

HEAT TREAT NEWSLETTER

Everything to do with heat treating



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INTRODUCTION

160 pages of the most recent news, trends and equipment listings about the worldwide heat treating industry will be found in this, the November 2019 issue of “The Monty”. Read on and please enjoy.

Sincerely, Gord, Jordan and Dale Montgomery.

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HEAT TREAT NEWS

The Website of Choice for Captive and Commercial Heat Treaters Since 1999

Haerterei Wittmann, Germany, Expands

Oct 31, 2019

Last year we toured captive/commercial heat treater Haerterei Wittmann in Uhingen, Germany who at the time was just starting on a very substantial investment/expansion program. The program is now concluded and earlier this week we had the chance to see the end results. To refresh your memories Wittman is a privately owned heat treater which provides commercial heat treating in addition to processing their own products which consists mainly of high end power transmission components. The company has substantial and impressive sealed quench (batch IQ) capacity) however what the firm has been concentrating on most recently is additional vacuum nitriding capacity which you can see below (Joern Rodhe of ROHDE Schutzgasöfen GmbH in Hanau and Ralph Matthaus of Wittman can be seen in two of these photos). The entire investment was close to 8 million Euros and included adding on almost 40% production capacity as well as an additional vacuum nitriding system, more office space, a brand new lab and more storage space. The end result is really quite impressive.



Solar Atmospheres Employees Recognized by MTI

Oct 31, 2019

“Hermitage PA, October 30, 2019 – Solar Atmospheres, Inc. has long been a model of innovation and leadership in the heat treating industry. As long-time members of the Metal Treating Institute (MTI), Solar employees are actively

involved in the many programs available through the Institute. Recently, MTI recognized three Solar employees for their commitment to MTI. On October 5, Bob Hill, President of Solar Atmospheres of Western PA, was honored with the prestigious M. Lance Miller Legend Award, in recognition of his leadership and lifetime commitment to the heat treating industry and MTI. Hill received the award in absentia, thanking fellow nominees, those who nominated him, and all MTI members in a videotaped acceptance speech. Said Hill of the honor: “Life is never boring as a commercial heat treater, and that’s why, after 43 years, I can honestly say I still enjoy being a part of this unique industry. It means so much that I’ve been honored with the M. Lance Miller Award.” Hill’s heat treating career began in 1980 when he joined Precision Heat Treating, Inc. as Vice President. Hill moved on to Solar Atmospheres of Souderton PA in 1995. Within five years, Hill was promoted to President, to head Solar’s newest venture 370 miles away in Western PA. In addition to Hill’s involvement with MTI, two other employees from the Solar Family of Companies – Patrick Reilly and John Hahn – are recent graduates from YES, MTI’s Leadership Training Program. The Solar Family of Companies congratulates Bob Hill, as well as Patrick Reilly and John Hahn, on their achievements.”



Ipsen Expands Aftermarket Coverage in North America

Oct 30, 2019

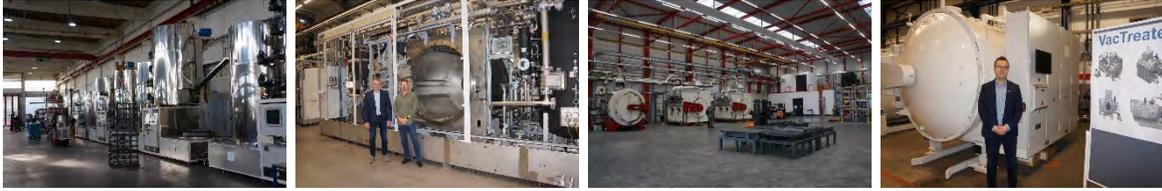
“Cherry Valley, ILLINOIS (October 30, 2019) – Ipsen USA announces the completion of an initiative to expand aftermarket services across the United States and Canada. Five Regional Sales Engineers (RSEs) were hired over the last six months to assist customers with replacement parts, retrofits, upgrades, service and technical support for any brand of atmosphere or vacuum heat-treating system. Ipsen’s RSEs have diverse backgrounds with experience in engineering, machine repair, and metallurgical processes. The RSEs are supervised by Matt Clinite, Ipsen Customer Service Sales Manager. “They are each incredibly unique in their own individual strengths,” Clinite says about the RSEs. “One common trait they all share is integrity and a ‘customer first’ attitude.” The RSEs fill a crucial role within the organization by creating a more efficient system for managing customers’ needs and streamlining the process between new equipment sales, aftermarket service, and field support. “Our team is here to identify risk points with our customers’ equipment,” says Clinite. “Our goal is to help our customers better prepare for maintenance planning and experience maximum furnace uptime and reliability.” Ipsen prioritizes innovative, industry-leading heat treating solutions and high-quality services. This new approach to customer care will provide quick and easy access to experts in the field. With a network of more than 120 technicians, Ipsen has the largest service team in the industry. For more information, visit our website at <https://www.ipsenusa.com/aftermarket-support>. To speak to a technical support specialist, call 1-844-GO-IPSEN”



Every Picture Tells a Story Don't It?

Oct 29, 2019

Each of the four photos below has a heat treating story behind it, whether it is about a captive heat treater, commercial heat treater, furnace manufacturer or cleaning system specialist and we will tell you each story over the next few days.



Mike Tristano Obituary

Oct 29, 2019

Yesterday we mentioned the passing of Mike Tristano, his full obituary can be found below.

“Michael J. Tristano, 76, died at his residence Sunday, surrounded by his loving family, after a courageous battle with ALS. He was born in Chicago, IL, July 4, 1943, son of the late Chester and Francis (Nee: Badlementi) Tristano.

On March 18, 1972, Michael married Diana J. Brenner. He loved working in the heat treating business, Bodycote, as a Division Manager of the Midwest region for forty-five years prior to retiring. For the past thirty years in May he traveled to Florida. Mike could fix anything and everything and enjoyed tinkering with cars and working on his corvette. An avid Packer and Brewer fan, he also belonged to several golf and bowling leagues throughout the years. Above all, Mike cherished time with his family, especially his grandchildren, and looked forward to Friday date night and Saturday with friends.

Michael will be dearly missed by his wife of forty-seven years, Diana; his children, Kelly Tristano, Nicole (Matthew Cecchini), all of Racine; his grandchildren, Joshua, Brandon, Danielle, Vincent, and Olivia; sisters, Rosemary Hogsett of Prescott, AZ, Jeanette (Hank) Arndt of Elkhart, IN; nieces, nephews, other relatives and many dear friends. In addition to his parents, he was preceded in death by two nephews, Mark and Michael; and brother-in-law, Allyn Brenner.

Funeral services will be held Tuesday, November 5th at 5 p.m. at [Maresh-Meredith & Acklam Funeral Home](#). Relatives and friends may meet with the family on Tuesday at the funeral home from 3 p.m. until time of service at 5 p.m.

Please send condolences to [Maresh-Meredith & Acklam Funeral Home](#).”

Gasbarre Nitriding Furnace

Oct 29, 2019

Going back almost exactly one year we asked Ben Gasbarre, of US furnace manufacturer Gasbarre if he could confirm rumors that his company was getting the nitriding business, his answer is further down. Now we have this photo of a completed Gasbarre unit being shipped. We are not sure who end customer is although we do know that Contour Hardening in Indianapolis ordered a system some time back;

“2018 POSTING; Gord, We have a number of exciting things happening at Gasbarre, which will be formally introduced in the coming weeks. We’ve been going through a rebranding process, not only for our furnace group, but the entire Gasbarre corporation. We gave a taste of that at this year’s FNA show (attached is a picture of our booth). We’ve added automation to our list of products. And yes, we’ve also added gas nitriding equipment to our list of thermal processing products. We’ve been working on the design for quite some time with the plan to roll it out at FNA. We were running ahead of schedule and actually put one in our backlog prior to the show, so we aren’t “getting in the business”. We are in it! Our organization at Gasbarre has been evolving, and we have a lot of great people making this all possible. You’ll be hearing more from us in the next few weeks!”



Troll Haertetechnik, Waldaschaff, Germany

Oct 29, 2019

We are taking the opportunity to see a few heat treaters and industry suppliers over the course of the next few days. One of the first is commercial heat treaters Troll Haertetechnik in Waldaschaff Germany. Founded almost 30 years ago by a man with a vision, Mr. Klaus Schorowsky, the company has thrived by specializing in one process only, gas nitriding and now has almost 30 employees. Last year the firm processed almost 2,000 tons of nitrided material through 7 pit gas nitriders, all supplied by Rohde furnaces of Hanau, Germany (by the way the largest has working dimensions of 2.5 meters in depth X 1.6 meters in diameter. In these pictures you see Mr. Klaus Schorowsky and Mr. Joern Rohde.



Michael Cousin

Oct 29, 2019

We mentioned Monday how experienced new furnace fellow Michael Cousin had parted ways with furnace builder Diablo. Apparently Mike is looking for another position I think the industry. If you would like to see his resume please let Jordan Montgomery know jordan@themonty.com



Mike Tristano

Oct 29, 2019

We regret to inform you that **Mike Tristano** has passed away over this past weekend. Mike worked for companies such as; **Harris Metals** located in Wisconsin and **Lindberg Heat Treating**. Below we have some comments that were sent to us. We will post the full obituary later this week.

"I am saddened to inform the heat treating community that Mike Tristano passed away over the weekend. Mike has been a well respected leader in the heat treatment of gears. He led the team of Harris Metals located in Racine, Wisconsin. When Lindberg Heat Treating acquired Harris Metals, Mike remained to be the "go to" leader. Then when Lindberg Heat Treating was acquired by Bodycote, in 2000, the press quench department in Harris Metals was transferred to the Bodycote plant in New Berlin, Wisconsin. Mike was the key leader in the transfer of seven Gleason press quench units to New Berlin. Mike retired in 2004 looking forward to spending quality time with his wife Diane and his grandchildren."



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Monday Morning Briefing

Oct 28, 2019

Ipsen, Kleve, Germany. As one of the largest furnace builders in the world we would have to assume that the company needs no introduction. Having said that we at “**The Monty**” have never had the chance to see the German headquarters of the company which is located in Kleve, Germany-last week we remedied that. Overall Ipsen has 800-900 employees located in several locations of which roughly 200 are in the Rockford, IL, USA plant and 350 in Kleve. The plant in Kleve was established in 1957 and currently occupies over 11,500 square meters in several different buildings. Structurally it is divided into 3 groups; Vacuum Products, Atmosphere (Batch) and Atmosphere (Continuous)-it is interesting that generally the product mix is roughly 50/50 between atmosphere equipment and vacuum equipment but this varies from year to year. If you want a bit of trivia we will add that since 1990 Ipsen has produced over 10,000 furnaces and since 1948 over 20,000. We have a number of photos of the plant, these will get us started.



Left to right; Michael Simon, Gord Montgomery, Bora Ozkan, Olivier Obladen

Mark Debruin New Plant Manager at **Certified Heat Treat** in Ohio; “**Todd McDonald**, CEO **TPH**, is pleased to announce the appointment of Mark DeBruin as Plant Manager of Certified Heat Treating, a commercial heat-treating operation located in Springfield, Ohio. Mark is a degreed Metallurgical Engineer and certified Six Sigma quality professional with extensive experiences that includes thermal processing and machining of metals. Mark has held a variety of positions including Technical Director, Operations Manager, Plant Manager and General Manager within the steel and iron foundry industry and induction furnace industry. Mark has a focus on continuous improvement and expertise in TS-16949 and ISO 9000 quality management systems. Mark will report to Ken Robinette, Regional Vice President, supporting the growth of Thermal Process Holdings commitment to

customer satisfaction, employee engagement and performance excellence. About Thermal Process Holdings, Inc; Thermal Process Holdings was formed by Calvert Street Capital Partners and John Hubbard (former CEO of Bodycote, PLC) to pursue a buy-and-build strategy in the thermal processing industry. The team has a stated goal to build a diversified, professionally-managed thermal processing business generating over \$100 million of revenue. TPH currently owns and operates four businesses: Diamond Heat Treat, based in Rockford, IL; Certified Heat Treating, based in Springfield, OH; Hudapack Metal Treating, based in Elkhorn and Franklin, WI; and P&L Heat Treating, based in Youngstown, OH. TPH is actively seeking other add-on acquisition opportunities.”

Also in people news we hear that **Michael Cousin** who has worked on the new equipment side of things with companies such as **AFC-Holcroft** and **Ipsen** just parted ways with furnace builder **Diablo** Furnaces in the Rockford, IL area.

The Heat Treat 2019 Exhibition, Detroit, Michigan, USA October 15th-17th is concluded and we understand that attendance was quite similar to their previous show, back in 2017. This show had a total of 5,201 attending which included 2,135 on the heat treat side of the show and 3,066 on the AGMA side. This meant a total of 195 exhibiting companies over 335 booth spaces. Our thought is that the sheer size of the hall made it appear that there were less people at this event than there actually were.

Solar Manufacturing New Facility; *“Solar Manufacturing Inc. commemorated the opening of a new, 59,000 square foot plant with a ribbon-cutting ceremony on October 24th. The company, located at 1500 East Clymer Avenue in Sellersville, Bucks County is the first business to build in the newly established Sellersville Business Campus. On hand to celebrate were a number of Bucks County notables, including Thomas C. Hufnagle, mayor of Sellersville Borough; Mary Smithson, chair of the Bucks County Industrial Development Authority; and Robert G. Loughery, chairman of the Bucks County Board of Commissioners. Building on two of the six lots now occupying land vacated by AMETEK, Solar Manufacturing owners William and Myrtle Jones were keen to breathe new life into the community after AMETEK and its 1500 employees*

left the area in 2008. "It is important that we invest in our communities," explained William Jones. "When AMETEK left, they left more than a couple of vacant lots. It's our goal to grow and support the local economy."

Currently employing 55 people, Solar Manufacturing aims to increase that number as business grows." In the photo below we see from the left;



“Jerry Gorski, president of Gorski Construction; Myrtle Jones, owner of Solar Manufacturing, Inc.; William Jones; owner of Solar Manufacturing; Thomas C. Hufnagle, mayor of Sellersville Borough; Mary Smithson, chair of the Bucks County Industrial Development Authority; Robert G. Loughery, chairman of the Bucks County Board of Commissioners.”

Remember this news item about Dan McCurdy of Bodycote from roughly a week ago? Well people must really, really like Dan or they just wanted to see him leave the industry-this news items received hundreds of thousands of views and generated pages of “likes on linkedin”, it really was quite impressive the number of people who were interested in this;

“Dan McCurdy/George H. Bodeen Heat Treating Achievement Award. We are really pleased to show you this photo of Mr. Dan McCurdy, former President of the Bodycote, AGD Division in North America shortly after he received the George H. Bodeen



Heat Treating at the Heat Treating 2019 exhibition in Detroit (Dan's wife Kim is beside his side in this photo) Dan recently retired but we at “The Monty” are pleased to say that he is a friend and that very few people in the industry have had such a positive impact. His experience will really be missed.”

To round things out we visited the manufacturing facility of furnace builder Rhode in Hanau, Germany who have several furnaces on the floor ready to ship. One of those which is just about to go out the door is this vacuum nitriding furnace-the owner of the company Mr. Joern Rohde can be seen in front of the furnace,





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Upcoming “Stuff”

Oct 24, 2019

Monday we will tell you about how one of the larger commercial heat treaters in Ohio, USA has a new General Manager. We will also show you some photos of the Kleve, Germany manufacturing facility of furnace builder **Ipsen** and also tell you about a new product the company is introducing. **“What’s It Worth”** is also included, our regular but rather sporadic thoughts about what some used heat treating furnaces are worth. Photos of captive and commercial heat treaters in Europe will be included along with a few gossip items. All upcoming.



Härtereikongress 2019 Cologne, Germany

Oct 24, 2019

The last major heat treating event of 2019 the HK19 heat treating exhibition in Cologne, Germany is now officially over and done with. We have had some coverage and will continue to have regular photo updates including these. In the first photo we see the ALD team from the left; Klaus Loeser, Esther Tomm, Margit Lipper, George Molitor, Sonja Koerner and Mathias John.



In the photo below we see a very odd “pairing”, two arch rivals in the vacuum nitriding business, Rohde and KGO, both German furnace builders. Joern Rohde and Konstantin Rohde, Harald Roth and Paul Reichert of KGO.



Polish furnace builder SECO/WARWICK always continues to have a very high presence at all heat treat shows no matter where in the world it is.



Lets keep this international as befits this show. In the picture you can see Mr. Cihan Bilaban, of Turkey and Mr. Lee Rabe of WS Burners. Lee is from the US but is working with WS in Germany.



Heat Treat Industry Changes (What we are Learning at the Heat Treatment Show in Cologne, Germany)

Oct 24, 2019

We are pleased to introduce you to the relatively new CEO and President of worldwide nitriding technology specialist and commercial heat treater Nitrex along with the new President of United Process Controls (to clarify the two companies

are sister companies with the same owner). In this photo you see from the left; Paul Oleszkiewicz, Jean-Francois Cloutier, CEO & President of Nitrex and Olivier Caurette, President, UPC Global & Head of Europe. While not shown in this picture Karl-Michael Winter who has worked with the two companies for many years now has a slightly different position, that of VP R & D/Engineering for Nitrex. Nitrex and United Process Controls (UPC) are names which are recognized in the heat treating industry around the world.

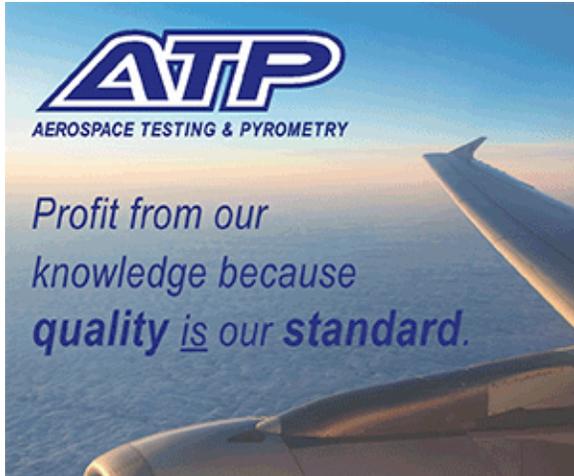


Robert Noebauer who has had a long distinguished career in the heat treating industry in Austria has a new job. We first met Robert when he was working for commercial heat treater and furnace manufacturer, Rubig in Wels, Austria. since then he has moved on to become CEO of commercial heat treater HMW in Ybbsitz, Austria www.hmwelser.com In this photo you can see Robert on the left and Alexander Desch, Purchasing, IT and Plant Management on the right.



No heat treat show in the world is complete without Bodycote. In this picture you can see from the left; Florian Elwart, Martina Waegner (Senior VP AGI Germany & Denmark), Roger Liedtke (Regional Manager) and Thomas Kratz (Head of Central Services).





Thermetco, Montreal, Canada

Oct 24, 2019

Yesterday we mentioned how commercial heat treater Thermetco <https://thermetco.com/en/home/> in Quebec, Canada has recently moved into a new building and added more capacity (scroll down to yesterdays news items for more details). To go with that news item we have these additional photos taken by Jordan Montgomery just yesterday.



Thermetco, Montreal, Canada

Oct 23, 2019

Jordan Montgomery of *“The Monty”* is in the Montreal, Canada region this week and he sent us these very interesting photos of commercial heat treater **Thermetco**, one of the largest commercial heat treaters in Eastern Canada. The company recently moved into a brand new location and already the company is considering expansion plans. By any standard Thermetco with over 100 employees is a big heat treater. In the first photo below the fellow you see is **Mr.**

Andre Labranche, Logistics Planner for the company. The other photo shows you part of the salt department, more photos to come we promise.



Heat Treatment Congress (HK) 2019 (Or What we Learned About The Heat Treatment Industry in Europe)

Oct 22, 2019

Yesterday (Tuesday October 22, 2019) marked the first day of the 3 day heat treatment exhibition in Cologne, Germany-we at “The Monty” are in attendance and this is what we learned;

- The heat treatment as a whole in Europe is slower these days, certainly not terrible but slower than it has been and certainly slower than North America. The main culprit-a slow down in the auto industry.
- One of the top heat treat furnace salesman in all of Europe is making a change and will be going back to the alloy business. More shortly when the move is actually done.
- We understand that controls company UPC has a new President, we are hoping and praying that tomorrow we will get a chance to meet him, introduce him to the industry and get a photo at the same time.
- The former CEO of a major European furnace builder is branching out on his own and starting his own business. Maybe or maybe not more details to come.
- We have always thought that US based Gleason Products and Germany based Heess pretty much had a lock on the manufacturing of press quench systems. Now we understand that there is another press quench company based in Germany which would appear to be a major player and which looks to be eyeing the North American market with a great deal of attention.

More to come, in the meantime we have these two photos for you. In the first we see Mr. Andreas Fritz of cleaning system company EMO (November 1, we will

have an interview with Andreas) and Mr. Shen Li of China based furnace company SAMT (Shanghai Advanced Metallurgical Technology Corporation). The second photo shows furnace builder Rohde which shows yet again that this is a family oriented business. The company is on its second generation and the short guys in the photo are the next generation.



DELTA H Commissions Dual Chamber Aerospace Heat Treating (DCAHT™) System to Sintavia for Additive Manufacturing (AM)

Oct 21, 2019

It is rather ironic that just yesterday we had a news item about how Additive Manufacturing (3D Printing) was not benefitting North American furnace manufacturers to any great degree as this press release talks about a furnace being provided to the Additive Manufacturing (AM) industry. Obviously there are some furnaces being built for this industry but we stand by our comments of yesterday-that this is the exception rather than the rule.

“DELTA H is honored to contribute to the additive manufacturing (AM) industry by providing global leader Sintavia with a Dual Chamber Aerospace Heat Treating (DCAHT™) system. Sintavia, located in Hollywood, Florida, provides advanced manufacturing for critical industries such as Aerospace & Defense, Oil & Natural Gas, and Industrial Gas Turbomachinery. Sintavia is the first independent manufacturer of its kind to offer a vertically integrated, end-to-end metal additive manufacturing production process that meets aerospace production quality standards. Sintavia president, Doug Hedges, adds “The DCAHT™ is a great addition to our machine fleet in our new facility. We are impressed with its performance and complex capabilities such as quenching to our customer specifications. We look forward to meeting the furnacing needs of our customers with this advanced system.”



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* 1 week availability limited to standard products in stock, while supplies last. (Some restrictions apply.) Typical delivery 8 to 10 weeks for castings of existing patterns. Ask about our Staged Delivery™ options.

IVR Furnaces Italy

Oct 21, 2019

We would like to direct your attention to a banner ad on the right side of this page from Italian furnace builder IVR <https://www.ivrsrl.it/en/> IVR is one of the largest furnace builders in Italy and will be exhibiting at the trade show in Cologne, Germany which starts tomorrow. We are expecting a very interesting press release from the company in the near future concerning a new installation for the company.



SSi Technical Seminar, Mexico

Oct 21, 2019

Super Systems–Mexico showing results of continuous growth supporting heat treat operators throughout industrial regions of Mexico and fortified with EMA certifications.

In addition to the great multicultural exchange during the SSi's International Sales Meeting on September 24th in Cincinnati, Ohio, SSi shared its experiences around the globe and how the business remains strong and the future looks bright. In its ninth year of operation, SSi-Mexico (Queretaro City) has fourteen highly skilled associates and the service center occupies a new, 5000 ft² office. The new facility has state of the art, EMA certified calibration and repair lab. The staff performs pyrometry and calibration services in addition to servicing and repairing sensors, process controllers and analyzers. SSi-Mexico earned three calibration accreditations in 2019 which address the needs to perform calibrations around the world.

SSi-Mexico provides solutions for process-control modernization and SCADA innovations to domestic and international companies requiring heat treat services in Mexico. SSi-Mexico continues its growth and is prepared to offer the best

solutions, innovation, and dependable support with project engineering, sales support and software development.

For further information regarding our accreditations in Mexico click [Here](#)



Monday Morning Briefing

Oct 20, 2019

This news item about **3D printing** appeared in **Industrial Heating** last week. While we don't find it particularly interesting from a heat treating aspect it made for some interesting conversation at the Heat treat exhibition in Detroit last week- specifically the conversations revolved around whether any furnace manufacturers were seeing much furnace demand from suppliers of 3D printing systems-the answer is a resounding no. Not a single major furnace builder reported any sales from suppliers of 3D printing systems. While we do know of two furnace builders that are providing small sintering systems that seems to be about the extent of it. We are starting to think that 3D printing will be like wind power furnaces in North America, a great deal of promise initially which at the end of the day fizzled out. *“**Kennametal Inc.** formed a 3D-printing materials and production business unit, Kennametal Additive Manufacturing, as part of its Infrastructure segment. Kennametal Additive Manufacturing combines the company’s expertise in materials science and wear-resistant solutions with additive-manufacturing capabilities to supply high-performance metal additive powders and fully finished 3D-printed parts for wear, erosion, corrosion and high-temperature applications. The new business unit is already shipping production parts to customers. These high-performance wear components include parts printed with powders specifically designed and optimized for 3D printing.”* Last week we this news item about commercial heat treater **Cascade Metallurgical** out in Kent, Washington; *“36,690 Square Foot Heat Treating Facility for Sale Near Seattle, Washington. Cascade Metallurgical, a Pacific Northwest based heat treating company, has elected to sell*

their facility located in Kent, Washington. The concrete tilt-up building offers 36,980 square feet sitting on a fully fenced 1.53 acres. Specialized improvements to the property include an upgraded 5" high pressure natural gas feed to fuel 15 furnaces, 2,000 amps of 480v 3p power, and purpose-built air and heat handling infrastructure." Just to clarify it is the building for sale NOT the business.



In people news we see that long time heat treater **Barry Dunham** was recently promoted to Regional Operations Manager for **Bodycote**. Barry has been with Bodycote for a number of years and most recently was General Manager of the facility in Oklahoma City, USA. We wish him the best of luck and have no doubt but that he will thrive in this new position. November 6th of this year commercial heat treater **Paulo** will be having an open house at their Cleveland, Ohio facility to showcase their brand new Quintus HIP system (Paulo is the second largest commercial heat treater in North America <https://themonty.com/largest-commercial-heat-treats/>) During the open house the President of the company **Mr. Ben Rassieur** will be giving what we are sure will be a very informative talk. Paulo bills this as a "state of the art" facility, having visited it several times over the years we would agree.



Speaking of HIP systems out on the west coast of the USA **Stack Metallurgical** is getting close to having their Quintus system up and running. We believe the open house will be November of this year and we are hoping to attend the ribbon cutting. Stack is the largest commercial heat treater in the US Northwest and has a very impressive operation. The "**Heat Treat 2019**" is over and we still have a ton of photos to show you. We are going to space them out over the next couple of weeks, here are several.



Jack Kalucki, Lilia Jasso (Nitrex Queretaro office), and Paul Gofas.



Steve Pfeiffle (Inside Sales), Tim McCormick (Service Technician), Danny Woodring (QRM/ISO), Tony Stoeger (System/Products Engineering Manager), Connor McDermott (Project Engineer), Lee Miles (Service Technician), and Frank Pietracupa (Head of Engineering NA).



Jerram Dawes and Mike Handscombe (PhoenixTm), Gord Montgomery



Jordan & Dale Montgomery, Eduard Lassel, Roland Weeske



Heat Treat 2019, Detroit, Michigan, USA

Oct 18, 2019

The largest North American heat treat exhibition of 2019, “*Heat Treat 2019*” is now concluded and is being relegated to the history books. The overall impression—well organized, great venue, lots of exhibitors but not as many attendees as most exhibitors would like. Over the course of the next week we will continue to post photos from the show, for this morning we have this one of Gord Montgomery, David Siddall and Dean Kinter of Cleveland Electric Laboratories along with Jordan Montgomery. By the way over the next two weeks we will visit furnace manufacturer Ipsen at their headquarters in Kleve, Germany, have a look at the heat treat show in Cologne, Germany and also report on a number of captive and commercial heat treaters around Europe. Needless to say lots of photos will be included.



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Heat Treat 2019

Oct 17, 2019

Each of these two photos has a story behind it. In the first we see from the left Craig Beaumier, Dale Montgomery, Doug Puerta and Jordan Montgomery. Craig and Doug are both with commercial heat treater Stack Metallurgical in Portland, Oregon, USA the largest such operation in the US North West. Stack is in the process of installing a Quintus HIP unit which is part of a recent trend by commercial heat treater in North America to bring this leading edge technology to market. The system at Stack will be in production within the next couple of months and we at “The Monty” plan on being at the opening.

In the second photo we see from the left; Ian Chen, Yong Xia, Janusz Kowaleswski, Andy Chen and Jordan Montgomery. Ian, Yong and Andy are all with Powermax in Taiwan which serves as a rep organization in the country selling for companies such as Solar Manufacturing of the US. In the past Powermax in Shanghai, China was a furnace builder (and at one time the AFC-Holcroft licensee in China) before merging into the Feng Dong furnace company quite possibly the largest furnace builder in China. Janusz probably doesn't need any introduction as he has been involved with the worldwide furnace building industry for many, many years.



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Heat Treat 2019

Oct 17, 2019

John Hansen. A true icon in this industry and one of the best known heat treat reps in Michigan is the recently retired John Hansen. It was a joy to see him at the show yesterday and we have this photo of him along with Tim Levy of Industrial Heat Treating in Jackson, Michigan and John Young, heat treat rep with Mountain Rep. Corp.



So who is the male model in this picture wearing the “Ask Me About My Super IQ” tee shirt? None other than Mark Hemsath of furnace builder SECO/WARWICK.

Greg McFee/Kowalski Heat Treat

Oct 17, 2019

Earlier this week we had this photo of commercial heat treater Kowalski Heat Treat in Cleveland, Ohio on the website. It is rather unusual that that we would mention a company twice in the same week but such is the case today. We just learned that Greg McFee a long time heat treater with roots dating back to Lindberg Heat Treat just became plant manager of Kowalski.



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SALE INFO

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Clear Height:	30 ft
Loading:	3 Grade-level doors (oversized)

Cascade Metallurgical, a Pacific Northwest based heat treating company, has elected to sell their facility located in Kent, Washington. The concrete tilt-up building offers 36,980 square feet sitting on a fully fenced 1.53 acres. Specialized improvements to the property include an upgraded 5" high pressure natural gas feed to fuel 15 furnaces, 2,000 amps of 480v 3p power, and purpose-built air and heat handling infrastructure. The facility is currently in operation and maintains NADCAP certification, serving a large network of local and national customers. The property is well positioned on a major arterial in Kent's heaviest industrial zone, allowing almost any manufacturing or industrial use outright within a business-friendly political environment.

The Kent Valley is the heart of the Puget Sound Industrial Market, one of the nation's most concentrated centers for manufacturing, R&D, international trade, and construction industries. The location has fantastic visibility and convenient access to Seattle 20 minutes away, and Tacoma 30 minutes to the south. The Puget Sound region's history is inexorably tied to aerospace and technology industries (Boeing, Blue Origin, Microsoft, Amazon, to name a few) which has led to a large pool of skilled labor and a wide variety of companies small and large to create a synergistic economy. In recent years the region has seen strong economic growth and an ever-increasing demand for the many inputs required by development. Neil Walter Company, a Seattle based real estate firm, represents the ownership of the facility and is offering the property for sale at a price of **\$6,500,000**. We would be happy to discuss the opportunity in greater detail, or answer any questions that you may have.

PROPERTY HIGHLIGHTS

- 5" diameter high pressure natural gas feed
- NADCAP Certified Heat Treating Facility
- Heavy Power: 2,000 amps 480v 3-phase
- M3 Heavy Industrial Zoning - City of Kent
- Fully Fenced
- High visibility on S 212th Street ~60,000 cars/day
- Two bridge cranes: 10-ton and 20-ton



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ffarrar@neilwalter.com

MIKE ROY
206.787.1470
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All square footage references are approximate. The information contained herein is from sources deemed reliable. Prospective Buyers or Tenants should conduct an independent investigation and verification of all matters.

Dan McCurdy/George H. Bodeen Heat Treating Achievement Award

Oct 16, 2019

We are really pleased to show you this photo of Mr. Dan McCurdy, former President of the Bodycote, AGD Division in North America shortly after he received the George H. Bodeen Heat Treating at the Heat Treating 2019 exhibition in Detroit (Dan's wife Kim is beside his side in this photo) Dan recently retired but we at "The Monty" are pleased to say that he is a friend and that very few people in the industry have had such a positive impact. His experience will really be missed.



Heat Treat 2019

Oct 16, 2019

We are currently attending the premier heat treating event in North America for 2019, "Heat Treat 2019" in Detroit, Michigan and have these photos to prove it. By the way in interesting people news we heard today that very experienced heat treater **Jay Jefsen** has accepted the position of General Manager at **Bodycote** in Covington, GA, USA.



Gord Montgomery, Pete Batche, Quality Metallurgist, Emerald Steel Processing, Michigan



Jordan Montgomery, Jim DeMaestri, Erica Garber, Eliot Fischer Fluke Process Instruments



Josh Harvey & Kyle Favors (CF Thermal), Dale Montgomery, Bob Fincken (SSI), Jordan Montgomery, Aaron Ackerman & TJ Wright (Wirco)



Raphael Raatz, Technical Director, Rohde Furnaces, Germany, Dale, Gord and Jordan Montgomery

New Ion Heat Plasma Nitriding Order in the USA?

Oct 16, 2019

As always there are lots of rumors floating around at the ongoing “Heat Treat 2019” Heat Treatment Exhibition in Detroit, Michigan. An interesting one has furnace manufacturer, Ion Heat of Colombia, South America recently landing an order for a brand new plasma (Ion) heat treating system from a company in the Southern, US. We honestly have no idea whether the order is from a captive or commercial heat treater, however we do believe this to be true-hopefully more details to come.



David Gangle, North American Cronite

Oct 16, 2019

We learned this at the “Heat Treat 2019” exhibition currently ongoing in Detroit, Michigan, USA. “David Gangle, a 25 year veteran of furnaces, combustion systems and heat treat alloy, has accepted a position as Sales Manager with North American Cronite, North Ridgeville OH.”



Global Heat Treatment Provider Holds VIP Event to Mark Opening of New Heat Treatment Plant in the Czech Republic

Oct 15, 2019

*“MACCLESFIELD (U.K.) — **Bodycote, the world’s largest provider of heat treatments and specialist thermal processing services**, held an official opening ceremony last week at its brand new facility in central Prague, Czech Republic. The VIP ceremony was attended by the local Mayor of Hostivice (Prague-West district), arch. Klára Čápková, and the British Ambassador to the Czech Republic, Mr Nick Archer. The Prague facility was officially opened by Paul Clough, President of Bodycote’s Classical Heat Treatment division for Northern Europe & Asia. Mr. Clough commented: “Bodycote is proud to be opening our newest facility in Prague, where we can be close to our customers and grow to meet their future demand.” The new heat treatment centre, now fully operational and supporting customer requirements, runs 24/7 providing a range of heat treatment services, and has been established to support the automotive and general industrial markets in the region.*

Bodycote has operated a heat treatment plant in Prague since the early 1990s, but due to growth and demand had outgrown its premises. The new plant was purpose built to replace the old central Prague facility, with additional space for anticipated future growth, and has been strategically located close to transport networks and the international airport.

Roman Poslusny, Vice President of Operations of Central Eastern Europe for Bodycote’s Classical Heat Treatment division commented: “The Czech Republic

is an excellent place for Bodycote to invest in order to support our customers' supply chains locally. This expansion helps to demonstrate our commitment to our Eastern European customers by providing the best possible service.”



First Photo. Cutting the ribbon (left to right): Paul Clough, President of Northern & Eastern Europe (Bodycote); Klara Capova, Mayor of Hostivice; Nick Archer, British Ambassador; Baris Telseren, Senior Vice President Eastern Europe (Bodycote); Roman Poslusny, Vice President Central Eastern Europe (Bodycote).



Second Photo. Welcome to the opening ceremony: Roman Poslusny, Bodycote's Vice President of Central Eastern Europe, welcomes guests to the official opening ceremony.”

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AFC-Holcroft Sales Meeting

Oct 15, 2019

So what do high priced, professional sales reps for furnace manufacturing company AFC-Holcroft do with their spare time during the “Heat Treat 2019” exhibition? Why they play Wirlyball of course. Like many companies AFC takes the opportunity to have their sales meeting during the show and Whirlyball (a combination of lacrosse and bumper cars) was part of the meeting. In the second photo we see Jenna Alder who is heavily involved in the parts department at AFC.



36,690 Square Foot Heat Treating Facility for Sale Near Seattle Washington, USA

Oct 15, 2019

“Cascade Metallurgical, a Pacific Northwest based heat treating company, has elected to sell their facility located in Kent, Washington. The concrete tilt-up building offers 36,980 square feet sitting on a fully fenced 1.53 acres. Specialized improvements to the property include an upgraded 5” high pressure natural gas feed to fuel 15 furnaces, 2,000 amps of 480v 3p power, and purpose-built air and heat handling infrastructure. The facility is currently in operation and maintains NADCAP certification, serving a large network of local and national customers. The property is well positioned on a major arterial in Kent’s heaviest industrial zone, allowing almost any manufacturing or industrial use outright within a business-friendly political environment. The Kent Valley is the heart of the Puget Sound Industrial Market, one of the nation’s most concentrated centers for manufacturing, R&D, international trade, and construction industries. The location has fantastic visibility and convenient access to Seattle 20 minutes away, and Tacoma 30 minutes to the south. The Puget Sound region’s history is

inexorably tied to aerospace and technology industries (Boeing, Blue Origin, Microsoft, Amazon, to name a few) which has led to a large pool of skilled labor and a wide variety of companies small and large to create a synergistic economy. In recent years the region has seen strong economic growth and an ever-increasing demand for the many inputs required by development.” More details? gord@themonty.com



Heat Treat 2019 Detroit, Michigan, USA

Oct 15, 2019

We have repeatedly mentioned that the largest heat treatment exhibition in North America in 2019 is Heat Treat 2019 which is now taking place in Detroit, Michigan, USA. It is rather a co-incidence that as part of our Monday Morning Briefing yesterday we had a photo of the Kowalski Heat Treat (commercial heat treating) booth at the 2015 show in Detroit. Co-incidence because the first booth we ran across when we visited the exhibition this morning (during exhibitor set up and before the show actually opened) was none other than Kowalski Heat Treat as you can see in this photo. As usual the President of the company, Steve Kowalski was happy, happy, happy. Lots more coverage of the show this week.



Solar Manufacturing Moves to New Location

Oct 14, 2019

Solar Manufacturing Inc. has relocated from Clearview Road in Souderton to East Clymer Avenue in Sellersville, Pennsylvania. Situated on a combined 8.5 acres

just three miles from the previous location, the newly-constructed building comprises 40,000 square feet of manufacturing space, with 17,500 square feet designated office space. There is the option of an extra 22,500 square foot addition to the manufacturing building in the future. The \$10M building was designed and built by Gorski Engineering, a national award-winning construction and development company based in Collegeville, PA. The move was achieved in several phases, taking place over several weeks in September and October. Despite the scope of the project, Solar Manufacturing experienced only a few minor interruptions.

Jim Nagy, President of Solar Manufacturing, says “Solar Manufacturing has expanded throughout the many years since our inception, resulting in our employees working from several different buildings. With this move we are finally united under one roof. Not only is the new space very handsome, but it is also a well-thought-out facility. It is equipped with and geared up for efficient production, with enough capacity to serve our customers well into the future, especially those who need very large vacuum furnaces.”



“This new facility provides us the space we need to grow and consolidate all our staff in one facility,” said William Jones, who along with his wife, Myrtle Jones, owns Solar Manufacturing, Inc. “Now that we’re officially settled, we’re eager to use the new building to its fullest potential.” The building was engineered by John Riebow of Gorski Engineering. The office space was coordinated by Myrtle Jones, owner, while the plant space equipment layout and work flow was a cooperative effort by many Solar Manufacturing employees.

Solar Manufacturing designs and manufactures a wide variety of vacuum heat treating, sintering, and brazing furnaces and offers replacement hot zones, spare parts, and professional service. To learn more about Solar Manufacturing contact Pete Reh, VP of Sales, at 267-384-5040 x1509, or via email pete@solarmfg.com or visit us at www.solarmfg.com.



Monday Morning Briefing

Oct 14, 2019

While we haven't heard much about new **vacuum carburizing** orders or installations recently we ran across two this past week. In a posting about **ECM** last week we mentioned how we understood they had recently received an order for a very large installation. About the same time we ran across a North American manufacturer who had just placed a reasonably nice order with **ALD**. Course along the same lines we also heard about a large auto parts supplier who had been planning on ordering a VC system, however at a meeting just 2 weeks ago they postponed any decision on it for at least a year. In Canada captive heat treater **Slacan** in Brantford, Ontario is busy expanding their heat treating department and is getting pretty close to starting up some more equipment. Slacan is Canada's largest designer and manufacturer of Poleline hardware and are pretty much unbeatable at what they do. Last week we had the chance to see the relatively new **Bodycote** (commercial heat treating) facility in Romulus, Michigan and we can tell you exactly nothing about it. It has been in operation a little over a year and all we can tell you is that it is a beauty and no expense was spared on the facility. Hopefully one of these days we will be able to persuade the "powers to be" to allow us a couple of pictures. February of this year the CEO of **Ipsen** in Kleve, Germany, **Mr. Marc Angenendt** parted ways with the company at which point we lost touch with him. Our understanding is that he is in the process of starting up a company in Germany to service the heat treating industry. We will be

in Germany next week and will try and find out all the details. As the **General Motors Strike** drags on it is certainly having a dampening effect on the heat treating industry. Obviously all of the GM in house heat treating is shut down but in addition we are seeing a lot of furnaces shut down at commercial heat treats and Tier One suppliers all over the US and Canada.

BMI is one of the largest vacuum furnace builders in France and seems to provide a tremendous number of furnace to the Asian market. This is a not uncommon press release from the company; *“On September 11th 2019, BMI hosted in its premises the visit of a Chinese delegation made of several members from the China Aviation Industry Corporation (AVIC). This visit was part of the Group’s Euro tour where they visit their qualified suppliers on a regular basis. The delegation included members of the purchasing entity CATIC but also top managers from three of the biggest subsidiaries of the Group: Cheng Du Aircraft, Shen Yang Aircraft and Xi An Aircraft. All three entities are already key customers of BMI.”*



In the UK Commercial heat treater and testing lab **“Keighley Laboratories”** is updating their testing equipment and furnace controls according to this press release; *“With the UK Aerospace Market continuously seeking to explore new technologies and pushing existing boundaries, competition to provide the highest quality services in aerospace is fiercer than it has ever been. The latest addition of a Leco ONH836 Gas Analyser to Keighley Labs Chemical Laboratory allows for the robust analysis of materials using Inert Gas Fusion, enabling Oxygen, Nitrogen and Hydrogen analysis. In addition Debbie Mellor, Manager Director had this to say; “We’ve also completed the investment programme of updating our furnace controls, allowing optimum process visibility and control of atmosphere. This ensures Aerospace equivalent standards are applied to our commercial production, which in turn ensures high quality of product. Along with further investments, we have also sought to increase our approval base, with recent Magellan Aerospace and Collins Aerospace approvals.”*

This week will see the **Heat Treat 2019** show in Detroit, Michigan, far and away the largest heat treat show in North America this year. **“The Monty”** is already in Detroit and we plan on providing live coverage of the event. It would appear that the last time this event was held was in 2015 and we have these photos to prove it. See you this week.



Heat Treatment Australia, Santa Fe Springs, CA, USA

Oct 11, 2019

The largest commercial heat treater in Australia and our favorite is Heat Treatment Australia (HTA) owned and run by brother and sister Norm Tucker and Karen Stanton. While based in Australia the company opened up a branch in California, USA back in 2016 as you can see in this press release dating back 3 years; “HTA Group has arrived in Santa Fe Springs, Los Angeles and brought with us 35+ years of quality Heat Treating Experience and Quality Processes to tackle any and all of your Heat Treating Requirements. Welcoming Branch Manager Mitch Fahrney as the newest member of our HTA Family.”

As far as we can tell this branch has grown and prospered and we have this very recent photo showing in the centre Karen Stanton and alongside her the Hon Melissa Price, Australian MP standing in front of a SECO/WARWICK vacuum furnace. Also below is a photo of Norm Tucker in front of a SECO vacuum furnace at the Brisbane, Australia facility which was taken when we visited the plant 4 years back.

HTA is honoured to welcome Hon Melissa Price MP to our Los Angeles Branch in Santa Fe Springs, California. Thank you to all Staff and Industry Partners involved for taking the time to hear our story and for your continued dedication to Australian Businesses in the Defense Industry across the globe



Oregon Products, Portland, Oregon, USA To Install Mesh Belt Furnace Line

Oct 10, 2019

The press release below gives you some details but to these basic details we can add a few more. Oregon Products has two locations doing heat treating, one in Portland and the other in Guelph, Ontario, Canada. Both operate large rotary retort furnaces, however Oregon in Guelph also operates one small Can Eng mesh belt austemper line-we have to assume that this new installation in Portland is pretty much of a duplicate.

“PORTLAND, Oregon (October 8, 2019) – Oregon Products recently awarded CAN-ENG Furnaces International, Ltd. a contract to design and commission a new Continuous High Capacity Mesh Belt Austemper Heat Treatment System for Oregon’s production facilities. Oregon, a leading global manufacturer of saw chain and other replacement products for the forestry industry, plans to use the new equipment as part of a long-standing commitment to continuous quality improvement. “The primary business driver of this project is quality. We sought out leading international thermal processing equipment suppliers to support our premium quality forestry cutting products which demand a high quality austempering system,” said Kaitlyn McNaughton, Director of Engineering and R&D Labs. “This new furnace is primarily targeted to raise the bar on quality for our harvester chain products, which perform under the highest loads and most extreme conditions.” Through collaboration, CAN-ENG was favored largely due to its ability to demonstrate consistent bainitic structure metallurgical properties and advanced

equipment design expertise, which allowed for a compact system footprint. The Austemper system integrates a computerized loading system, pre-wash system, atmosphere-controlled mesh belt austenitizing furnace, molten salt quench conveyor system, post quench residual salt removal and recycling system, mesh belt parts drying oven, unloading system and CAN-ENG's PET™ system which provides vital features such as individual lot/product traceability, detailed process data collection for continuous process improvements and comprehensive Industry 4.0 equipment diagnostics capability. The system is scheduled for commissioning early 2020.”



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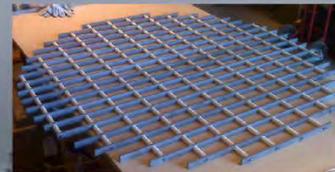
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ECM Synergy Center, Pleasant Prairie, Wisconsin, USA

Oct 10, 2019

It is a year now since we had the chance to visit the US headquarters of furnace builder ECM in Pleasant Prairie, WI. Our last visit was to view the company's brand new Synergy Center, a state of the art R & D facility designed to test customers parts. The Synergy Center consists of the latest ECM designed NANO low pressure vacuum system with a 20 bar high pressure gas quenching system, along with CMM measurement equipment and a full metallurgical lab. They have recently added a modular temper system to the facility which works with the NANO's in line single piece flow design. The mission of the Synergy Center is to provide customers with short term results of measured heat treat parts with low pressure vacuum carburizing or vacuum hardening and also to work on new thermal processes in other markets than heat treating. By the way we hear that ECM recently received an order for a large vacuum carburizing system from a US customer-hopefully we will shortly have a formal press release about it.



Gord Montgomery, Dennis Beauchesne, President ECM, USA, Spencer Wolf, Technical Specialist, Vincent Lelong, Synergy Center Supervisor



Where Are They Now-Chris Bixler

Oct 10, 2019

Chris has spent his entire life in the heat treating industry; almost 13 years at Applied Process in Livonia, Michigan (Applied recently became part of the Aalberts Group of companies), a short stint at Metlab in Wyndmoor, PA (who boasts some of the largest pit carburizing furnaces in North America) and Robert Wooler Company another commercial heat treater in PA. It would appear that Chris has just left the industry as he is working at a company by the name of Jerith Manufacturing who provides aluminum fencing-perhaps they heat treat in house? The photo below dates back 5 years (Chris is on the left) and was taken at the Applied Process facility in Michigan.



Hauck Heat Treatment Eindhoven, The Netherlands

Oct 9, 2019

According to ***"The Monty"*** <https://themonty.com/largest-european-commercial-heat-treaters-february-2019/> Hauck Heat Treatment with 27 plants around Europe is the second largest commercial heat treater in Europe (*we will remind our readers that when their parent company Aalberts Industries recently acquired Applied Process the company became one of the larger heat treaters in North America as well*). This prelude leads to this press release from the company telling us how their location in Eindhoven, Netherlands just expanded and is in the process of installing a new vacuum furnace. The attached photo shows a vacuum tempering furnace this location added in 2016; *"Hauck Heat Treatment Eindhoven B.V. on October 4th 2019 opened its new production hall during the yearly staff party. Because of the company growth during the last few years and looking forward to continued growth in the future the decision was made in late 2018 to expand the building. The expansion was completed recently and has a floor area of 1.000 m²*

and an elevated floor of 250 m² for storage of goods. In the addition a new full metal vacuum furnace with dimensions 1200x1200x2000mm is being installed and in early 2020 a new cleanroom for brazing assembly will be commissioned.”



ThermTech of Waukesha Open House

Oct 9, 2019

Almost exactly one year ago commercial heat treater ThermTech, one of the largest in the US Midwest issued this press release. As an update to this story the company is planning on an open house October 25th of this year to celebrate the completed expansion.

“ThermTech Announces Major Expansion, WAUKESHA, WI (September 21, 2018) – ThermTech of Waukesha announces expansion plans to better serve its customers. The company will add 11,000 square feet of production space to its facility at 301 Travis Lane in Waukesha, WI along with two new major equipment lines.

- A large AFC Holcroft IQ batch furnace line with a working zone is 56” W x 72” L x 36” H. This furnace is capable of quenching 9000lbs.*
- A Gasbarre/Becker large double zone hardening furnace where each zone is 54” W X 54” L X 54” H along with two matching tempering furnaces.*

The addition of these two furnaces will enable us to shorten lead times and reduce testing costs for carburizing and forging customers respectively. ThermTech has also made additional improvements in blast capabilities with the installation of a large roto-blast cell installation from Pangborn.

With the new expansion, ThermTech will now occupy 75,000 square feet at its Travis Lane campus, with an additional 85,000 square feet at its Pearl Street campus. Steve Wiberg President, Quote: “ThermTech is adding floor space and capacity. The new large AFC equipment will allow ThermTech to decrease lead times and decrease customer testing costs by increasing batch size. While not

unique, it is one of the largest batch IQ furnaces in the Midwest.” Mary Wiberg Springer, Vice President, Quote: “ThermTech strives to remain responsive to the needs of our customers, and this expansion is one example of that. The ingenuity of the American manufacturing sector has been unleashed! Especially in the pipeline, fracking, mining and construction markets. With the huge influx of business that we have experienced in the last 600 days, we are excited about the new capacity and capabilities this IQ line will allow. We look forward to continuing to serve our customers at the highest level, improving turn around and maintaining high quality.”

The new line will result in several additional jobs. ThermTech is firmly rooted in the Waukesha Community, founded by Charles E Wiberg in 1982. Currently owned and operated by brother and sister, Steve Wiberg, President and Mary Wiberg Springer, Vice President. In 2017, they also purchased the building at 1511 Pearl Street. Currently they employ 140 people on the two campuses. About ThermTech: “Since 1982, ThermTech has been a recognized leader in providing quality heat treating services. Serving tooling, defense, oil & gas, mining, construction, medical, and general metal manufacturing companies, ThermTech’s highly skilled staff, of experienced professionals, embracing servant leadership, has been recognized as being able to meet the rigorous quality standards required by our major customers. ThermTech is certified for ISO 9001:2015 and AS9100D in both metal heat treat and metal finishing. They are the only commercial heat treat company also certified by the American Petroleum Institute (API) for heat treating services. The company has an in-house laboratory and offers a full menu of testing and metallurgical consultation. Lastly, ThermTech utilizes the Bluestreak™ Manufacturing Execution and Quality Management System software designed exclusively for the metal finishing industry. www.go-bluestreak.com”



Multi Metals Auction-Powdered Metal Factory

Oct 8, 2019

In Louisville, Kentucky, USA we see that a company by the name of Multi-Metals has closed with the equipment going to auction this week. This would appear to be a pretty standard PM facility with a mixture of presses, lab equipment, machine tools and you guessed it sintering furnaces. Looks like there are a number of furnaces and in the mix are a couple of vacuum sintering HIP units one of which was manufactured by AVS. At first glance everything appears to be pretty tired however perhaps it is just the fact that generally PM facilities are very hard to keep clean. Our guess is that the belt sintering furnaces will attract little interest and the vacuum sinters? Probably 50/50 for a buyer.



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Heat Treating Viet Nam

Oct 8, 2019

It's an interesting world these days with manufacturing being truly global. In this case we are looking at a pump manufacturer from Texas who set up shop in Viet Nam-a shop which now boasts a very impressive in house heat treating facility. The equipment is a mixture of used Ipsen equipment (although not that old) and new equipment provided by McLaughlin Services of Avilla, Indiana, USA as can be seen in the photos below.



Monday Morning Briefing

Oct 6, 2019

We are going to start out in Mexico where we are anxiously awaiting a press release from a company by the name of **Metalsa Commercial Vehicles** in the Monterrey area. Metalsa is a Tier 1 supplier of components to the auto and truck industries and the company is in the process of buying a new furnace to go in their new heat treat area where it will be used to heat treat heavy truck components. We expect a formal announcement and photos towards the end of this year. In a ceremony this past weekend **Mr. Jim Oakes** of controls company SSi was sworn in (wonder if that is the correct term) as the new President of MTI (Metal Treating Institute). In this photo you see Jim on the left, his father in the center (which was a complete surprise to Jim that he would be in attendance) and Steve Thompson, President of SSi.



From **Abbott Furnace** in St. Marys, PA, USA we have this announcement about a new hire. St. Marys, PA is of course the powdered metal capital of the world and we mean that literally, there can be on other location in the world with as much industry dedicated to powdered metal as St. Marys. “We are pleased to announce that **Mike Jacobs** has joined the company as Marketing Manager, directly reporting to Mike Gelsick. He will be responsible for managing the company’s marketing strategy. Mike previously worked for another industrial furnace manufacturer where he worked on various furnaces for almost 15 years, most recently managing the company’s Controlled Atmosphere Brazing (CAB) business as well as the Roller Hearth product line and was very involved with atmosphere generators. His extensive experience with high-volume production furnaces as well as low volume batch furnaces has given Mike a unique perspective on the aluminum brazing and heat treating market.”



The ongoing **General Motors** strike is undoubtedly starting to have an effect on their suppliers which in turn effects both captive and commercial heat treaters. As an example, **Linamar**, a Tier 1 supplier and very large captive heat treater (as an example the company boasts the largest batch IQ installation in North America) is reporting large losses every day that the strike drags on and they are only one of many suppliers to be feeling the pain. “Linamar Corp., Canada’s second largest autoparts manufacturer, expects to lose up to \$1 million every day of the [General Motors Co. strike in the United States](#), the company said in a news release Wednesday. That means the Guelph, Ont. company’s bottom line has already taken a hit of up to \$18 million as the labour action nears the end of its third week. About 49,000 United Auto Workers have been on strike since Sept. 16, resulting in manufacturing stoppages across North America’s deeply integrated supply chain. “The resulting decline in GM orders are currently estimated to impact Linamar earnings at a rate of up to \$1 million CAD/day of strike,” Linamar stated in an investor update on market conditions that have changed since it last released financial results in August.



We ran across quite an interesting interview with **Bob Hill** of commercial heat treater **Solar Atmospheres of Western, PA**. While an interview with Bob is always interesting what caught our attention was the fact that the interview revolved around heat treating of additively manufactured parts-in other words 3 D printing. <https://www.todaysmedicaldevelopments.com/article/5-questions-additive-manufacturing-robert-hill-solar-atmospheres/> Where are they now-**Marc Walters**. Marc has spent most of his working life in the heat treatment industry with companies such as Bodycote (commercial heat treating) and McLaughlin Services (furnace manufacturing). Marc has now been working with GeoCorp a supplier of thermocouples for a little over two years now. Furnace controls company **SSi** is having a technical seminar in **Queretaro, Mexico** October 24th of this year; “SSI Mexico Seminar Queretaro; SSI Mexico will be conducting a seminar on 24 October 2019 at the Four Points Hotel In Queretaro, QRO, Mexico. The topics will include Quality & Metrology for Heat Treatment, Endothermic Atmospheres, SCADA, Controls, Flow technology, Oxygen Sensors and Troubleshooting, Carburizing, Induction and Pyrometry requirements. There will be an interactive show room displaying technologies to meet the rigorous requirements of CQI-9. The seminar will include lunch and a post-seminar happy hour.”



And to round things out we have this photo from **Brad Foote Gear Works** in Pittsburg, PA which we took a couple of years back. Brad Foote has one of the largest pit carburizing installations in North America.



Regal Beloit, Valparaiso, Indiana, USA

Oct 4, 2019

There has been a great deal of turmoil at bearing manufacturer Regal Beloit in Valparaiso, Indiana with a two month long strike tuning into a decision by the company to close the plant which in turn lead to further negotiations-the details are below. It is of interest to us as this location maintains a fairly large in house heat treating department which includes several batch IQ furnaces, freezers and a reasonably large vacuum heat treating department. “After two months, striking Regal Beloit workers have agreed to return to work so the International Association of Machinists and Aerospace Workers Local 2018 can bargain to try to save the 109-year-old Valparaiso factory and more than 170 jobs. The union and Wisconsin-based company reached an agreement that 110 striking hourly workers, who hit the picket line for better pay and more affordable health care on June 30, will report back to work Tuesday so the two sides can negotiate Regal Beloit’s decision to close the plant and try to maintain some work in Valparaiso. The International Machinists Union also is appealing to the White House to intervene after Regal Beloit’s announcement that it will close the longtime Valparaiso factory. The plant once made golf clubs and electrical safety products and switches, but now makes bearings for the aerospace industry, including military helicopters.”





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Parker Trutec, Inc. \$1.4 Million Expansion Completed

Oct 4, 2019

In Springfield, Ohio Parker Trutec just completed an expansion of their heat treatment facility. Parker Trutec is a subsidiary of Japan based Nihon Parkerizing one of the largest commercial heat treaters in Japan and like many Japanese companies largely services the Japanese automotive manufacturers located in North America. We searched through our archives and came up with this 2106 press release from the company which tells us how they were adding a fourth AFC-Holcroft batch IQ furnace. "MARCH 2016 PRESS RELEASE; Parker Trutec, Inc. in Springfield, Ohio has added a 4th UBQ 36-48-36 universal batch integral quench furnace to an existing line. This latest furnace will be equipped for carburizing, and will be made CQI-9 Compliant. The equipment is scheduled for installation in March of 2016. About Parker Trutec: Parker Trutec is a North American subsidiary of Nihon Parkerizing, a world leader in metal improvement technology. The Parker Trutec Group operates 6 facilities in the United States and Mexico which specialize in metal treatments and products that improve the resistance to wear, corrosion and fatigue of metal components. For more information: www.parkertrutec.com



"September 16, 2019, Springfield, Ohio – Parker Trutec, Inc. announces the completion of a 30,000 square foot, \$1.4 million expansion at the Springfield Heat Treatment Plant; marking the sixth expansion since plant operations began in

1989. For more than 30 years, Parker Trutec, Inc. has provided a variety of heat treatment processes including gas carburizing, gas carbonitriding, neutral hardening, gas soft nitriding (GSN), ISONITE® / ISONITE-Q®, and salt bath nitriding (FNC), as well as value-added processes. With the completion of this expansion, additional equipment and processes will be added to further meet customer needs.”

Joern Rohde, ROHDE Schutzgasöfen GmbH Interview

Oct 3, 2019

In the European heat treat market Joern Rohde of furnace builder ROHDE Schutzgasöfen GmbH is quite a well known figure. Recently he provided an interview to the German heat treat magazine "Der Wärmebehandlungsmarkt" (The Heat Treatment Market) a publication which comes out 4 times a year. The interview was done by the CEO of the magazine, Dr. Sommer whose company provides metallurgical testing.

Heat Treatment Market (HTM): It's nice to interview you again this year. At the moment everyone is talking about climate protection and energy efficiency. How do you take this trend into account in your company?

Joern Rohde (JR): The energy efficiency of our systems has always been a very important issue in which we have invested a lot of time. It is essential for our customers to operate energy-efficient plants in order to remain profitable on the market. In our company, we are constantly developing and improving the energy efficiency of our plants. The results of the theoretical energy efficiency are precisely determined before delivery during the hot acceptance test on our test field. In addition, we are involved in projects to increase the efficiency of furnace plants and thus learn more every day.

HTM: That sounds very interesting. So could you be a little more specific?

JR: We have a very current practical example of the energy efficiency of our systems. We have supplied a new customer from the Stuttgart area with gas-heated gas nitriding systems of type KGU 100/120/180. Since this customer has already operated and operates gas nitriding systems from other manufacturers, he wanted to convince himself of the efficiency of our systems. Already in the

decision-making process, the customer took the opportunity to visit the plant and to have his new plant presented by us down to the smallest detail on the basis of a 3D-model. We were able to explain our solutions to him in detail and take away his concerns about existing problems. The operation of the systems shows that our efforts have paid off.

HTM: Can you give us exact numbers?

JR: Our customer can quantify the savings exactly as he records the consumption values of all his systems. The special thing is that in this case we were able to compare our systems directly with those of a market competitor. Within a few days, the customer had run a comparison batch with the same batch content and the same process. The systems both have an external cooling unit from the same manufacturer, so the electricity costs should not be underestimated and provide us with information about the amount of energy that has to be used as cooling capacity. You can see the exact numbers from the graphics. In this case, according to our customer, this saves more than €10,500 per year in operating costs per system. Over the service life of such a system, our systems pay for themselves through this effect alone.

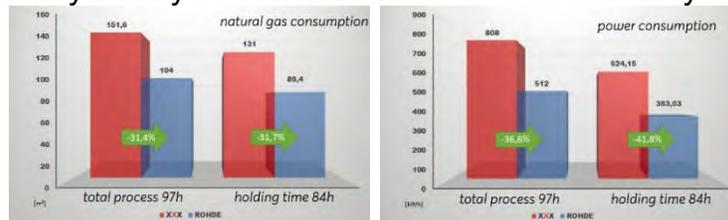
HTM: Of course, this gives you an enormous advantage in this day and age. What do you think is the cause of this increase in efficiency?

JR: Energy efficiency has always been an issue for us, because those who waste energy unnecessarily give away their money. Today, our customers are faced with the challenge of profitable production, even though costs continue to rise and this trend is expected to continue. We took this problem on board years ago and optimized our products so that our customers can save energy costs. Without going into too much detail, everyone can easily see the difference between our systems. Take a look at the external dimensions of the comparable usable space. The customer does not have to pay for the energy that I keep in the overall system, quite simply. When purchasing a new system, I recommend that customers pay attention to the consumption data for electricity, natural gas and the cooling capacity required. This will enable them to effectively reduce their heat treatment costs and a clear conscience is given free of charge.

HTM: The development of your company over the last few years has been very successful, as we have witnessed. What are the reasons for this constancy?

JR: We are actually celebrating our 40th anniversary this year, which makes me very proud. Since my father founded the company, we have continued to develop, but always with small, well-considered steps. We have proven and tested structures in the company, but we have always been open to new ideas. In addition to international business, which is constantly growing, we can also benefit from our new location. But the real engine of our growth is customer satisfaction. In every detail of the plant, we try to offer our customers the best technical and sustainable solution with the quality seal “Made in Germany”.

HTM: Then, we finally wish you continued success and thank you for the interview.



Joern Rohde (left) Hirschvogel Automotive Group, Denklingen, Germany

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Bluewater Thermal Solutions Kitchener, Canada Closes

Oct 2, 2019

As ranked by “**The Monty**” Bluewater Thermal Solutions <https://bluewaterthermal.com/> is one of the largest commercial heat treaters in North America with 12 different heat treating and brazing facilities in the USA and Canada. Unfortunately we have been informed that yesterday, September 30th 2019 the facility in Kitchener, Canada closed for good. The history of this location is quite fascinating; it was founded in 1945 and for many years was owned by the Beingsner family until they sold to Gibraltar Steel in 2002 at which point the company had annual sales of approximately \$15.5 million (Canadian) making it the largest commercial heat treater in Canada at that time. It remained part of the Gibraltar commercial heat treating division (which included the Carolina Commercial facilities-now part of Bodycote) until Gibraltar sold off the entire division which was renamed Bluewater Thermal. At this point in time the company has a couple of smaller mesh belt lines, some aluminum furnaces not currently in operation and several 36" X 72" batch IQ furnaces, one purchased new in 2015 and the others designed and built by B & W themselves quite a few years ago. We believe that all of the equipment has been bought by a used equipment dealer but this has not yet been confirmed. It is a real shame to see a company with such a long and illustrious history closing however the world keeps changing. This photo was taken in 2015 when the Surface Combustion Allcase furnace was brand new, in the centre we see the General Manager, Mr. Shawn Scott who remains with the company.



SSi New Building

Oct 2, 2019

Last week we mentioned how US controls company SSi recently acquired another building. This press release below tells about the new building and a recent sales meeting.

“Super Systems Inc. of Cincinnati OH held its 2019 sales meeting at its worldwide headquarters last week. The meeting included employees from international offices in England, Mexico, India and China, along with sales representatives across the 50 states. The meeting took place in SSi’s recently acquired building on the same street as the other two buildings occupied by SSi administrative, engineering, sales and manufacturing staff. “It was a fantastic week that included some very in-depth training on our products and services and of course a great networking opportunity for our sales channels” says Steve Thompson, President of SSi “I am grateful for the sales representatives that we have working with SSi – truly the best in the business. A shout-out to all of the SSi staff this week. Everyone contributed in some way, bringing great success to the meeting.”



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HEAT TREAT 2019
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An advertisement for Ipsen heat treatment equipment. It features a large blue industrial furnace on the right and a smaller, open furnace on the left where a person is visible. The text "INVENTING HISTORY" is overlaid on the image.

Countdown for HK 2019 – 22 – 24 October in Cologne, Germany

Oct 2, 2019

The event is Europe's largest annual forum for experts in the field of materials technology, with a particular focus on heat treatment processes. This year a high quality congress program will be provided. The program jury were able to select the speakers from more than 50 submissions.

Main topics:

1. Materials for lightweight design
2. Functional coatings
3. Intelligent process control
4. Quality control
5. Partial heat treatment of components
6. Additive manufacturing
7. Microstructure and strength

Congress and trade fair – a strong duo; Around 3,000 trade visitors – from heat treatment shops, as well as from sectors such as industrial furnace construction, from supplier companies, manufacturers of testing equipment and also employees from the automotive and steel industry – now make use of this event to share and exchange information on innovations and trends in the sector within the network of the AWT (German association for Heat Treatment and Materials Technology). At the show, around 180 exhibitors from across Germany and from around the world will be providing information on their latest product innovations across an exhibition space of 13,000 m². The strong connection between the congress and the associated trade show has the advantage that employees from all areas of a company can take part in the event – company management, research and development, quality management, technical practice and sales. This will ensure a high standard of discussion with the customers at the trade show.

HK for the 75th time – from Heat Treatment Colloquium to Heat Treatment Congress; Celebrate with us and immerse yourself in the history of the event! We have put together a large collection of photos from the 75 events which have been

held between the years 1942 and 2018, and have made them into a photo show. The show will be presented on the stand next to the Piazza in the exhibition hall, in the Feedback Area and in the Congress Hall. All visitors to the congress and all exhibitors are invited to our big Anniversary Reception on the evening of Wednesday 23 October!

News from the Online Marketplace; Take part in a round table discussion about the 20 µm issue concerning the Vickers hardness test. Furthermore, you'll get a report from the DIN ad-hoc group „Indention diagonals below 20 microns” and the last ISO meeting of the TC 164 „Mechanical testing of metals“ that took place in September 2019. Location: AWT booth on the Piazza C-120, 23rd October 2019 from 2.00 to 3.00 pm

More information, apps and ticket shop at www.hk-awt.de



The place for networking and meetings with the VIPs from AWT at HK is the Heat



Thomas Dopler, Aichelin GesmbH, Austria

Oct 1, 2019

We are excited to be able to offer you this interview with an individual we have a very high opinion of Mr. Thomas Dopler, CEO of furnace manufacturer Aichelin GesmbH based in Moedling, Austria.

Thomas I am always curious about how people end up in the heat treatment industry. Could you share with us how you got started in the industry and ended up where you are now?

I did my first heat treatment at the age of 15 at high school (higher technical school with optional classes in metallurgy), followed by my studies in material science where heat treatment was one of the major subjects, especially steel and aluminium. These two materials have been guiding me through my entire professional life from the aerospace and automotive industry where I was working in R&D and Sales to my current position at Aichelin, which I joined 11 years ago. Heat treatment of steel and aluminium is our reason to be.

Please share with us some details about Aichelin-what you have to offer, the size of the company, the number of locations and perhaps even a brief history of the company.

AICHELIN Group is a leading provider of heat treatment solutions, such as industrial furnaces, induction hardening plants and industrial gas burners systems. The company's roots date back to 1868. The long-established brand AICHELIN, as well as EMA Indutec, SAFED, BOSIO, AFC-Holcroft and Noxmat, make up the group and together employ more than 1,100 people. AICHELIN Group ranges among the world's top 3 heat treatment companies. AICHELIN's subsidiaries in Europe are located in Austria, France, Germany, Slovenia, and Switzerland; the worldwide presence of the company includes subsidiaries and branch offices in China, India, Russia, and the US, as well as a sales network in 22 more countries. The site in Mödling is the technological center for new equipment in Europe, with a focus on continuous heat treatment plants. Our scope of supply ranges from pusher, ring and roller hearth furnaces to belt and sealed quench furnace lines. AICHELIN GesmbH has been doing business in Mödling since 1960 and the Group's headquarters is also located here. A great deal of our business

is After Sales and we are constantly working on new developments such as our latest products heatXpress and #jakob.

Historically what type of furnace has Aichelin made the most of? Pusher? Cast Link? Sealed Quench etc.?

Since we offer such a great variety of furnace types, this question is difficult to answer for the entire history of Aichelin. However, there is certain continuity with gas carburizing. Aichelin started the production of furnaces for powder carburizing according to licenses of the American Gas Furnace Corp. back in 1900. When the contacts to the USA were interrupted during World War 1, these furnace lines were further developed with Aichelin's own know-how. Together with Robert Bosch (the founder of Bosch group, in person!) and his leading engineers, Aichelin had started tests even before the War in order to improve carburizing in gas. Back then, barrel-shaped retort furnaces were used, which was one of the most-requested Aichelin products of that time. Despite the limited control devices of that period, the test results were astonishingly good. Aichelin is therefore definitely a pioneer regarding gas carburizing.

Typically who are your customers? Commercial or captive heat treaters? Auto parts makers or aerospace suppliers?

The AICHELIN Group focusses on atmospheric heat treatment, for both continuous and batch furnace lines. We consider ourselves as one of the globally leading companies in this industry, with more than 150 years of history in Europe, more than 100 years of history in the US and more than 30 years of history on the Chinese market. Therefore, we serve all kinds of customers, from the major OEMs of the different industries and the leading captive heat treatment shops of the leading tier 1s to commercial heat treatment shops. This also confirms our focus on the automotive market and its suppliers with all their applications, whereas the aerospace market is less our target. At the same time we are also serving customers in the bearing, fasteners and electric machinery industry.

As CEO of the Moedling division do you have much involvement with the other divisions such as China or North America?

AICHELIN Group's strength is the global position in the heat treatment market, with more than 1100 employees world-wide. For this reason, a very tight

cooperation and close contacts with my colleagues in China & the US are part of our common success. We can help each other with know-how, resources and technical advice as well as with service support.

Are you seeing or do you expect to see much competition in Europe from either North American or Asian furnace builders?

No. There is a degree of customization of furnace lines for the individual needs on the 3 continents (Europe, the Americas & Asia). Therefore, the only cases when we see some mixture of overseas furnace builders with the locals is in case our customers go overseas and want a precise copy of what they have in their home country (with adaptations to local standards and equipment)

A common perception amongst buyers of new furnaces is that because they are high dollar items this must translate into high margins for the furnace manufacturer. How would you respond to this statement?

New furnace business will never make you rich in the automotive business! The market power of “us” (the furnace builders) is far too small against the OEMs. We must therefore focus on continuous improvement of the furnace quality and technology and assist our customers throughout the long life of our furnaces with After Sales Services. This way we remain competitive over the years.

I understand that Aichelin has a new product which you are quite proud of “heatXpress”-could you please tell us why you are so proud of this particular system?

The reason we are so proud of the new product, heatXpress, is easily explained: The step chain furnace has 10 major advantages compared to existing PHS (Press hardening Steel) heat treatment solutions. For example, the durability of the step chain transport system is more than 4 years in contrast to traditional systems using rollers, which must be replaced much more frequently. Another example is the transport accuracy at every stage since there is no build-up of AISi on the chains in the furnace. A final example would be the tailored property options combined with the very short cycle times, which create an important advantage for companies who are looking for cost-effective PHS manufacturing.

With our new product, heatXpress, AICHELIN has the right and best product for all PHS requirements now and in the future.

What is your number one concern these days? Finding people? Tough competition? A slowing economy?

Over the last 20 years, our industry has gone through several major ups and downs. Our experience thus tells us that we need to stay flexible regarding the size of our individual furnace companies as such changes can occur within short notice. On the long run, the most important concern are our employees! We must find them, train them, keep them and challenge them over the years. Only if we manage to have the best experts on the market (for mechanical and electrical design, processes, furnace installation, ...), we may set ourselves apart in the dynamic market with respect to our competitors.

I am fascinated by additive manufacturing (or 3D printing) and I have now seen a couple of examples of small systems which incorporate a sintering furnace. Have you had any involvement in this technology?

Additive Manufacturing is one of the technologies that will shape the future. Heat treatment is an essential part of this technology to reduce stresses and distortion for 3D-printed parts and to obtain the desired part properties. In my own opinion we will see this technology entering the heat treatment market on a bigger scale in the near future (2021 to 2025). We are already working on this technology, in cooperation with 3D-printing prototype manufacturers as well as with 3D printer manufacturers and already have parts running through our furnaces.

Since we're talking about a changing world and changing technologies let's look at electric cars. The predictions are that within a decade or two we will all be driving electric cars which by their very nature require substantially less components which means substantially less heat treating. Does this enter your long term thinking about the size of the heat treatment industry?

The heat treatment market has always been very dynamic. The trend towards electric cars (purely electric as well as hybrid) means a big change for us, as some of our customers are strongly in the gear box industry. We face these changes by doing what we have always done: We focus on providing our customers with just

the right technology for their needs. An example: One of our big overseas customers supplies parts for the new TESLA models.

Lets keep talking about the future of the industry. Do you personally think that the product mix Aichelin now offers will remain fairly constant in the foreseeable future or do you see it changing?

We see a slight shift in our product and service mix. As we have a high number of existing installations in the market, our customers tend to use them as long as possible. The oldest Aichelin installations working in the market are more than 70 years old! It is our job to keep these installations as up-to-date as possible, from the switch cabinet with the latest safety technology up to the use of most recent energy-efficient combustion systems. Of course, industry 4.0 will play an important role in the future.

Thomas out of all the types of thermal processing systems which you can offer what is your favorite style? Personally I have always liked the versatility of batch IQ (sealed quench) furnaces and have never been overwhelmed by pit furnaces but that is my opinion-what are your thoughts?

Our goal is to provide world class heat treatment for our customers which reproduces exactly the quality our customers require. For this reason, my heart is with continuous heat treatment furnaces with a good degree of automation, as I believe they are the best way to ensure stable quality for many industries with a decreasing number of skilled personnel.

Last but not least is there any interesting developments at Aichelin which you can share with us?

The most exciting recent development is our digital maintenance assistant #jakob. Named after Jakob Aichelin, who founded our company 151 years ago, this tool will make maintenance so much easier, providing all the information the furnace operators or maintenance staff will ever need at a glance, whilst carrying out monitoring functions and predicting maintenance and parts needs. #jakob is AICHELIN's answer to Industry 4.0 and IoT.



Bodycote, New York, USA

Oct 1, 2019

While we mentioned this news item recently, this article from Syracuse.com provides a few more details about the new location. Please note the interesting comment about the new location being able to “perform heat treatment processes not currently available in the United States.”

“Geddes, N.Y. — A thermal processing company whose Van Buren operation was destroyed by fire last year plans to reopen in Geddes. Bodycote Thermal Processing Inc. said it will spend \$15.3 million to renovate and equip a dilapidated, 58,000-square-foot building at 8 Dwight Park Drive, where it will have access to low-cost power from Solvay’s municipal electric department. Most of the money, \$11.5 million, will be spent on equipment, including some that will allow the company to perform heat treatment processes not currently available in the United States, it said. “The new facility will initially employ up to 30 employees in the community within the first two years of operation with the opportunity to add more positions as we add future processing capacity,” Bill Sandstrom, vice president of operations, said in a letter to the Onondaga County Office of Economic Development.

Bodycote, which describes itself as the world’s largest provider of thermal processing services, entered the Syracuse market when it acquired Syracuse Heat Treating Corp.’s operation at 7055 Interstate Island Road in Van Buren in January 2017. The company operates in 23 countries, with 180 locations and 6,000 employees. A fire broke out in the plant in Van Buren on July 6, 2018, injuring no

one but causing heavy damage to the building. Sandstrom said the fire was caused by “legacy shop floor issues” in the plant. The company has continued to serve its customers in Central New York, shipping their parts to other Bodycote facilities and shipping them back after heat treatment. Bodycote’s nearest facility to Syracuse is in Rochester.”



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BATCH IQ FURNACES

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#IQ469 Surface Combustion “Super 30” Batch IQ Furnace

Manufactured by Surface Combustion this is a Batch IQ furnace with working dimensions of 30" X 48" X 30". Batch IQ furnace S/N BX-41206-1. Electrically heated with top cool and updated SSI controls. Built approximately 1980. Set up for endo atmosphere with ammonia addition. Currently installed but not in use. Furnace is complete, installed and ready to go. Shut down approximately 5 months ago. Excellent condition.

Asking Price: \$49,000 USD

<https://themonty.com/project/itemiq469-surface-combustion-super-30-batch-iq-furnace/>

Item#IQ468 Surface Combustion “Super 36 Allcase” Furnaces (2 available)

“Proelectric” 36" X 48" X 30" High Surface Combustion batch IQ furnaces (2 available). Serial numbers BC-42068-1A and BC-42068-1B. Electrically heated with a maximum operating temperature of 1900F. Top cool, state of the art SSI touch screen controls and SSI oxygen probes. Quench oil filters and rear handlers. Both built in 1983. Currently running on endothermic atmosphere. Very good condition, complete and currently installed. Shut down very recently. **Asking \$69,000 USD Each**

<https://themonty.com/project/itemiq468-surface-combustion-super-36-allcase-furnaces-2-available/>

Item#IQ467 Surface Combustion “Super 30” Allcase Line

Manufactured by Surface Combustion this is a complete line consisting of a Batch IQ furnace, charge car, temper and washer. Working dimensions of 30" X 48" X 30". Batch IQ furnace S/N BX-41206-1. Electrically heated with top cool and updated SSI controls. Built approximately 1980. Set up for endo atmosphere with ammonia addition. Line is complete, installed and ready to go. Shut down approximately 5 months ago. Excellent condition. Please ask for complete details.

Charge Car. Manufactured by Surface Combustion this is a model SEDP-ER 30 48 Charge car suitable for a 30" X 48" batch IQ furnace. Extended reach. Installed but not currently in operation. Complete and ready to go.

Temper. Manufactured by Surface Combustion in 1972 this is an electrically heated temper with working dimensions of 30" X 48" X 30". Serial Number BC-39686. Maximum operating temperature of 1250F. Currently installed but not in use. Complete and in good condition.

Washer. Manufactured by Surface Combustion this is a dunk/spray washer with working dimensions of 30" X 48" X 30". Model WWD 30-48-30, Serial number BC 42072-1. Electrically heated with a maximum operating temperature of 180F. Installed but not in use. Excellent condition.

Asking \$79,000 USD For Everything

<https://themonty.com/project/itemiq467-surface-combustion-super-30-allcase-line/>

Item#IQ465 Surface Combustion “Super 36” Batch IQ Furnace

Manufactured by Surface Combustion in 2001 this is a gas fired batch IQ furnace with working dimensions of 36" X 48" X 36" and a weight capacity of 3500 pounds. Set up for endo atmosphere. Pneumatically actuated quench elevator , top cool, furnace fan and updated SSI touch pad controls. Currently installed but not in use. Very good condition.

Asking Price \$160,000 USD

<https://themonty.com/project/surface-combustion-super-36-batch-iq-furnace/>

Item#IQ463 Ipsen T-7 Batch IQ Furnace

Ipsen Model: T7-1000-DGM Batch IQ Furnace. Serial #52044. Type: Straight Through Atmosphere Integral Quench Furnace

Processes: Carburizing, Neutral Hardening and Carbonitriding

Heat Input: Natural Gas-Fired (12 Silicon Carbide Radiant Tubes)

Work Zone: 30"W x 48"D x 20"H

Max. Temp: 1850°F (Typically operated at 1750°F)

Max. Load Wt.: 1350 lb at 1550F

Quenchant Heating and Cooling: Yes (SBS Oil Cooler)

Loading/Unloading: Ipsen "T7 Trans. Loader" powered Front-end Loader and Roller Unload Table

Pit Required: None

Carbon Control: SSI Gold Probe

Controls: Super Systems, Inc. 9120 touch screen, with SSI Series 7 & 7SL controllers, Digital data logging (currently tied into plant-wide SSI Super Data system)

Insulation Type: Brick-lined

Condition: Refurbished by Unitherm, Converted to Eclipse Recuperative Burners (still under warranty)

Included: Any available spare parts, Ammonia Tank.

Footprint: 8'-6" Wide x 27' Long x ~14-1/2' High

Alloy: Grids and baskets may be available

Asking Price \$59,000 USD

<https://themonty.com/project/itemvf350-ipsen-t-7-batch-iq-furnace/>

Item#IQB461 Surface Combustion Batch IQ

Surface Combustion Batch IQ Furnace. Standard Surface Combustion Integral Quench Furnace with single quench cylinder and rear handler. This furnace has

“Trident” type radiant tubes with Eclipse burners and Eclipse recuperation. Natural gas fired 1,000,000 BTU’s. Serial Number BX-35790-1. Max operating temperature 1750°F with a voltage of 460/3/60. Working dimensions of 30”W x 20”H x 48”L. Approximate external dimensions 10’w x 10’h x 15’l. Controls: Mounted and wired in a free standing panel includes a current SSi control system with PLC and computer. Very good condition and available immediately.

Asking Price \$65,000 USD

<https://themonty.com/project/itemb461-surface-combustion-batch-iq/>

Item#IQB445 Surface Combustion Batch IQ’s (3 Available)

Surface combustion gas fired batch IQ furnaces model “Super 36”. Working dimensions of 36” wide X 48” deep X 32” high. Late 1980’s vintage. Casemate controls, SBS quench oil filter. Set up for endo atmosphere with ammonia addition. Furnaces were in operation until February 27th 2018, now in indoor storage in the Detroit, Michigan area. Complete and in good operating condition. Alloy and brickwork in reasonably good condition.

Asking Price \$99,000 USD Each Loaded On A Truck

<https://themonty.com/project/itemb445-surface-combustion-batch-iqs-3-available/>

Item#IQ442 SOLO Quenching Machine

SOLO Quenching Machine 209-30/30 6981 – 1150 °C. Built by Solo of Switzerland this is a SOLO 209-30/30 model. This furnace was manufactured in 1991. Quenching machine for self-hardening and oil quenching. Composition: quenching Bell Furnace, nitrogen quenching unit, tempering furnace, oil quenching unit, controller / programmer, operator panel, temperature controller, hydraulic control. Dedicated for austenitizing, annealing, tempering, oil quenching, quenching under nitrogen. Max. temperature: 1150°C. Main voltage: 3 x 400 V – 50 Hz. Power input: 10 kW. Effective load dimensions: Diameter 300

mm*Height 300 mm. Max. loading weight: 20 kg. Protective gas: N2 or mixture N2 to max. 5 % H2. Overall dimensions: Height 2200mm, width 2070mm, depth 2250m. Possibility of mounting and commissioning by the manufacturer (SOLO). Located in France. Good condition. All manuals included.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb442-solo-quenching-machine/>

Item#IQ441 GM Batch IQ Furnace

GM Batch IQ with Top Cool. Manufacturer: GM. Type: Integral Quench Furnace with Top Cool. Heated: Natural Gas – 1.2 M BTU's/Hour. Max. Temperature: 1450-1875 deg. Voltage: 460/3/60. Work Area: 36"W x 36"H x 48"L. Controls: All mounted in two freestanding panels next to the furnace Includes motor starters relays, pushbuttons, signal lights etc. Honeywell indicating controller and overtemp. Honeywell circular chart recorder for recording temperature. Carbon control system.

Description: Furnace has (4) "U" shaped radiant tubes mounted vertically, (2) on each side wall. Heated by recuperated burners. Alloy roller rail hearth, alloy circulating fan, dual quench cylinders, top cool chamber and heated quench tank. Brick lined with fiber roof. Rear handler system, 1998 vintage. Installed, complete and operational. Condition: Very Good. Availability: Immediate.

Asking Price \$150,000 USD

<https://themonty.com/project/itemb441-gm-batch-iq-furnace/>

Item#IQ439 Surface Combustion Batch IQ Furnace

Surface Combustion "Allcase" batch IQ furnace with working dimensions of 36" X 48" X 30" high. Natural gas heating, 1 MBTU's/Hour. Maximum operating temperature of 1750F, voltage 460/3/60. External Dimensions: 10'W x 12'H x 15'L. Controls: All mounted in a panel attached to the furnace includes motor starters relays, pushbuttons, signal lights etc. Honeywell digital strip chart recorder for recording temperature, indicating controller and overtemp. Partlow

controls for oil heating/cooling. Description: Surface Combustion Allcase Furnace with (6) "U" shaped radiant tubes mounted vertically 3 on each side wall. Fiber lined. Alloy roller rail hearth, alloy circulating fan, dual quench cylinders, top cool chamber and heated quench tank. Furnace has some missing components (temperature controls, pressure switches, ignition transformers, regulator) which will be replaced prior to shipment. Condition: Very Good.

Asking Price \$80,000 USD

<https://themonty.com/project/itemb439-surface-combustion-batch-iq-furnace/>

Item#IQ438 Holcroft Batch IQ Furnace Line

Holcroft Batch IQ Furnace Line. Model GP2500. Serial Number S/N #CJ-4233. Installed new in 1980. Gas fired, working dimensions of 30" X 48" X 30" and a capacity of 2500 pounds. Furnace was operational until shut down on 11/30/17 when plant closed. Also included is a double ended charge car (Holcroft) to handle loads of 30" X 48" and a Holcroft Spray/Dunk washer with heating system 30" X 48" X 30". Complete, in very good condition and ready to go.

Asking Price \$60,000 USD

<https://themonty.com/project/itemb438-holcroft-batch-iq-furnace-line/>

Item#IQ398 Sauder Batch IQ Line

Sauder Batch IQ Line. Serial Number 881978-83. Electrically heated 480/3/60/150kW total load. Maximum operating temperature of 1850F. Working dimensions of 24" Wide X 24" high X 36" long. Controls; Mounted and wired in an enclosure attached to the right hand side of the furnace includes a Marathon 10 Pro digital temperature controller, Marathon Carbpro digital carbon controller, Barber Colman analog high limit and a Honeywell digital strip chart recorder. Three power meters are face mounted to the same enclosure which monitor power in each zone of the furnace. A Halmar "SCR" power controller controls power to the heating elements. Two (2) Allen Bradley PLC controllers are mounted in the same enclosure. Standard In/Out Integral Quench Furnace w/Top

Cool. This line consists of IQ furnace with top cool, heated quench tank, charge car, dunk & spray washer, temper furnace, SBS oil cooler, scissors table, atmosphere flow panel and several spare parts. Very good condition. Asking \$125,000 USD for the complete line. Shipping Dimensions:

Temper Oven: 72"W x 11'H x 72"L

Washer: 80"W x 10'3"H x 120"L

Furnace: 109"W x 11'H x 96"L

Quench: 106" x 10'H x 72"

Top Cool: Skid – 5' x 5' x 6'H

Charge Car: 78"W x 60"H x 86"L

Misc. skids, flow panel, SBS, spare parts

Asking Price \$125,000 USD

<https://themonty.com/project/itemb398-sauder-batch-iq-line/>

BATCH FURNACES

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#B474 New Pyradia Inert Atmosphere Retort Furnace

Furnace Construction: Bottom Loading Retort Electric Furnace w/ Semi-Automatic Electro-Pneumatic. Loading Cart. Ceramic Fiber Insulation. RA330 Sealed Retort Construction. Primed & Painted 3/16" Steel Shell. Working Dimensions: \varnothing 36" x 30"H. Retort Inside Dimensions: \varnothing 44" x 36"H. Design Temp: 2000F. Working Temp: Up to 1800F. Uniformity: +/-25F @ 1800F. Heating Power: 180KW, Watlow SCR. Heat-Up Ramp: Ambient to 1800F in 120 min (loaded oven). Max Gross Load: 800lbs. Heating Element Type: Sandvik ROB Heating System w/ APM Heating elements. Furnace Atmosphere: Argon/H₂ Mix (<4%). Voltage: 600/3/60. Amperage: 200 amps. Recirculation Fan: Plug Type, Radial, 3 HP, Water Cooled. Cooling: External to retort, 5 HP blower with additionnal 1/2 HP forced air fan. Instrumentation: AMS2750E, Type B compatible. Gas Panel: Complete Ar/H₂ gas panel with flowmeters, pressure regulators, manual & solenoid valves & flow switches, SSI O₂ sensor, SSI Dew point sensor. Controls: NEMA 12 electrical enclosures, Micrologix PLC, Kep 7" Touchscreen HMI, Eurotherm Nanodac Temperature Controller, Eurotherm 3216 Limit Controller, Eurotherm 6100A, Digital Chart Recorder w/ Up to 12 Recording Inputs for Load TCs, Batching capability, Bar Code, Scanner, Uninterrupted Power Supply (UPS), 1-Ton Air cooled Temptek TCU, CSA Approved. Extras: 2x Forced Air Cooled Tables, 2X Carbon Fiber Fixture Grids. NEW!

Asking \$375,000 Canadian (Approximately 295,000 USD)

<https://themonty.com/project/itemb474-pyradia-inert-atmosphere-retort-furnace/>

Item#B473 Pit Carburizing Furnaces (2 available)

Manufactured by Surface Combustion these are gas fired units with an operating temperature of 1750 F. SSI controls. Working dimensions of 48" X 72". Endo atmosphere with recirculating fan in the bottom. Currently installed but not in use. Excellent condition.

Asking \$150,000 USD Each Loaded On A Truck

<https://themonty.com/project/itemb473-pit-carburizing-furnaces-2-available/>

Item#B472 Ionitech's Plasma Nitriding Cold-Wall furnace

Ionitech's Plasma nitriding Cold-Wall furnace ION-75CWI, with 2 Chambers and one control. The furnace is capable of Plasma Nitriding, Plasma nitrocarburising, and Post-oxidation, processing big and small parts and tools. The furnace has been used for 4 years at Ionitech's facility and has been taken care of perfectly – it is good as new. It still works daily. It has been retrofited to work with our absolutely user-friendly touchscreen control panel. The process is really easy to control. Ionitech gives full time support as maintenance and technology after purchase. Working dimensions of Chamber 1 are Ø 1000 mm x 1100 mm and max weight of tool for processing 1500 kg. Chamber 2 – Ø 750 mm x 2000 mm and max weight of tool for processing 1500 kg. Purchase can be done with only one chamber. Located in Europe.

For Pricing Please Contact Jordan@themonty.com

<https://themonty.com/project/itemb472-ionitechs-plasma-nitriding-cold-wall-furnace/>

Item#B471 Lindberg Pit Nitrider

Lindberg Pit Nitrider. Lindberg Cyclone "Pit Nitriding" furnace with removable fan assembly & retort. There are twelve (12) bolt locks which seal the fan assembly to the gasket on the retort. Fan assembly sets on a steel stand when not in use. Alloy retort sets in a steel support when not in use. Electrically heated with a voltage of 230/3/60/105 kW. Model # 3896-E12 and serial # 14030. Max

operating temperature is 1250°F. Working dimensions of 36" diameter x 84" deep with external dimensions of 5'w x 9'4"H x 7'l – Furnace Only. Controls mounted and wired in a free standing panel includes all necessary controls for proper operation.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb471-lindberg-pit-nitrider/>

Item#B452 AHT Fluidized Bed Furnace

Applied Heat Technologies (AHT) fluidized bed furnace. Treatment chamber is 300 mm diameter x 900 mm deep (roughly 12 in diameter x 36 in deep.) Maximum temperature is 1050 °C (1922°F). Maximum load is rated at 50 kg at 1000 °C (110 lb at 1832 °F) and 90 kg at 570 °C (198 lb at 1058 °F.) Mark® fluid bed furnace controller software. Silicon carbide heating elements, 25 kW, configured in delta. Piping is set to accept nitrogen, argon, hydrogen chloride (HCl), and hydrogen gasses. Inert material is P120 grit aluminum oxide (Al₂O₃) powder. The fluidized bed is designed to deposit vanadium carbide (and other carbides with correct chemistry) onto steel. The fluidized bed system comes with a propane burner, HCl detection system, and scrubber system. The system also has a hood and quench bed that came with it but these have not been used and it cannot be verified that they work. The fluidized bed system with scrubber is currently operational but is not being used. Almost new heating elements with one spare included.**Asking Price \$99,000 USD**

<https://themonty.com/project/itemb452-aht-fluidized-bed-furnace/>

Item#B448 Kleenair Products Tip Up Style Furnaces

Tip Up Furnaces (3 available). Manufactured by Kleenair Products these "Tip Up" style furnaces have working dimensions of 60" wide X 60" high X 72" long. Natural gas heating-1200CFH. Maximum temperature 1500F & 2000F. 460/6/60 electrical. External dimensions of 8'W x 10'6"H (closed) x 14'L Each, 13'6"H

when open. Controls: Temperature controls are missing. There is one (1) control cabinet which houses the flame relay modules, motor starters etc. and is common to all three (3) furnaces. Description: Currently available are two (2) 1500°F furnaces and one (1) 2000°F furnace. There is also one (1) loader and one (1) quench tank. Furnaces are ceramic fiber lined with Eclipse “TJ” direct fired burners. Burners fire from top rear and bottom front under the refractory piers. Dual hydraulic cylinders open/close the furnace cover. One (1) common hydraulic power unit for all three (3) furnaces. We will separate the line to sell individually or as a whole. We can provide hydraulic power units for each furnace. Very good condition.

Asking Price \$55,000 USD Each

or

\$150,000 USD For All Three

<https://themonty.com/project/itemb448-kleenair-products-tip-up-style-furnaces/>

Item#B436 Lindberg Pit Gas Nitrider

36" x 60" pit gas nitrider (Lindberg Homo Nitrider – electric) built in late '70's, c/w with Super Systems Gas Nitriding Control system built in 2012. System was operational up until decommissioning last year, when it was replaced with new equipment. Price includes fixtures shown in pictures.

Asking Price \$50,000 USD

<https://themonty.com/project/itemb436-lindberg-pit-gas-nitrider/>

Item#B426 Plateg Plasma Nitriding Unit

Manufactured by Plateg this is a Plateg Puls Plasma Nitriding unit. Type; Hot Wall Plasma Nitriding Furnace (Tandem). Built in 1997, the programmer was replaced in 2017. Working dimensions of 1000 mm diameter X 1250 mm high. Load capacity 1000 kg. Installed power 95 kW, 400 V, 50 Hz, 160 A. Located in Turkey.

Asking Price \$98,000 Euro

<https://themonty.com/project/itemb426-plateg-plasma-nitriding-unit/>

Item#B415 J.L.Becker Car Bottom

J.L. Becker Car Bottom. Working Dimensions are 96" wide x 180" Long x 66"High with a Maximum Temperature of 1,800 Deg. F. Natural Gas fired with 4.3 Million Btu's. Serial Number: J 2060. Double Ended Car Bottom with Air Operated Doors to accommodate Dual – Full Length Motorized Cars. Each Car is 108" wide x 200" long with Castable Refractory Floor Insulation – Sand Sealed. The Furnace is Fiber/Refractory Lined with 8 Tempest Burners (4) per side wall, firing opposite and opposed. The Exhaust Flues are floor level mounted for excellent temperature uniformity. Temperature Controls : Free Standing Panel Honeywell Digital Controls and Honeywell Tru-line Circular Chart Recorder.

Asking Price \$95,000 USD

<https://themonty.com/project/itemb415-j-l-becker-car-bottom/>

Box Furnaces

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#BOX469 SierraTherm Forced Convection Elevator Batch Oven

SierraTherm LTCC16-24-4A 8500 Series Forced Convection Elevator Batch Oven. The internal dimensions of the chamber are approximately 18" inches wide by 18" inches deep by 24" inches high. The advertised temperature achievable is 1050°C. The Oven comes with the two computers, one monitor, one mouse, & one keyboard, as shown. One computer has the SierraTherm Furnace Monitoring System Software loaded on it, as shown. The power requirements are 240Vac 3-phase 60Hz. Each of the computers power-up although only one has the SierraTherm Furnace Monitoring System Software loaded on it.

Asking Price \$42,500 USD

<https://themonty.com/project/itembox469-sierratherm-forced-convection-elevator-batch-oven/>

Item#BOX468 SierraTherm Elevator Hearth Box Furnace

Model; LTCC-16-24-4A. Voltage; 240V 3Ph 109A 60Hz. Maximum operating temperature of 1050 degrees C. Working dimensions of 16" high x 24" wide x 24" deep.

General Application Parameters:

- o Maximum Temperature Rating: 1050° C
- o Atmosphere System: Designed for air atmosphere.
- o Heating Method: Ceramic fiber block with imbedded resistive wire heating elements.
- o Batch processing: bottom load elevator

Rated to 1050 °C, this SierraTherm Series features an energy efficient, ultra clean, low mass refractory heating chamber. All models include the MicroTherm

Windows based user interface with 20 segment temperature and gas flow programming. Temperature cycling can be programmed using starting and ending temperature, rise and cooling rates, and time duration. Multiple vertical heated zones, as well as power trimming to all four element panels (left, right, front, back) provide for precise temperature stability and control throughout the process chamber. A sophisticated atmosphere inlet and exhaust system features four independently adjustable gas inlets and corresponding exhaust ports to efficiently extract burn-off effluents throughout the process chamber. Excellent condition.

Asking Price \$59,500 USD

<https://themonty.com/project/itembox468-esierratherm-elevator-hearth-box-furnace/>

Item#467 L & L Special Furnace Box Furnace

Model MDL.FB777-FA11-01-G394-480R39H96, Serial Number H496LN.

Electrically heated 480/3/60/150 kW/187 Amps. Maximum operating temperature of 1800F. Working dimensions of 72"W x 72"H x 72"L (7'Cube Inside), outside dimensions of 9'W x 12'5"H x 8'L. Controls; Mounted and wired in a free standing NEMA 1 enclosure with fused disconnect on the left hand side of the furnace. Honeywell UDC digital temperature controls for control and high limit. Strip chart recorder and process timer is also included. SCR provides consistent power to the heating elements. A cooling blower with filter helps with cooling the enclosure. Furnace is lined with ceramic fiber on all sides, top, and bottom between the castable piers. The door is a double hinged right hand swing type door with four (4) hand wheel clamps for a tight seal. The furnace hearth consists of 4 rows of castable spaced evenly for forklift loading. Hearth capacity is 10,000 pounds. Alloy based nickel chrome coiled heating elements are located on both side walls, rear wall and door which provides uniform heating. There is a 2 HP roof mounted fan in this furnace. Door limit switch cuts power to the heating elements and fan when the door is open. Very good condition.

Asking Price \$47,500 USD

<https://themonty.com/project/item467-l-l-special-furnace-box-furnace/>

Item#BOX466 Grieve Top Loading Furnace

Model# PT-3642, Serial# 140. Manufactured by Grieve this is a top loading furnace with working dimensions of 36" Wide X 42" Deep X 36" Long and a capacity of 31.5 cubic feet. Electrically heated 460/3/60 @ 70 KW, 2,000 F maximum operating temperature. Description; Manually operated counter balance door, brick lined, helical coil Kanthal heating elements on all four sides, gasketed cover fully self contained. Temperature Controls; Honeywell "Dial a Troll" control with "Dial a Pak" Overtemp. Built in 1982. Very good condition.

Asking Price \$14,500 USD

<https://themonty.com/project/itembox466-grieve-top-loading-furnace/>

Item#BOX465 Electra Box Furnace

Electra Box Furnace. Floor model high temperature box style furnace with a manually operated vertical lift door with counterweight for easy operation. A door limit switch cuts power to the elements when the door is opened. The furnace is refractory lined and has a silicon carbide hearth plate supported on brick piers. Twenty four silicon carbide elements mounted horizontally across the furnace chamber, 12 elements over the top and 12 under the hearth for good uniform heating. Electrically heated with a max operating temperature of 3000°F. Model # 6724 and serial # 1184. Voltage of 460/3/60/16 kW. Working dimensions of 8"W x 6"H x 30"L and external dimensions of 44"W x 90"H x 70"L. Controls are located on the right hand side at the rear of the furnace. There is a Barber Colman model 560 digital controller, a Barber Colman 560 high limit and a Barber Colman strip chart recorder. Also on the rear of the unit in a protected area is a Robicon SCR to control the elements and a high limit contactor. A voltage reduction transformer is mounted on the framework under the furnace chamber.

Asking Price \$8,500 USD

<https://themonty.com/project/itemb465-electra-box-furnace/>

Item#BOX464 Lindberg Box Furnace

Lindberg Box Furnace. Pneumatically operated vertical lift door with convenient foot pedal operator. The door slides up and down on the sloped front breast plate. A flame curtain is mounted directly under the door. A limit switch activates a solenoid to start the flame curtain to burn off any escaping atmosphere. The interior is refractory lined. Heavy gauge rod style heating elements are located on both side walls, and on the floor under the alloy hearth plate for excellent temperature uniformity. The alloy hearth pan has 2" high sides to prevent product from falling off the pan. Flow meters attached to the side of the furnace regulate the flow of atmosphere into the furnace. There is an Endothermic gas flow meter and a Natural Gas flow meter. Electrically heated with a max temperature of 2000°F. Model # RO 122410-A and serial # 19229. Voltage is 480V/3/60/15 kW, 67V. Working dimensions of 12"W x 10"H x 24"L with external dimensions of 54" wide x 64" long x 85" high. Controls are mounted and wired in a separate enclosure. There is a Leeds & Northrup digital temperature controller with display screen and a Leeds & Northrup model 2077 high limit safety. Control switches are flush mounted on the front of the panel. The panel has a Square D flange mounted fused disconnect switch. Honeywell flame safety relay, purge timer relays and control transformer are mounted inside the enclosure A second enclosure with circuit breaker disconnect switch houses the Halmar SCR power controller. A step down transformer is supplied to provide low voltage to the elements.

Asking Price \$7,500 USD

<https://themonty.com/project/itemb464-lindberg-box-furnace/>

Item#BOX458 Noble Furnaces Box Furnace

Manufactured by Noble Furnaces this is a gas fired box furnace capable of 2,000F. Furnace has a vertical lift front door with a charge car and retort.

Furnace has working dimensions of 8' X 8' X 6" high (approximate). 330SS retort has working dimensions of 70" diameter X 42" high. Vendor has been processing aerospace parts in an argon atmosphere in the retort, however furnace can be used without the retort. Excellent condition, currently installed and in operation.

Asking Price \$80,000 USD

<https://themonty.com/project/itemb458-noble-furnaces-box-furnace/>

Item#BOX449 Lindberg Atmosphere Box Furnace

Lindberg/MPH air atmosphere box. Model Number: 11-ROMT-243624-20, Job Number: 224745. Chamber Dimensions: 24" W x 36" D x 24" H. Electrically heated 40KW. Max Temp: 2,000°F. Capacity: 1,200 lbs. @ 2,000°F. Elect. Input: 480/3/60. SCCR Rating: 65 KW. F.L.A.: 5 AMPs. Elect. Drawing: 7315-1134-OOA. Largest Motor/Load: 40 KW. Control Panel is included. Manufactured Date: September 2016. Never used this unit is available for immediate delivery with a full warranty.

Asking Price \$60,000 USD

<https://themonty.com/project/itemb449-lindberg-atmosphere-box-furnace/>

Item#BOX437 Ipsen Recirculating Box Furnace

Ipsen Recirculating Box Furnace 38" high x 43" wide x 48" deep. Gas fired, 1,000,000 BTU/hr with a max temperature: 1400 deg.F. Model Number: DL-3036. Serial Number: 60458. Updated controls, Honeywell indicating controller and overtemp. High temperature tempering furnace. Vertical lift air operated door with overhead air cylinder. Fiber board insulation. Alloy roller rail hearth. Direct fired furnace, but the heating chamber is separate from the work chamber and has a high velocity roof mounted circulating fan. Top mounted package burner. Complete combustion controls and safeties. 460/3/60 power. Test fired prior to shipment.

Asking Price \$39,500 USD

<https://themonty.com/project/itemb437-ipsen-recirculating-box-furnace/>

Item#BOX425 Lindberg Box Furnace

Manufactured by Lindberg. Working dimensions of 42" high x 48" wide x 14'-0" long. Electrically heated 480/3/60, 160 KW. Operating temperature of 2000F. Temperature Controls: Free standing enclosed panel with updated Honeywell controls, including circular chart recorder, SCR controls, back up contactors and step down transformers for the heating elements. Description & Features: Fiber lined. Heated by Nichrome ribbon heating elements on both side walls. Two zones of control. Air cylinder operated door. Includes motor driven load/unload system. 8000 pound capacity. Originally installed at Boeing. Condition: Good. Vendor will repair the back wall, replace all broken element hanger modules and provide and install serviceable heating elements.

Asking Price \$85,000 USD

<https://themonty.com/project/itemb425-lindberg-box-furnace/>

Item#BOX397 Drever Atmosphere Box Furnaces

"Lift-Off" Atmosphere Box Furnaces (2 available). Manufactured by Drever. Effective working dimensions of 10'6" Wide x 35' Long x 6' High. Gas fired- 12,000,000 BTU/Hr. Max. Operating temperature of 1450F. Description; Ceramic Fiber Lined, Vertical Rising Atmosphere "Lift-Off" Furnace complete with (26) U-Shaped Radiant Tubes, North American Burner System, (4) Top-Mounted Alloy Circulating Fans, (4) Zones of Control, Stationary Hearth, "Knife-Edge" Atmosphere Seal, and Hydraulic Lifting Cylinders on each end of furnace. Furnace is capable of 100,000 lb. loads. Instrumentation; Free-Standing Control Panel with Honeywell PLC Digital Temperature Controller, and Honeywell Flame Safety System. Very good condition. Overall dimensions of 15'11" Wide x 41' Long x 13'6" High. Approximate weight 70,000 pounds. Units

each can hold up to 100,000# loads and were used prior for tempering/normalizing wire rod and bar stock. Both of these have top mounted recirculating fans and are “atmosphere capable”, good for FNC work.

Asking Price \$325,000 USD Each

<https://themonty.com/project/itemb397-drever-atmosphere-box-furnaces/>

Item#BOX374 R&G Services Atmosphere Box Furnace

Atmosphere Box Furnace. Manufacturer: R&G Services, Inc. Inside Dimensions: 18" high x 32" wide x 36" deep. Heated: Electric, 230/3/60, 60 KW. Temperature: 2100 deg. F Model Number: EB-183236 Serial Number: 77021 Temperature Controls: Updated indicating controller and overtemp. Description & Features: Air operated vertical rising door. Slanted face plate. Brick lined with silicon carbide hearth. Heated by heavy Nichrome ribbon heating elements. Atmosphere inlet and burn-off. Flame curtain with controls and safeties. Condition: Very good. Furnace will be cleaned & painted, repaired as necessary, checked out & test fired prior to shipment.

Asking Price \$18,000 USD

<https://themonty.com/project/itemb374-rg-services-atmosphere-box-furnace/>

CONTINUOUS FURNACES

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Item#C348 BTU Belt Furnace 1100°C

Manufactured by BTU this is a high temperature mesh belt furnace. Model BTU TFCA94-6-54E48GT, Serial Number RFMT-1. Max Temperature of 1100°C. Hydrogen Capabilities, Belt is 9" wide with 4" clearance over the belt. 6 zones of control with a heated length of 54" heat and a 48" long cool zone. Gas Tight. Excellent condition.

Asking Price: \$69,500 USD

<https://themonty.com/project/itemc348-btu-belt-furnace-1100c/>

Item#C347 SierraTherm Series 2500

SierraTherm Series 2500. Vintage: 2000. Model: 9K9-117C91-9NCHS. Brazing and Copper Firing Conveyor Furnace. One Owner – company closed due to retirement of owner bought new from SierraTherm. Full Manuals included. General Specifications. Belt Width: 9 inches. Heated Length: 117 inches. Cooling Length: 91 inches. Product Clearance above belt: 1" with 2" baffles. Temperature: 1050 degrees C. Atmosphere: N2 or H2. Input Power: 200/240VAC. 3Ph, 3 Wire, 50/60 Hz, 46kVA max. Zones Heated: Nine [9]. Entry / Exit Tables: 24". Overall Length 292 inches. Height: 50 inches. Width: 44 Inches. Conveyor Height: 36 inches. Leveling Range: +-1. Belt Speed Range minimum: 1.0/min. Belt Speed Range maximum: 10.0/min. Weight approximate: 4000 lbs

Asking Price: \$89,500 USD

<https://themonty.com/project/itemc347-sierratherm-series-2500/>

Item#C345 BTU-TCA Series Belt Conveyor Furnace

Specifications:

BTU-TCA Series Belt Conveyor Furnace

Metallic muffle

120" heating chamber

4" clearance above the belt

18" wide belt

10 Zones

1100 degC. Max.

24" each..loading and unloading tables

OAL: 29.0 Ft

Microprocessor controls

76 KW, 440/3/60

Overtemp. protection

Water cooling sections

N2 curtains front and back with burn-offs

Protective atmosphere: DA with N2 purge

\$50,000.00 USD Loaded on your truck

\$42,000.00 USD Where is/as is

<https://themonty.com/project/itemc345-btu-tca-series-belt-conveyor-furnace/>

Item#C342 Two CM High Temperature Pusher Furnaces

Each system includes ...Common frame with power and control components. Heavy gage welded construction. Atmosphere containment doors with protective atmosphere flushing. "Moly" elements wound a ceramic tube muffle. Alumina brick insulation. Water jacketed cooling section. Microprocessor temperature controller. Phase angle fired SCR control units. Overtemperature protection controller. Type "C" thermocouples.

Model 345-48-3Z. 4" opening x 5" wide x 48" long heating chamber, 3 zones. 54 KW, 480/3/60. Hydrogen/Nitrogen atmosphere with safety system. Max. temperature rating: 1700 deg.C.

Asking Price: \$23,450.00

Model 366-48-1Z. 6" opening x 6" wide x 48" long heating chamber, single zone. 45 KW, 480/3/60. Hydrogen/Nitrogen atmosphere with safety system. Max. temperature rating: 1700 deg.C.

Asking Price: \$22,550.00

<https://themonty.com/project/itemc342-two-cm-high-temperature-pusher-furnaces/>

Item#C341 CI Hayes Mesh Belt Furnace

Used CIHayes Conveyor Type Muffle Furnace. Super Solitaire 27. NH3 & Nitrogen Inlet Flowmeters. Combustible atmosphere system with N2 purge. Inconel Muffle with internal hearth plates. Furnace (6) Nichrome Ribbon Elements. AD150 (6) Nichrome Ribbon Elements 314SS Mesh Belt rated 3# per linear foot loading @ 2000F. Type: Model LAC-MB-030627-AD. Hot Zone: 27" Long Heated Length, 6" wide Mesh Belt, 3" Work Height. Overall Dim.: Approx 2-1/2' Wide x 5' High x 20' Long. Max Temp.: 2100F (1150C) Continuous at 2000 deg.F Elec Utilities: Furnace 18kw, Contactor Power Switching, Wired 240/3/60. AD150 15kw, Contactor Power Switching, Wired 240/3/60 Controls: Honeywell Temp Control & Honeywell Overtemp Control, Both. Furnace and 150 CFH Ammonia Dissociator. Rear mounted Belt Drive with Indexing Control. Digital speed readout 0-20ipm. Extended Front Entrance Tunnel with Nitrogen Curtains and Burn-off Stack.

Asking Price 18,000 USD Loaded On A Truck

<https://themonty.com/project/itemc341-ci-hayes-mesh-belt-furnace/>

Item#C339 Can Eng Mesh Belt Furnace

Operating temp. to 2050 F. Work zone: 18" wide x 12" high x 132" heated, 33' stainless steel cooling section. Power: 575 volt, 3 phase. 176 KW. 2 zone

temperature control. Brick lined chamber. Silicon carbide heating elements above and under the belt. Silicon carbide hearth tiles. 2 tap transformers. Approximate overall size: 8' wide x 7' high x 60' long.

Asking Price 14,900 USD

<https://themonty.com/project/itemc339-can-eng-mesh-belt-furnace/>

Item# C337 Mesh Belt Furnace Line, 4,000 Pounds/Hour

Manufactured by Atmosphere Furnace Company in 1995 this is a complete mesh belt furnace line designed for hardening of fasteners. Gas fired. 4,000 pounds per hour capacity. Line included Metro Scale loading system, hydraulic bin dumper, vibratory shaker and scale, belt width 60". Oil quench and temper. Line is complete, installed but has not been run recently. Very good condition. More details and photos to come.

Asking Price \$250,000 USD

<https://themonty.com/project/item-c338-mesh-belt-furnace-line-4000-pounds-hour/>

Item#C335 SOLO Compact Belt Furnace

Compact belt furnace 321-7-90 6677 1000°C. Built by Solo of Switzerland this is a SOLO 321-7-90 model. This furnace was manufactured in 1990. Composition: Loading frame, heating part with frame, cooling part with frame, unloading frame, driving system, conveyor belt, NH3 cracker 3m3/h, distribution for treatment and cabinet gas, operator panel. Dedicated for annealing under cracked ammonia, brazing and hardening. Max. temperature of 1000 °C Heated length: 900 mm, cooled length: 1500 mm, channel section: 80 x 40 mm, Main voltage: 3 x 380 V – 50 Hz / TN, power input: 10,5 kW, gas generated: 75% H2 and 25% N2 (NH3), effective height with belt: 30 mm, conveyor belt width: 70 mm, external dimensions: L 5300 mm x I 800 mm x H 1250 mm. Perfect condition, 11 manuals included. Located in France.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemc335-solo-compact-belt-furnace/>

Item#C324 C.I. Hayes Mesh Belt Furnace

LAC Type. Work Zone: 12" Wide Belt, 12" High work area, 12' heat, 12' cool with 3 zones of temperature control. 1120C maximum temperature (2000F operating temperature). Power: 220V, 75KW, 212Amp, 60Hz , 3Ph. "Air Products" Gas Mixing Panel (N2, H2). Footprint: 9'W x 54'L (90'L Belt), 10'H + ductwork. Extra set of cooling muffles.

Asking Price \$49,500 USD

<https://themonty.com/project/itemc324-c-i-hayes-mesh-belt-furnace/>

Item#C323 Aichelin Cast Link Furnace Line

The line consists of a loading table, cast link belt hardening furnace, oil quench, cross conveyor, post wash and two continuous tempering furnaces. High belt is 24" wide X 300" long with a capacity of 336 Kg/h. Nitrogen/Methanol atmosphere. Electrically heated 300 kW. Operating temperature of 1650F. Quench oil tank holds 7,000 litres. Air/oil quench oil cooler. Post wash has oil skimmer. Both tempering furnaces are electrically heated, 57 kW each. Belt widths 20" X 250" long. Maximum operating temperature of 575F. Installed in 2005 and used for processing automotive bearings. Recently removed from operation and now in indoor storage. Excellent condition.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemc323-aichelin-cast-link-furnace-line/>

Item#C321 Ipsen Austempering System

Ipsen Model SG500, S/N52822. Shaker hearth style hardening furnace is capable of 500 pounds/hour, 1850F operating temperature, gas fired 800,000

BTU's/hour with an 18" wide tray. Temper has an operating temperature of 800F and a heat input of 300,000 BTU's. Controls on both are Honeywell UDC units. Entire system consists of a magnetic conveyor loading system, Ipsen shaker-feeder-hopper. Mitsubishi variable speed AC drive on salt conveyors, 900 gallon wash tank with 30" conveyor and 280 gallon rust inhibitor tank with 32" conveyor. Currently installed but not in production. System is in reasonable condition but has not been used for some time.

Asking Price \$20,000 USD

<https://themonty.com/project/itemc321-ipsen-austempering-system/>

Item#C314 Wellman Roller Hearth Furnace

Manufactured by Wellman in 1982. Model #AL-81-180 RH, S/N 180. Working dimensions of 60" Wide x 42' Long x 14" High – 4800#/HR. Electric – 480/3/60 – 469 KW (over (4) Zones of Control). Operating temperature of 1650° F. Brick Lined Atmosphere Capable Roller Hearth Furnace complete with (4) Zones of Control, Heating Elements above and below Rolls, Transformers, 25' Slow Cool Chamber (Air Cooled with Fans), and Variable Speed Drive. Free Standing Control Panels with Watlow Digital Controllers ((1) Per Zone), Watlow High Limits, and SCR Power Controls. Overall dimensions; Entrance Chamber: 12'Wide x 14' Long x 10' 6" High. High Heat Chamber: 10' 6" Wide x 30' Long x 10' 6" High. Cooling Zone: 12' Wide x 27' Long x 10' 6" High. Approximate weight 80,000 pounds. Very good condition.

Asking Price \$225,000 USD

<https://themonty.com/project/itemc314-wellman-roller-hearth-furnace/>

Item#C301 Rogers Engineering Cast Link Furnace Line

Manufactured by Rogers Engineering 4,000 pounds/hour cast link belt furnace line consisting of a 1750F high heat furnace and 1700F temper furnace. Serial #

CC-3977-0 (1997). High Heat Furnace: 48"W Omega Cast Link Belt, 4" pitch, 3" sides. Furnace has a 30'L heating section. Four (4) zones of control with three (3) roof mounted in the last three (3) zones. Maximum operating temperature of the hardening furnace is 1750°F. Furnace is radiant tube heated with recuperators. Furnace is currently set up for Endothermic w/Enriching Natural Gas & Air. Total BTU's for hardening furnace is 3,180,000 BTU/HR. Controls; All mounted in a free standing panel includes Allen Bradley PLC w/HMI Touchscreen, Honeywell UDC Digital Temperature Controls, SSi Carbon Controls. Voltage 480/3/60/200kW.

Tempering/Anneal Furnace: 60"W mesh belt with support rollers. Furnace has a 35'L heating section. Four (4) zones of control with four (4) roof mounted fans. Maximum operating temperature is 1700°F. Total BTU's for the tempering/annealing furnace 3,790,000 BTU/HR. Please note that this furnace has two (2) different modes of operation. Click on 'PDF" below for more information on the different modes of operation.

The sequence of this furnace is as follows:

- Load parts into pre-wash dump loader
- Pre-Wash, 190°F, Gas Heat
- Parts vibrate onto mesh (soft load) then onto cast link belt.
- High heat cycle
- Quench cycle, 200°F, Gas Heat, 8000 Gallon
- Wash cycle, 190°F, Gas Heat
- Temper cycle
- Oil blackening cycle

Includes:

- 5600 CFH Air Cooled Endothermic Gas Generator
- SBS Air to Oil Heat Exchanger which consists of three (3) 5 H.P. fans.-

Manuals & Drawings

Very good condition, available immediately.

Asking Price \$650,000 USD

<https://themonty.com/project/itemc301-rogers-engineering-cast-link-furnace-line/>

Item#C269 C.I. Hayes Mesh Belt Furnace

Working dimensions of 5" over belt, 12" wide X 120" of heated length. Electrically heated 230/3/60, operating temperature of 2100F. Model LAC. Temperature controls are new state of the art, control panel with Honeywell solid state digital readout controller and overtemp for each of three zones, includes volt and amp meters. Full alloy muffle in hot zone. 20' long sealed water jacketed cooling. Global heating elements over and under the belt. (3) zones of control. (4) argon flowmeters. Dayton AC inverter provides adjustable belt speed. Updated SCR controls. Muffle and belt are new. Very good condition.

Asking Price \$29,000 USD

<https://themonty.com/project/itemc269-c-i-hayes-mesh-belt-furnace/>

DRAW/TEMPER OVENS

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#T379 Grieve Oven 36" x 36" x 36"

Manufacturer: Grieve

Inside Dimensions: 36"high x 36"wide x 36"deep

Heated: Electric 460/3/60, 33 Amps, 24 KW

Temperature: 1250 deg.F

Model Number: AB-1250

Serial Number: 95862A1008

Temperature Controls: Partlow Circular Chart Recorder MRC5000.

Watlow Control. Partlow 1161 overtemp.

Description & Features: 1 HP fan motor. Air flow switch. Double swing-open doors. Front to back horizontal air flow. Stainless steel interior. Provisions for 5 shelves, 4 included. Checked out and operational.

Condition: Excellent

Asking Price \$18,500 USD

<https://themonty.com/project/itemt379-grieve-oven-36-x-36-x-36/>

Item#T378 Despatch Recirculating Walk In Oven

Inside Dimensions: 66"high x 54"wide x 68"deep

Heated: Gas fired. 250,000 BTU

Temperature: 500 deg.F

Model Number: V-41

Serial Number: 53101

Temperature Controls: Updated solid state controls.

Tempco CEC-4100 controller. Honeywell overtemp.

Description & Features: Double swing open doors, horizontal air flow, insulated floor with tracks for a cart, powered exhaust blower, top mounted combustion and fan chamber. Atmospheric type burner system. Complete combustion controls and safeties. Oven will be cleaned and painted, checked out and test fired prior to shipment.

Asking Price \$16,500 USD

<https://themonty.com/project/itemt378-despatch-recirculating-walk-in-oven/>

Item#T377 Despatch Aluminum Horizontal Heat Treat Equipment

Manufactured by Despatch Industries this is a horizontal quench aluminum furnace with working dimensions of 40" X 40" X 40". Serial number 162815. Normal operating temperature 1000F, maximum operating temperature of 1050F. Electrically heated, heater capacity 125KW. Control voltage 120V-1PH-60HZ. Designed to heat treat aluminum parts for BF Goodrich. Rated for 500 pounds per load with a heating time of 30 minutes. Complete and in very good condition.

Asking Price \$99,000 USD

<https://themonty.com/project/dispatch-aluminum-horizontal-heat-treat-equipment/>

Item#T376 Grieve Oven 60" x 60" x 60"

GRIEVE TRUCK OVEN TCH-550. Hardworking ovens designed for baking, drying, preheating or any other application where a dependable source of heated air to 550°F is required. Complete with temperature controllers that offer the latest in heat-sensing technology and built-in floor level guide tracks that make truck loading easy.

Vintage: 2017

ID: 60" x 60" x 60"

125 CU FT

OD: 80" x 91" x 74"

550°F

Blower: 2000 CFM, 2 HP

6" Insulation

Double Doors

24 kW

175,000 BTU

Control Accuracy: $\pm 0.3\%$

Uniformity: $\pm 5^{\circ}\text{F}$

Temp Ramp: 38 min

Weight: 3160 lbs

2 years old – low use, dark mark on back panel is a *scuff*. UL LISTED CONTROL PANEL. Standard Truck Ovens from Grieve meet the requirements of National Fire Protection Association Standard 86, Industrial Risk Insurers, Factory Mutual and OSHA standards. For some applications, such as those involving flammable solvents or hazardous locations, the above organizations require additional safety devices.

- Controls – Digital, microprocessor based, thermocouple actuated, indicating temperature controller
- Modulating burner on gas ovens
- Motor control push buttons and on-off heat switch
- LED pilot lights
- Safety Equipment—Electric Oven
- Adjustable, thermocouple actuated, manual reset excess temperature interlock
- Separate heating element control contactors
- Recirculating blower air flow safety switch
- Safety Equipment—Gas Oven
- Adjustable, thermocouple actuated, manual reset excess temperature interlock
- Electronic flame safeguard protection
- 325 CFM powered forced exhauster for combustion venting
- Exhauster air flow safety switch
- Recirculating blower air flow safety switch

- Purge timer
- High gas pressure switch
- Low gas pressure switch
- Two pilot safety shutoff valves with leak test stations
- Two main safety shutoff valves with leak test stations
- Valve position indicator on main safety shutoff valves
- Choice of air flow patterns specially adapted for truck processing
- Aluminized steel interior
- Aluminized steel exterior with enamel finish
- Brushed stainless steel control panel face
- Explosion venting latches
- 6" of 10 lbs/cf density industrial rockwool insulation
- Built-in baffles prevent radiant heat
- Silicone rubber door gasket
- Insulated floor with truck tracks
- Adjustable fresh air intake and exhaust dampers
- High pressure recirculating blower

Asking Price \$17,500 USD

<https://themonty.com/project/itemt376-grieve-oven/>

Item#T375 Grieve Walk-In Oven 5'W x 5'L x 6'H

Manufacturer: Grieve

Type: Walk-In Oven with Cart

Model: WTH 566-750

Maximum Temperature: 750F

Work Zone: 5'W x 5'L x 6'H

Footprint: 7'W x 7'L x 9'H

Manuals and electrical schematics included

Power: 460V, 84A, 3Ph, 60Hz

Heat Input: 60KW

Fans: Exhaust fan and circulation fan (largest motor 5HP)

Controls: Honeywell UDC 2300 Temperature Controller and analog high limit controller

Uniformity: Appears to have been designed as +/-10F, was last used as if it was +/-25F

Condition: Excellent

Asking Price \$24,500 USD

<https://themonty.com/project/itemt375-grieve-walk-in-oven/>

Item#T374 Pacific Scientific 30" x 48" x 30" Electric Temper Pacific Scientific 30" x 48" x 30" Electric Temper. Model PKMD 100-E. Serial number: 662-0208P . Heating: Electrically. Power Req: 65 KW, 460 Volt, 3 Phase. Max Temperature: 1450°F.

Asking Price \$15,000 USD

<https://themonty.com/project/itemt374-pacific-scientific-30-x-48-x-30-electric-temper/>

Item#T373 Pacific Scientific 30" x 48" x 30" Electric Temper Pacific Scientific 30" x 48" x 30" Electric Temper. Model PKMD 100-E. Serial number: 662-0420. Heating: Electrically. Power Req: 65 KW, 460 Volt, 3 Phase. Max Temperature: 1450°F. Nitrogen Capable.

Asking Price \$14,500 USD

<https://themonty.com/project/itemt373-pacific-scientific-30-x-48-x-30-electric-temper/>

Item#T372 Selas (Pacific Scientific). Model PKMD 100-E Selas (Pacific Scientific). Model PKMD 100-E, Serial number 662-0585. Working dimensions: 30"X 48" X 30". Max Temp: 1450°F. 65 KW, 460 Volt, 3 Phase. Very good condition.

Asking Price \$17,500 USD

<https://themonty.com/project/itemt372-selas-pacific-scientific-model-pkmd-100-e/>

Item#T371 Recirculating Box Type Draw Oven

Lindberg Model 152418-E12 recirculating box type draw oven. Working dimensions of 18" high X 15" wide X 24" deep. Electrically heated 230/3/60, operating temperature of 1250F. This is a standard Lindberg "Cyclone" design . Coiled Nichrome heating elements are housed in a separate chamber. A high velocity paddle wheel fan delivers the heat to the work chamber and provides for good uniformity. Plug type swing open door. Brick lined door, stainless steel interior. Provisions for two shelves, one shelf included. Furnace will be checked out and reconditioned, cleaned, painted and test fired. Includes a 30 day warranty. Very good condition. ALSO AVAILABLE ARE 4 OTHER TOOL ROOM BOX DRAWS IN STOCK.

Asking Price \$5,950 USD

<https://themonty.com/project/itemt371-recirculating-box-type-draw-oven/>

Item#T370 AFC Holcroft Tempers (2 Available)

Manufactured by AFC-Holcroft in 2013 these are model UBTN-E (Universal Batch Tempering Nitrogen Electrically heated) units. Working dimensions of 36" wide X 48" deep X 36" high with a 4,000 pound capacity. Maximum operating temperature of 1450F. Pneumatically actuated door, roller hearth conveyor on 22 ½" centers, 50 ½" from floor to top of rollers. Touch screen controls were updated by SSI in 2015 and last calibrated in 2016. Atmosphere Engineering electronic flowmeter for nitrogen addition. Installed but not in use. Excellent condition. Originally \$115,000 USD.

Asking Price \$45,000 USD Each

<https://themonty.com/project/itemt370-afc-holcroft-tempers-2-available/>

Item#T369 Surface Combustion Temper Super 36

Serial numbers BC-42071-1A and BC-42071-1B. Working dimensions of 36" wide X 48" deep X 30" high. Electrically heated with a maximum operating temperature of 1400F. Shared control panel. Built in 1983. Very good condition. Currently in operation, available September 2019.

Asking Price \$35,000 USD Each

<https://themonty.com/project/itemt369-surface-combustion-temper-super-36/>

Item#T368 Surface Combustion Super 30 Temper

Manufactured by Surface Combustion in 1972 this is an electrically heated temper with working dimensions of 30" X 48" X 30". Serial Number BC-39686. Maximum operating temperature of 1250F. Currently installed but not in use. Complete and in good condition.

Asking Price \$29,000 USD

<https://themonty.com/project/itemt368-surface-combustion-super-30-temper/>

Item#T366 Wisconsin Temper Oven

Wisconsin Oven Model EWN-618-6E, NEW in 2012, 500F, Inside 6' W x 18' D x 6' H, Outside 9'6"W x 19'3"D x 9'11", 96KW on 480V/3/Approx. 133 Amps, 10HP/8,600CFM recirculating fan, 1HP/9CFM forced exhaust, UL listed control panel, shipping weight 6,500 lbs., uniformity (+/-)10, viewing window, 8 port jack panel, doors front and rear, digital controller, safety disconnect switch, emergency stop button, horizontal airflow, aluminized steel interior, high limit control, adjustable louvers, aluminized steel interior

Asking Price \$39,950 USD

<https://themonty.com/project/itemt366-wisconsin-temper-oven/>

Item#T360 Wisconsin Oven

Model SBH-222, 650F, inside dimensions 2'W x 2'D x 2'H, horizontal airflow, Allen Bradley Panel View Plus 600, hi-limit, door switch, audible/visual alarm, 240/3 with 12 KW heater, Honeywell chart recorder, 2 shelves.

Asking Price \$7,900 USD

<https://themonty.com/project/itemt360-wisconsin-oven/>

Item#T359 Seco Warwick Vacuum Temper Furnace

Model VTR-5050/48. Serial Number 586/2005. Purchased 3/21/2006. Work Zone Dimensions, 36W X 48D X 24H. Originally qualified for 900°F to 1260°F with +/- 10°F uniformity. Vacuum pump is Stokes Model 212-11, Blower is Stokes Model 310-41. The operating system is Wonderware Intouch. Internal circulation fan. 460 VAC 3 phase. The buyer will be responsible for removal. The furnace will be available for removal in April 2019. It is currently still in operation.

Asking Price \$50,000 USD Or Best Offer!

<https://themonty.com/project/itemt359-seco-warwick-temper-furnace/>

Item#T358 Wisconsin Oven Like New (2 Available)

Wisconsin Oven Model EWN-55-5G8, 800F, 5'W x 50'D x 6'H, overall 9'6" W x 11'D x 11'H, 10HP/7000CFM recirculating fan, combination airflow, adjustable louvers, airflow switch, 600 CFM exhaust, Eclipse 450,000BTU burner, UL listed control panel, Honeywell recorder, Honeywell programmer, digital hi-limit, disconnect switch, vertical rise doors on both ends, insulated floor, exhaust hood. Excellent Condition.

Asking Price \$29,500 USD Each

<https://themonty.com/project/itemt358-wisconsin-oven-like-new-2-available/>

Item#T356 Wisconsin Oven Temper Furnace

Wisconsin Oven Temper Furnace. Recirculating gas fired batch temper with air operated vertical lift doors on each end. Eclipse package burner with roof mounted recirculating fan distributes heated air in a combination air flow pattern. Roller rail hearth with chain guide. Furnace includes two (2) scissor lift tables. Manuals & drawings are included with this furnace. Natural Gas – 1 MBTU's/Hour. Model # SDB-6616-10G and serial # 033899307. Max operating temperature is 1000°F with a voltage of 480/3/60/16 Amps. Working dimensions of 36"W x 36"H x 96"L with external dimensions of 96"W x 13'4"H assembled (10'6"H shipping) x 11'L. Controls mounted and wired in an enclosure with fused disconnect attached to the side of the furnace. Temperature controllers consist of a digital Barber Colman 560 digital for temperature and a Barber Colman digital "Limitrol" 75L high limit. ATC process timer to control heating cycle and Barber Colman digital round chart recorder. Allen Bradley switches for control power, circulation fan, ignition and gas valve reset. Signal lights for control power, air flow, high/low gas pressure, purge, etc. Eclipse package burner with Honeywell flame safety, UV scanner and spark ignition.

For Pricing Please Contact Jordan@themonty.com

<https://themonty.com/project/itemt356-wisconsin-oven-temper-furnace/>

Item#T352 Pyradia Tempering Oven

Pyradia Oven 48" X 48" X 48". Electrically heated oven manufactured by Pyradia. Model P06P048048048HMTGV, Serial Number 2002-12-15977-1. Working dimensions of 48" X 48" X 48". Operating temperature of 1200F. Recirculating fan. 600 volts, 3 phases, 54KW. Vertical lift Door with double pivots. Convection style, 32,000 CFM. Built in 2004 this oven has been used for a total of 40 hours and should be considered like new.

Asking Price \$39,000 USD

<https://themonty.com/project/itemt352-pyradia-tempering-oven/>

Item#T349 Eclipse Recirculating Box Furnace

Recirculating Box Type Draw Furnace. Manufacturer: Eclipse. Inside Dimensions: 30"high x 42"wide x 96"deep. Heated: Gas fired. Temperature: 1250 deg.F. Model Number: Box Draw. Serial Number: 3424-00773. Temperature Controls: Updated controls, Honeywell indicating controller and overtemp, circular chart recorder. Description & Features: Vertical lift air operated door. Brick lined. Alloy roller rail hearth. Seven adjustable roof baffles. Rear combustion chamber with atmospheric burner and high velocity recirculating fan. Complete combustion controls and safeties. Includes manual load table. Condition: Very Good, Operational.

Asking Price \$39,500 USD

<https://themonty.com/project/itemt349-eclipse-recirculating-box-furnace/>

Item#T342 Precision Quincy Recirculating Walk In Oven

Recirculating Walk In Oven. Manufactured by Precision Quincy. Working dimensions of 72"high x 48"wide x 120"deep. Gas heated, 300,000 BTU's per hour. Operating temperature of 450F. Model EC-410, S/N 25766. Temperature Controls: Partlow indicating controller and overtemp. Side mounted control cabinet. Double swing open doors, horizontal air flow. Powered exhaust blower, rear mounted combustion and fan chamber. Atmospheric type burner system. Complete combustion controls and safeties. Air flow switch. Oven will be checked out and test fired prior to shipment. Approximate shipping weight 4,310 lbs.

Asking Price \$16,500 USD

<https://themonty.com/project/itemt352-precision-quincy-recirculating-walk-in-oven/>

Item#T341 McLaughlin Services Temper Furnace

Temper Furnace 36" X 48" X 36". Made by McLaughlin Services. Working dimensions of 36" X 48" X 36", 5,000 pound capacity. Gas fired 750 cfh @ 2-5 PSI, 750,000 BTUH. Operating temperature 250F to 1400F, +-10F. Electricity; 40 Amps, 480V/3Ph. Compressed Air; 100 psi, Intermittent. Temperature Controls; Super Systems 9130 Temperature Controller with 12" Touchscreen, Super System 7SL 1/16 DIN Limit Controller. Logic Controls; Allen Bradley Micrologix PLC is included for alarming and sequencing.

Asking Price \$91,000 USD

<https://themonty.com/project/itemt341-mclaughlin-services-temper-furnace/>

Item#T340 Safed/Borel Annealing Furnace

Safed/Borel Annealing Furnace built in 1991. The working dimensions consist of: Diameter 400 mm, Height 500 mm. External Dimensions: 1800 mm x 1767 mm x 2412 mm. Maximum Temperature: 650 C with a maximum load capacity of 100 kg (not including baskets). Main voltage is 3 x 400V / 50 Hz, Control voltage is 230V / 24V. This setup includes a Eurotherm programmer, threshold controller, recorder, programmable clock, timing relay, control for water flow, vacuum pump, pressure reducer, and fire engine. Located in France.

For Pricing Please Contact Jordan@themonty.com

<https://themonty.com/project/itemt340-safed-borel-annealing-furnace/>

Item#T335 Despatch Temper

Batch Oven 37"H X 37"W X 25"D. Batch type recirculating oven manufactured by Despatch, Model V-29-STD. Inside dimensions of 37" high X 37" wide X 25" deep. Electrically heated 480/3/60, 12 KW. Operating temperature of 500F. Serial number 126552. Temperature Controls: Partlow indicating controller and Honeywell overtemp, timer. Double swing open doors. Side mounted

recirculating fan. Adjustable horizontal air flow. Provisions for 12 shelves, 4 shelves included. Powered exhaust blower. Oven has been checked out and test fired and is ready for immediate shipment. Excellent condition.

Asking Price \$5,500 USD

<https://themonty.com/project/itemt335-despatch-temper/>

Item#T325 Despatch 3-Station Temper Furnace

Manufactured in 1980 by Despatch Industries, Inc. 3 Independently loaded and operated furnace stations with shared panel. Tops elevate off bases for loading and unloading. Work Zone: 22"W x 40"L x 25"H Each. Hearth Height: Estimated at 36-40" (Can measure for you). Max. Temperature: 850°F with a Uniformity of +/- 25°F (Center area of 12"W x 20"L x 10"H meets +/-10°F). Electrically heated with a power of 490V/3Ph/60Hz. 3 West 4400 Temperature Contrl. & West 6700 Hi-Limit. (We can quote upgrade to new Super Systems, Inc. controls, if desired.). Just rebuilt. New heating elements, new hearth ceramics, New stainless steel side panels, new paint.

Asking Price \$20,000 USD

<https://themonty.com/project/itemt325-despatch-3-station-temper-furnace/>

Item#T320 Pifco Conveyor Oven

Electrically heated 2 zone conveyor oven 480/3/60/144 kW. Maximum operating temperature of 600F. Work area; 72"W x 12"H x 25'L heated length. External dimensions 9'W x 10'H x 40'L – approx.. Controls; Mounted and wired in a free standing panel includes an Allen Bradley PLC with PanelView Plus 1000 touchscreen interface. Power to the heating elements are controlled through two (2) Allen Bradley "SCR" power controllers, one (1) for each zone. An Allen Bradley PowerFlex "VFD" controls oven conveyor belt speed. Standard two (2) zone electrically heated conveyor oven with a wire on edge belt. This oven has a

10'L load end and 8'L unload end with cooling. Access doors with "Brixon" door latches on both sides of oven and one in each heating chamber. Very good condition.

Asking Price \$59,000 USD

<https://themonty.com/project/itemt320-pifco-conveyor-oven/>

Item#T318 Eisenmann Box Tempers (4 Available)

Large Box Tempering Ovens (4 available). Built by Eisenmann in 2002, Model # HN-FNC-002. Working dimensions of 108" Wide x 96" Deep x 64" High. Natural gas fired, 3.2 million BTU's per hour. Operating temperature of 1200F.

Description; Stainless Steel Lined Recirculating Box Tempering Oven complete with Top-Mounted Alloy Recirculating Fan (20 HP – 13,000 CFM), Rear-Mounted Heater Box with Eclipse Burner System, Alloy Skid Hearth, Forced Cool Down Fan System (7,333 CFM), Vertical Rising Motor Driven Front Door, and Stationary Loading Table.

Instrumentation; Free Standing Control Panel with Eurotherm Digital Set Point Programmable Temperature Controller, High Limit, Chessel Strip Chart Recorder, and Honeywell Flame Safety System.

OVERALL DIMENSIONS: Oven: 13' Wide x 20' Long x 17'8" High (includes Door Structure. (Shipping Dimensions: 12'6" Wide x 20' Long x 10'8" High). Loader: 9'6" Wide x 12" Long x 4' High. Approximate weight 20,000 pounds. Excellent condition, operational.

Asking Price \$72,500 USD

<https://themonty.com/project/itemt318-eisenmann-box-tempers-4-available/>

Item#T303 Pifco Temper Furnace

S/N 8177 built in 1988. Working dimensions of 126" long x 60" wide x 40" high. Overall dimensions of 13' x 11' x 11' high. Comes with load and unload discharge tables and combustion fan. Maximum operating temperature 950 deg. F. Rated for 250 pound net weight x 37.4in long tray loaded every 15 minutes. Furnace holds three (3) trays. Approximate nineteen (19) minutes to operating temperature. Forty-five minutes in furnace @ 15 minute load cycle. Heated by one gas burner approximate rating 600,000 BTU/hour. Utilities required: 1000 BTU natural gas @ 5PSI, 480v 3Ph 60Hz. Water 80 deg. F maximum @ 20PSI. Compressed air 60PSIG minimum. Adequate drain for water. Good condition.

Asking Price \$20,000 USD

<https://themonty.com/project/itemt303-pifco-temper-furnace/>

Item#T286 Lindberg Box Temper

Model 11-7212048-G14, S/N 24947. Working dimensions of 72" wide X 120" long X 48" high. Gas fired with a maximum operating temperature of 1200F. Vertical lift-air operated door, brick lined, 5 course refractory hearth, alloy roof baffles, alloy side wall ducts, dual zone burners-roof mounted combustion chambers with dual belt driven fans. Free standing prewired control panel. Good condition.

Asking Price \$65,000 USD

<https://themonty.com/project/itemt286-lindberg-box-temper/>

GENERATORS

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#G201 South Tek Nitrogen Generating System

Manufactured by South Tek Systems of Wilmington, NC., in 2012. Model STS N2-GEN 250S. Output of 2875 SCFH at 99.5% purity. Footprint of 48" X 50" X 119". Shipping weight of 3925 pounds. Installed but not in use. Excellent condition.

Asking Price \$30,000 USD

<https://themonty.com/project/itemg201-south-tek-nitrogen-generating-system/>

Item#G199 2000 CFH Endothermic Generator New 2015

Manufactured by Unitherm Industries in 2015. Model EG 2000, Serial Number 102113-2. 2,000 CFH capacity. Maximum operating temperature 2000F. Natural Gas fired. SSI atmosphere controls includes AC-20, Series 7 Temperature control, 7SL Hi Limit. Installed but not in use. Excellent condition. Last operated December 31/2018.

Asking Price \$29,500 USD

<https://themonty.com/project/itemg199-2000-cfh-endothermic-generator-new-2015/>

Item#G198 Sunbeam Endothermic Generator

3,000 CFH Endothermic Generator. Manufactured by Sunbeam, model # ENG-30, S/N F-377-79. Gas fired, operating temperature of 1900F. Temperature Controls: Upgraded controls. Honeywell digital indicating controller and overtemp. Single alloy retort. Selas compressor. Waukee flowmeters. Air cooled. Package burner. Complete combustion controls and safeties. Good condition.

Asking Price \$22,500 USD

<https://themonty.com/project/itemg198-sunbeam-endothermic-generator/>

Item#G197 Lindberg Ammonia Dissociator

Manufactured by Lindberg. 1,000 CFH. Model Number: 16-1000-HYAM. Serial number 26004. Electrically heated, 460/3/60, 30 KW, 37.6 amps. Operating Temperature: 2000 deg.F. Temperature Controls: Honeywell indicating controller and overtemp. Standard Lindberg design with vertical sealed catalyst chamber. Ceramic fiber insulation. Nichrome heating elements. Air cooled heat exchanger. Includes pressure gauges, SSOV, Waukee DA flowmeter. Includes operating manual and drawings. Very good condition. Unit is complete and guaranteed operational.

Asking Price \$11,500 USD

<https://themonty.com/project/itemg197-lindberg-ammonia-dissociator/>

Item#G196 Surface Combustion Endo Generator

Surface Combustion 5000 CFH Endo Generator. Serial number AC 42332-1A. Maximum temperature 1950F. Barber-Coleman controls with digital recorder and over temp. Air cooled. Shipping dimensions of 8'5" W X 10'1" high X 8'11" long. Very good condition. Included is a new pump.

Asking Price \$31,500 USD

<https://themonty.com/project/itemg196-surface-combustion-endo-generator/>

Item#G178 Sargeant & Wilbur Ammonia Dissociators (4 Available)

Built by Sargeant & Wilbur, 4 electrically heated Ammonia Dissociators. Model GAD3000E. 3,000 CFH capacity. Maximum temperature 1759F. Voltage 480/3/60/60 kW. External dimensions of 5'W x 6'H x 8'L. **Controls:** Mounted and wired in a free standing panel includes the following:

– Yokogawa UT 350 digital control for dissociator undertemp.

- Yokogawa UT 350 digital control for dissociator overtemp.
- Yokogawa UT 350 digital control for dissociator temperature control.
- Two(2)Yokogawa UT 350 digital controls for vaporizer lower/upper zone.
- Yokogawa UT 350 digital control for vaporizer overtemp.
- All necessary signal lights, timers etc.

Mounted in the same control cabinet are three (3) SCR's. Two (2) "Halmar Robicon" and one (1). "Ametek". One is for dissociator heating elements and the other two are for vaporizer lower/upper zone heaters.

Description: Electrically heated Ammonia Dissociator suitable for supplying up to 3000 CFH of atmosphere with a composition of 75% Hydrogen and 25% Nitrogen. This atmosphere is obtained by cracking anhydrous ammonia vapor in a catalyst filled vessel maintained at a temperature of 1700°F to 1850°F. Incoming ammonia pressure is reduced before retort entry. At the outlet of the retort the hot dissociated ammonia passes through a dry cooler where the gas is cooled to near room temperature. It then passes through a flowmeter and on to the consuming device. This dissociator includes a Sargeant & Wilbur Ammonia vaporizer. This dissociator is provided with two (2)catalyst filled heat resisting alloy retorts. The retorts are mounted within the insulated dissociator heating chamber. The heating chamber consists of heavy Mullite T-Slot tiles. Retorts are heated with Sinuous-wound Nichrome Ribbon Heating elements which are mounted in the tile slots. The element tails and studs extend through the rear wall of the dissociator. Elements can be removed through the rear wall without having to unpack furnace insulation etc. A step-down transformer (480V to 240V 112.5 KVA) is included. Manuals and drawings are also included. Very good condition.

Asking Price \$29,500 USD

<https://themonty.com/project/itemg178-sargeant-wilbur-ammonia-dissociators-4-available/>

Item#G176 Surface Combustion Endo Generator

Manufactured by Surface Combustion. Natural gas heated 675 CFH/HR. Model # RX 35-75-3V. Maximum temperature 1950F. 7500 CFH capacity. Controls are complete, water cooled. SSi atmosphere controls and Atmosphere Engineering "Endo Injector". Very good condition, ready to go.

Asking Price \$75,000 USD

<https://themonty.com/project/itemg176-surface-combustion-endo-generator/>

Item#G173 Lindberg Endo Generator

4500 CFH, gas fired. Retorts and brickwork are in excellent condition however it requires temperature controls and an air cooler (vendor has partially completed changing from water cooling to air).

Asking Price \$17,500 USD

<https://themonty.com/project/item173-lindberg-endo-generator/>

Item#G169 Gasbarre / Sinterite Endo Generator

3000 CFH, electrically heated 460/3/60/63 Amps/50kW. New in 2006. External dimensions of 106" wide x 75" deep x 116" high. Controls are enclosed in a panel attached to the side of the generator. Honeywell UDC 3200 digital temperature controller and Honeywell UDC 2500 digital high limit safety. Control switches with indicating lights are flush mounted in the enclosure. Flange mounted fused disconnect switch for control power. Separate non fused disconnect for the main power. Waukee flow meters are manifold mounted for incoming and outgoing gases. Flow meters include: Natural Gas 0-1000 CFH, Air 0- 2500 CFH, (3) Mixed Gas 0-1500 CFH and Endo 0- 3500 CFH. Step down transformer for reduced voltage to the heating elements. Electrically heated 3 retort generator. Refractory lined shell with vertically mounted retorts. Total of twelve (12) silicon carbide heating elements, 6 on each side are mounted through the chamber for

good uniform heating of the alloy retorts. The natural gas and air pass through a Waukee “mixor” valve then into the Waukee gas pump. Mixed gas enters the 3 “mixed gas” flow meters, through the Selas fire checks and enters the top of the retorts. The gas travels through the catalyst filled heated retorts and exits at the bottom. The exiting Endothermic gas passes through water cooled chambers then finned cooled air heat exchangers then through the Endothermic flow meter. A pressure regulator is supplied on the exiting gas piping. Good condition.

Asking Price \$29,500 USD

<https://themonty.com/project/itemg169-gasbarre-sinterite-endo-generator/>

INDUCTION HEATING SYSTEMS

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#I184 Pillar Mark 11 100kW 10 kHz Power Supply

Manufacturer: Pillar

Model No. Mark 11

Mfg. Date: 1996

100 kW, 10 kHz

Runs well, in good condition. Was running until recently when uninstalled.

Asking Price \$15,000 USD With Shipping Included

<https://themonty.com/project/itemi184-pillar-mark-11-100kw-10-khz-power-supply/>

Item#I183 Pillar Single Spindle Induction Scanning System

Manufactured by Pillar Induction this is a Model; AB7102-107/MK 11, Serial Number 3815. Voltage; 480V/3/60/266 Amps/222 KVA. Power supply; 200 kW, 3 kHz with a 24" Scanner. System is skid mounted with a footprint of 8'W x 10'H x 12'L. Controls; Mounted and wired inside an enclosure with fused disconnect includes an Allen Bradley SLC5/04 with touchscreen interface. This system includes a Pillar MK 11 200 kW, 3 kHz power supply, stainless steel DI water system w/plate & frame heat exchanger, 24" scanner attached to heat station and stainless steel electrically heated quench tank. Very good condition.

Asking Price \$75,000 USD

<https://themonty.com/project/itemi183-pillar-single-spindle-induction-scanning-system/>

Item#I182 2007 Ajax/Tocco 48" Vertical scanner

2007 Ajax/Tocco 48" Vertical scanner (42" max hardening length). Single spindle with a 300# weight capacity

Touchscreen controls with 15" monitor. Recipe storage for 500 part files. Quality assurance signature monitoring includes: Energy monitor at the coil, quench pressure, flow and temperature 400 KW, 1.1 – 3.0 kHz power supply integrated to the vertical scanner. Both scanner and power supply are in excellent operating condition.

Asking Price \$75,000 USD

<https://themonty.com/project/itemi182-2007-ajax-tocco-48-vertical-scanner/>

Item#I181 Pillar Induction Heat Treat System 50 kW, 50 kHz

This is an automatic Lift and Rotate Machine with a single lift position and TWO heat stations allowing for heating in two different locations in one machine cycle. The two heat stations are controlled by a transfer switch that transfers power from one position to a second position. This is a manual load/unload automatic cycle machine with Allen Bradley controls and Panelview 1000 operator interface. It has an automatic door close/open and light curtain for operator safety. Power Supply is a Pillar MK11 50 kW, 50 kHz IGBT Type. Entire unit is mounted on a common base for easy transport and re-installation. Other details include:

Rotational Drive Speed (Variable): 0- 200 RPM

Integral Quench Reservoir: 100 Gallon

Dimensions (Induction Heater) (L x W x H): 155" x 120" x 115"

Weight Estimate: 20,000 Lbs.

Asking Price \$49,500 USD

<https://themonty.com/project/itemi181-pillar-induction-heat-treat-system-50-kw-50-khz/>

Item#I179 Semi-Automatic Pin Hardening System 25kW, 3/10 kHz

Ajax Pachydyne 25kW, 3/10 kHz pin annealing/hardening system. This is a small automatic system for Induction Heat Treating small pins. Includes a power supply with matching heat station and a small fixture for heating and drop quenching small diameter parts. Also includes a small conveyor to drag out the parts from the quench container and water to water cooling and recirculating system and a quick-change coil bus adapter. Good condition.

Asking Price \$14,900 USD

<https://themonty.com/project/item179-semi-automatic-pin-hardening-system-25kw-3-10-khz/>

Item#I178 Inductoheat Pick & Place Induction System

Used Inductoheat Automated 100kW, 400 khz pick and place heat treating machine. This machine has been taken out of production due to completion of a contract. It is in good working condition and is still connected to power. It can be run for the buyer prior to shipping. It was used to harden a gear part 45" in dia. Could possibly be retooled for different part processing within the limits of the machine capabilities. This machine includes a SOLID STATE TRANSISTOR (Thermatool) power supply. These are very heavy-duty power supplies which are generally made by Thermatool for tube welding operations that usually run 24/7. This machine includes:

- Input conveyor with gating and part pickoff locator.
- Three arm Pick and Place mechanism that picks one part from the infeed position, one part from the heating position and one part from the cooldown station. All are transferred at the same time.
- Head Position includes placement into the heating coil, air operated part hold down, rotation, heating and quenching. Quick Change Coil Adapter is also included.
- Cooldown/Exit Idle position includes cooling quench flow.
- Exit position with push off onto exit conveyor with reject station

- Auto Lube System • Quench cooling and recirculating system with bag filter
- Water cooling and recirculating system.
- PLC Control with Panelmate interface
- Most Drawings and DVD Manual Included.
- Optional 6 Ton Chiller available.

Asking Price \$85,000 USD

<https://themonty.com/project/item178-inductoheat-pick-place-induction-system/>

Item#I177 Ajax 2 Station Spindle Scanners

This is an integrated Ajax 2 Station (single spindle per station) 150 kW, 10 kHz Scanner System. It has a single SCR type power supply with a transfer switch to send power to station A or B. It has a single shared Quench Recirculating System with bag filter, single shared Water Recirculating System. Each station has a PLC Control and servo control. PLC is A/B SLC 5/03, Pacific Scientific Servos, and Nematron MMI. Also has Quick Change Coild Adapters (would cost about 4-5k today). This was built in 1998 but appears to have been well maintained and contains currently serviceable components.

Asking Price \$89,500 USD

<https://themonty.com/project/item177-ajax-2-station-spindle-scanners/>

Item#I174 Ajax Tocco Induction Power Supply & Heat Station

Manufactured by Ajax/Tocco in August 2005. 480V three phase input is rated to be 1.2MW (1200KW). 660V three phase input is rated to be 2.2MW (2200KW). Unit requires three phase input of 480V, 2500A. System is deigned to work at 2.5 kHz in frequency. Requires 65 GPM of cooling. Buyer must have a dedicated transformer at the three phase input for this machine. Buyer must provide their own coils, bus, and water-cooled cables to attach power supply to heat station and heat station to coils. Limited warranty available. Note: Currently set up to

work at 480V input voltage. In order to switch to 660V, buyer needs to change the input breaker. Excellent condition.

Asking Price \$120,000 USD

<https://themonty.com/project/item174-ajax-tocco-induction-power-supply-heat-station/>

LAB EQUIPMENT

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#L22 ATM Brilliant 250H Wet Saw

Available is an ATM Brilliant 250 H wet saw and ATM pump with wash down and filtration. Saw can accept a 12 inch blade. This unit is operated manually, works well and is in daily use. daily. Vendor has upgraded his lab and this is surplus.

Asking Price \$8,000 Canadian (roughly \$5,500 USD) or best offer.

<https://themonty.com/project/iteml22-atm-brilliant-250h-wet-saw/>

Item#L11 Leco Metallagraph

Leco Metallagraph.

Asking Price \$8,500 USD

<https://themonty.com/project/iteml11-metallagraph/>

MISCELLANEOUS HEAT TREAT EQUIPMENT

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#M434 Cryogenic Processor with Integral Tempering

Type: Cryogenic chamber with integral heater

Work Zone: 18"W x 42"L x 18"H (height can be increased to 34" with extension box)

External dimensions: 30"W x 61"L x 35"H

Temperature: -300F to at least +350F

This heavily insulated cryogenic chamber has an integral tempering heater. The unit can connect to a Liquid Nitrogen tank or a Dewar with an insulated hose.

The cryogenics and the heater work well. The temperature controller and the chart recorder need to be repaired as they are outdated. A height extension box for processing larger parts is included. The unit is on wheels.

Selling As-Is.

Asking Price \$12,000 USD

<https://themonty.com/project/itemm434-cryogenic-processor-with-integral-tempering/>

Item#M433 Surface Combustion Charge Car 36x48

Built by Surface Combustion this is a double ended charge car for use with a 36" X 48" furnace. Model DEDP 36-48 Charge Car. Serial #BC42070-1. 460V, 3 phase, 60hz. Excellent condition and still in use. Available September 2019.

Asking Price \$29,000 USD

<https://themonty.com/project/itemm434-surface-combustion-charge-car-36x48/>

Item#M432 Super Systems 9200 Control System

For sale Super Systems 9200 control system mounted in free standing panel including multiple spare HMI touch screens and spare power supplies

Asking Price \$19,000 USD

<https://themonty.com/project/itemm432-super-systems-9200-control-system/>

Item#M431 Eclipse Singe Ended Recuperative Burners (20 available)

We have 20 Eclipse single ended recuperative burners and 20 65 inch long silicon carbide inner and outer tubes for sale. Also 20 Honeywell flame relays and all solenoids and gas and air valves also 20 ignition transformers. This system is still installed. New in 1998 and used very little. We can provide removal and packaging. We prefer not to separate. Burners and tubes are currently mounted vertically but can be installed and operated horizontally. These burners are good for any atmosphere furnace such as belts or batch or pits.

Best Offer

<https://themonty.com/project/itemm431-eclipse-singe-ended-recuperative-burners-20-available/>

Item#M429 Whaley Products Refrigerant Water Cooling Tower

Model # SA20D-3-2PT. Capacity: 20 Tons. Dual Compressors/240,00 BTU/Hr. Flow Rate:48 GPM. Insulated Poly Tank: 100 Gals. Inlet/Outlet Pipe Size: 1-1/2". Fan Output:16,600 CFM. Supply Pump: 3 HP. Circulating Pump: 1 HP. OAD: 29" L x 68" W x 84" H. Purchased 4/2015 In Very Good Condition, Has Seen little Use.

Asking Price \$9,800 USD

<https://themonty.com/project/itemm429-whaley-products-refrigerant-water-cooling-tower/>

Item#M427 Used Houghton MAR-TEMP Oil 355

Mar-Temp 355 is a high performance accelerated hot quenching oil suitable for use at temperatures of up to 375°F (190°C). It is based upon solvent-refined mineral oils and contains a specialty formulated additive package which provides accelerated quenching characteristics and excellent oxidation resistance and thermal stability. Mar-Temp 355 has a high flash point and will provide long life under arduous operation conditions.

Features & Benefits

- Short vapor phase and fast maximum cooling rate for optimum hardness and physical properties
- Premium hot quenching (martempering) oil providing maximum distortion control of quenched components eliminating the need for rework due to distortion
- Excellent oxidation and thermal stability: Resists formation of sludge and breakdown of oil in use to ensure maximum oil life

22,000 Liters are available immediately and 16,000 Liters in a month or two.

Asking Price \$1.25 USD Per Litre (Located In Canada)

<https://themonty.com/project/itemm427-used-houghton-mar-temp-oil-355/>

Item#M426 Midbrook Belt Washer

Midbrook hurricane 5024, stainless steel conveyor through feed type 4-stage parts washer, s/n 44674 (2004), 24" x 24" opening, wash/rinse/rinse/blow off/dry stages, allen-bradley panelview 1000 control, stainless steel metal mesh belt conveyor, demagnetizer, 24" wide plastic infeed and outfeed power belt conveyors. Comes with over 50' of automated feed conveyor. Currently installed without power.

Asking Price \$89,000 USD

<https://themonty.com/project/itemm426-midbrook-belt-washer/>

Item#M425 Kolene Salt Bath Nitriding Line (gas)

Manufactured by Kolene this was purchased new in 1995 by the vendor. This is gas fired with pot dimensions of 42" diameter X 6' deep. Was typically producing 1,000 pounds per hour but capable of more. Line includes the following;

- 3 overhead transfer cranes
- Air scrubbing unit
- Bronco continuous belt blasting unit, large very effective machine with 36" belt and 8 multi directional blasting motors (vendor will sell this separately)
- 3 vibratory polishers
- Many fixtures
- Used salt*
- New salt*
- Extra pot (weld repaired)

System is installed and was in operation until late 2018. Complete and in good condition.

Asking Price \$365,000 USD For Everything

<https://themonty.com/project/itemm425-kolene-salt-bath-nitriding-line-gas/>

Item#M421 Berg Chiller

Brand: Sterling. Model: GPAC-20 (2014 mfg. year). Capacity: 5 ton. Voltage: 460V/3/60. In good condition.

Asking Price \$8,000 USD

<https://themonty.com/project/itemm421-berg-chiller/>

Item#M417 Soluble Oil Dunk Tank

Working dimensions of 30" X 48" X 30". Tank has a capacity of 2500 pounds. Includes chart recorder, cooler, recirculation pump, and controls. This could easily be modified or used to water quench aluminum. Good condition.

Asking Price \$8,000 USD

<https://themonty.com/project/itemm417-soluble-oil-dunk-tank/>

Item#M416 Wheelabrator

Wheelabrator 6' Diameter.6" Diameter table blast wheelabrator. 30 HP belt drive. Installed and in use until March 2018. Recently reconditioned with rebuilt auger. Brand New wheel and wheel housing. Good controls with pneumatic operated control and timer to shut down wheel and notify operator when cycle is complete. Very reliable machine in excellent condition. Table is mounted on the door with full access for overhead crane.

Asking Price \$75,000 USD

<https://themonty.com/project/itemm416-wheelabrator/>

Item#M414 Vacuum Residual Gas Analyzer (3 Available)

Pfeiffer Vacuum PrismaPlus QMG220 Compact Mass Spectrometer, Mass Range 1-200 amu, Catalog # PT M06 211 111, Residual Gas Analyzer. Unused these were new in Dec. 2015 and are still in original factory packaging. Warranty expired, but still factory supported. Each set consists of the following;

1. 1 Each, Quadrupole electronics QME220, P/N PTM28612
2. 1 Each, Quadrupole analyzer QMA200, P/N PTM25253
3. 1 Set, QMS220, Accessories & Spare Parts
4. 1 Each, SP 220, (033-0038 43202) Power Supply 90-264VAC, 2.1mm R/A (24 V Output)
5. 1 Each, 45-0007 43024 UTP-Patch-Cable, 3m, Crossed, Red
6. 1 Each, B4564309YX Inficon Mains Cable (USA) LNPE, AWG 18, 2.5m

7. 1 Each, 45-0006 UTP-Patch-Cable, 3m, 1:1, grey 43024
8. 1 Each, PT882400-T Quadera-software, Version 4.61 12/10/2015 for Windows 7 or XP (32-bit Pro)
9. 2 Each, PrismaPlus QMG220 Operating Instructions (1-English & 1-German)
10. 1 Each, Test Reports and Configuration
11. 1 Each, PT R 26 002 Compact Full Range Vacuum Gauge PKR 251, DN 40 CF F
12. 1 Each, PT 448 250-T Sensor Cable

Asking Price \$8,800 USD Shipping Included

<https://themonty.com/project/itemm414-vacuum-residual-gas-analyzer-3-available/>

Item#M411 SBS Quench Oil Coolers (2 Available)

Air to oil quench oil coolers manufactured by SBS Corporation. 480V/6/60. External dimensions of 6' wide X 5' high X 21' long. This unit has three (3) NEMA type disconnect switches mounted on side of unit. Standard "SBS Quench Air" air cooled heat exchanger with removable tube manifold, propeller fans for moving air across the tube bundle, flanged inlet & outlets, three (3) NEMA type disconnect switches mounted on the side of the heat exchanger. This unit has a removable top that has louvers for directing the air horizontally instead of vertically. Good condition.

Asking Price \$13,500 USD Each

<https://themonty.com/project/itemm411-sbs-quench-oil-coolers-2-available/>

Item#M380 Bronco Wheelabrator

Model# SLC500. 36" Mesh Belt –VFD drive. 8 – 20hp Blasting Wheels – VFD drive. Media separator, Torrit dust collector. Some spare parts are also included.

Well maintained and works well. Footprint – 30' long, 16' high, aprox. 12' wide. (Includes loading at the facility)

Asking Price \$20,000 USD

<https://themonty.com/project/itemm380-bronco-wheelabrator/>

VACUUMS FURNACES

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#VF361 Sunbeam Vacuum Furnace

Description: Front Loading Sunbeam Vacuum Furnace. Currently in storage but has been operational in the past year. Well maintained and in excellent condition. Used exclusively for Aerospace brazing applications. All manuals, prints and maintenance records are available.

Specifications:

- Model: 4014
- Work Zone: 48" H x 48" W x 60" L
- Pumps: Stokes 212 roughing, MD Pneumatics 5514 blower, Varian 32 Diff and Welch 1376 holding.
- Max. Temperature: 2400 Degrees F
- Uniformity: +/- 15 F
- Power Requirements: 460/3/60

Controls:

- CompuVac control cabinet, new in 2008.
- AllenBradley Model SLC5/05 PLC.
- Two Televac Pirani Gauge Tubes.
- Televac Cold CathodeGauge Tube.
- Honeywell Digital Chart Recorder.
- Honeywell Over-temperatureController.
- Compuvac Work Station with Flat Panel Touchscreen.
- MM200 TelevacVacuum Gauge.

Also included are extra heating elements, loader and serpentine furnace rack.

Asking Price \$125,000 USD

<https://themonty.com/project/itemvf361/>

Item#VF360 Vacuum Aluminum Brazing Furnace

Manufacturer: PV/T, Inc. (Now an Inductotherm Group company)

Type of Furnace: Vacuum Aluminum Brazing

Work Zone: Horizontal, 24" Wide x 37" Long x 33" High

Temperature Rating: 1250°F

Used for: Brazing Radiators

Design Temperature Uniformity: +/- 5°F (6 zones of control)

Hot Zone Design: Rectangular Shape, Elements all 4 sides, top & bottom

Hot Zone Condition: Good

Vacuum Pumps: Varian HS-16 Diffusion Pump (New in 2005), Stokes 412-H
Roughing Mechanical Pump, Stokes Mechanical Booster Pump, Welch 1402
Holding Pump

Floor Space Requirement: 8 ft x 11ft for furnace, 2 ft x 5 ft for control panel

Power Requirement: 480V/3Ph/60Hz, 200 Amp Disconnect

Controls: Honeywell, Barber-Coleman

Accessories Included: Loader, Water Cooling System (as shown in photos)

Disassembly: No charge, Just pay for rigging

Asking Price \$95,000 USD

<https://themonty.com/project/itemvf360-vacuum-aluminum-brazing-furnace/>

Item#VF359 Stokes 412 Vacuum Pump and Stokes 612 Booster

We have available a fully reconditioned Stokes Model 615-1 booster pump, Lot 78506-37, S/N 88878S00599 and a reconditioned Stokes 412 Vacuum pump.

Both units have been serviced regularly and are completely rebuilt.

Asking Price \$15,000 USD For Both

<https://themonty.com/project/itemvf359-stokes-412-vacuum-pump-and-stokes-612-booster/>

Item#VF358 Abar Ipsen 10-Bar Vacuum Furnace

Manufacturer: Abar Ipsen

Type: 10-Bar Vacuum Furnace, Internal Quench

Furnace Model: H-66x48

Date: 1994

Work Zone Size: 48"W x 50"L x 48"H

Max. Temperature: 2300F (operated 900F-2220F)

Temperature Uniformity: +/-15F

Hot Zone: All Metal

Control Thermocouple: Type S

Process: Used for Steels and Titanium

Cooling Gas: Argon and Nitrogen

Quench: 10 Bar Quench with Internal Cooling Fan

Blower motor: Recent rebuild/upgrade to VFD, 350HP

Typical vacuum level: 10^{-6} Torr with 2 micron leak rate reported

Diffusion Pump: Varian 35"

Mechanical Pump: Stokes 412J-14

Vacuum Booster Pump: Edwards 900-615-MHRR 09/16

Furnace Footprint: 21'W; 22'L door closed; 27'L door open; +10'L Loader and Rails

Panel Footprint: 8'W x 3'L x 7'H

Included: Loader, (2) ea. Serpentine Load Support Grids

Description: Metal shielded hot zone, needs new elements and shield repairs, or you can convert to graphite insulated hot zone.

Controls: Honeywell AC90 recipe controller, Honeywell UDC 2000 over-temperature controller, Televac MC300 vacuum gauge, SSi Touchscreen Digital Chart Recorder, Dewpoint Panametrics Moisture Monitor Series 35, SSi Series 7 diffusion pump oil temperature controller

Asking Price \$250,000 USD

<https://themonty.com/project/itemvf358-abar-ipsen-10-bar-vacuum-furnace/>

Item#VF357 Abar Ipsen Rebuilt Vacuum Furnace

- Manufacturer: Abar Ipsen
- Model: HR 46X72
- Condition: Rebuilt in 2015, used through 2016. Very good.
- Hot Zone: 36”W x 24”H x 72” deep, Moly, New in June 2015
- Elements: Moly
- Controls: New Ipsen control panel, new in 2015.
- Temperature: 2400F
- Diffusion Pump: 32” Varian Diffusion Pump (new in 2015).
- Pumps: Stokes 212 mechanical pump was rebuilt in early 2016. Welch 1398 holding pump was rebuilt in 2015. Stokes 615 blower recently rebuilt.
- Estimated Footprint: 21’ Wide (+ water surge tank which could be relocated 4’x10’x6’H). 24’ Deep (+10’ deep loader). 12’ High. Spool piece adapter added to remove need for diffusion pump pit.
- Power: 480 Volts, 3 Phase, 60 Hz
- Loader Included, 10’ Long x approx. 3.5’ Wide.
- 2-Tier TZM Moly Grid Fixture, 36” Wide x 72” Long x 18.5” Tall.
- Cold Trap: Liquid N2 fed Cold Trap
- Status: Furnace is currently disassembled in storage. Furnace was in production until January 1st, 2017.

Asking Price \$350,000 USD

<https://themonty.com/project/itemvf357-abar-ipsen-rebuilt-vacuum-furnace/>

Item#VF355 Vacuum Furnace Control Panel

Built by Loy Instruments in 2014 for use on an Abar Vacuum furnace. System consists of a free standing, 2 door panel with Honeywell 900PLC with Honeywell Over Temp and Televac vacuum controller. Panel was used for 2 years before it was removed from service. Panel has always been in a controlled atmosphere environment maintained at 70F. Very clean and in excellent condition. New this was \$60,000 USD.

Asking Price \$26,000 USD

<https://themonty.com/project/itemvf355-vacuum-furnace-control-panel/>

Item#VF353 Bottom Load Vacuum Furnace 60" X 60"

Vac Aero Rebuilt Bottom Load Vacuum Furnace, working dimensions of 60" x 60". Model: VAV-6060-BL. Hot Zone: Moly face with graphite insulation. Vacuum Pumps: 35" Diffusion Pump, Stokes 1722 Package. Quench System: 125 HP external quench. Rebuild in progress: Complete exterior reconditioning. Interior of pipes, fna house and vessel receive sand blasting and new high temp white epoxy paint. New hosing. New hot zone. New quench heat exchanger. Rebuilt 125 HP motor. Rebuilt mechanical pump and blower. (New controls available at extra cost). PHOTO BELOW SHOW FURNACE BEFORE REBUILD.

Asking Price \$495,000 USD

<https://themonty.com/project/itemvf353-bottom-load-vacuum-furnace-60-x-60/>

Item#VF350 Ipsen Bottom Load Vacuum Furnace

Model VVFC, Serial number #57411. Working dimensions of 48" X 48". Max. temp 2300F. 225KW heating power. 2 speed 25 HP cooling fan. Increased internal heat exchanger coils. Insulated hot zone with moly hot face. Stokes 412 mechanical pump with ROOTS CONNERSVILLE 1016 booster. New SSI programmer/controller. Built 2/6/78. Graphite heating elements and graphite hearth. Installed but not in use. Good condition.

Asking Price \$99,000 USD

<https://themonty.com/project/itemvf350-ipsen-bottom-load-vacuum-furnace/>

Item#VF348 C.I. Hayes Vacuum Furnace

C.I. Hayes Vacuum Furnace. The front door is mounted on an I-Beam trolley and slides to the side for access to the interior. Quench section is located directly in front of the heat chamber with a hydraulically operated door separating the chambers. Hot zone is lined with graphite felt backed up with ceramic fiber blanket. Six graphite rod elements are mounted horizontally across the chamber, 3 over and 3 under the work area. Hearth rails support the work load. Hydraulic cylinder transfers the load between the chambers. Hydraulic pumping system lowers and raises the work load into the tank. There is a Kinney vacuum. Electrically heated with a voltage of 480/3/60/20 kW. Model # VCQME and serial # 16482 (1987). Max operating temperature is 2400°F. Working dimensions of 8"W x 6"H x 14"L with external dimensions of 5' wide x 9' 6" long x 8' 5" high Furnace only – not including pumps, transformer. Controls are mounted and wired in a separate enclosure. There is a Honeywell DCP 511 programmable controller and a Honeywell round chart recorder / high limit with digital readout. MKS vacuum gauge indicates vacuum level in the quench area and the heat chamber. Control switches for all functions of the furnace including temperature, vacuum, nitrogen backfill, gas fan and oil agitator are flush mounted in the enclosure. Controls for transferring the load and elevator controls are located next to the furnace door. Voltage reduction transformers with DC power drivers are mounted in a NEMA 12 enclosure.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemvf348-c-i-hayes-vacuum-furnace/>

Item#VF344 C.I. Hayes Vacuum Furnace

Built by C.I. Hayes this is a VCH-202436 Single Chamber Vacuum Furnace. Work dimensions of 20"h x 24"w x 36"d. Max. Temp.: 2450 deg.F. Connected Load: 125 KW, 440/3/60. All Graphite Heating Chamber. Vacuum Components: Mechanical Pump/Blower Combo (16" Port For Addition Of Diffusion Pump). High Volume Recirculating Gas Cooling System. Programmer Controller, OT Protection, Two Recorders. Previously used for sintering of stainless steel

magnetic material and the quench is capable of hardening alloy materials. Hot zone in good condition. Furnace is presently in storage.

Asking Price \$90,000 USD

<https://themonty.com/project/itemvf344-c-i-hayes-vacuum-furnace/>

Item#VF342 Ipsen Bottom Load Vacuum Furnace

Ipsen Bottom Load Vacuum Furnace 48" X 54". Completely Re-Manufactured IPSEN 48" Dia x 54" High Vertical Bottom Loading Vacuum Furnace for your Heat Treating and Brazing requirements. This furnace complies and meets the SAE Aerospace Material Specification AMS2750 Latest Revision E (AMS2750E) and NADCAP. Operating temperature from 800°F (427°C) to 2400°F (1315°C). Temperature uniformity $\pm 10^{\circ}\text{F}$ ($\pm 6^{\circ}\text{C}$) between 1004°F (540°C) to 2400°F (1315°C). Equivalent to Class 2 Furnace in AMS2750E standards. Circular one-piece gas plenum/hot zone support structure provides strong, uniformly expanding support for elements Work Zone Dimensions are 48" (1219 mm) Diameter x 54" (1372 mm) High. Hot Zone Insulation is composed of the following layers:

Hot Face

First Layer

Second Layer

– 0.060" Thick Graphite Foil with CFC Sheet at ends

– 1.00" Thick High Purity Graphite Felt

– 1.00" Thick High Purity Graphite Felt

Hearth gross load weight capacity of 3000 lbs (1361 kilograms) at 2400°F (1316°C). Ultimate Vacuum (nominal) 10-5 Torr Range. Re-manufactured Stokes 412H-11, 300 C.F.M. (8,500 litres per minute) mechanical roughing pump. Re-manufactured Stokes 900-615, 2,000 C.F.M. (56,600 litres per minute) as blower pump. Re-manufactured Varian NHS-35" Diffusion pump, pumping speed 50,000 litres per second. Comes with Safety Guard against hot body surfaces. New Leybold Trivac 8B, 5.7 C.F.M.(161 litres per minute) Rotary Vane Vacuum pump

as holding pump. New Oil Mist Filter System for pumping system exhaust. One (1) Re-manufactured External 4400 CFM 50HP Spencer Turbine Co. Gas Fan Cooling Motor and heat exchanger system. One (1) Re-manufactured step-up transformer for Gas Fan Motor. One (1) Backfill Reservoir Gas Tank @ 120 p.s.i.g of 5,000 litres capacity. Argon Quenching To Maximum 2 Bar. Consider this basically a new furnace with a 12 month warrantee. Asking \$525,000 USD with start up and training included. Half the price of new.

Asking Price \$525,000 USD

<https://themonty.com/project/itemvf342-ipsen-bottom-load-vacuum-furnace/>

Item#VF335 ALD Vacuum Carburizing Furnace

Loading Dimensions : Width 400 x Length 400 x Height 400 mm. Loading Capacity : 80 kg max. Cooling Fan Motor : 75 kW, 3000 rpm for 10 bar N₂. Vacuum System : Leybold SV100 Mechanical Pump. Leybold WA501 Roots Pump. Leybold E250 Mechanical Pump. Leybold WA1001 Roots Pump. Vacuum Level : $<5 \times 10^{-2}$ mbar. Leak Rate : $<5 \times 10^{-3}$ mbar l/s. Heating Zone : 120 kW, 2 zones. Plasma Chamber : 60 kW, 1 zone. Diffusion Zone : 180 kW, 3 zones. Max. Temperature : 1250 °C (Heating chamber). Operating Temperature : 800-1100°C. Process Gases : Nitrogen, Methan, Argon, Hydrogen. Installed Power : 700 kVA, 3x400V 50 Hz. Manufacturing Year : 2002.

Asking Price \$75,000 Euro

<https://themonty.com/project/itemvf335-ald-vacuum-carburizing-furnace/>

Item#VF331 Elnik Vacuum Furnace

High Temperature Vacuum Furnace 2300. Manufactured by Elnik this is a MODEL T-3000 unit, built in 1993. The vacuum furnace consists of a watercooled cylindrical chamber, a molybdenum hot zone with tungsten heaters, a roughing pump, a holding pump, a diffusion pump, a heat exchanger assembly,

and all associated valving.

- The furnace runs on 480 volts
- Working dimensions of 18" X 18" X 18"
- External dimensions of furnace 6' X 6', water tank 5' X 5'
- Ultimate vacuum 10-5
- Stokes roughing pump Model 148 H-9
- Holding pump (Walsh) 1402
- Varian diffusion pump – VHS-6
- Water system – Model WCS 305-ET with a 300 gallon stainless steel recirculating tower model 1CT4-64
- 2300F operating temperature
- Ut35 temperature controller controls the temperature of the furnace as programmed by the operator via the computer's profiler utilities
- Complete and in Good Condition

Asking Price \$19,950 USD

<https://themonty.com/project/itemvf331-elnic-vacuum-furnace/>

Item#VF330 Surface Combustion Vacuum Furnace

Surface 2-Bar Quench Vacuum Furnace. Model# HVPI 484824. Maximum Temperature: 2400F. Power requirements: 460/3/60, 275 KW. Hot Zone Dimensions: 48" Wide x 48" Deep x 24" High. External Dimensions: 12' Wide x 12' Deep x 11'High. Features: Horizontally Loaded Vacuum Furnace complete with 412 Stokes Vacuum Pump, Roots 615 Booster Pump, 2 Bar Quenching, Graphite Heating Elements, "Autoclave" Style Swing-Out Front Door, and Powered Big Joe Loader. Also Included is (1) Crate of New Spare Heating Elements and Connectors. Controls: Free-Standing Control Panel complete with Marathon Monitors Digital Temperature Controller, Honeywell Digital High Limit, and Honeywell Round Chart Recorder. Condition: Very good – Operational. Approx. Weight: 25,000 lbs

Asking Price \$119,000 USD

<https://themonty.com/project/itemvf330-surface-combustion-vacuum-furnace/>

Item#VF327 Surface Combustion Vacuum Temper Furnace

Working dimensions of 36" x 48" x 24" and is approximately 23 years old. The equipment is in good condition with Honeywell HC900 Controls, Telvac Vacuum Control & Sensors, Honeywell UDC 2000 overtemp control, Stokes 412 Vacuum Pump, Controls Concepts SCR, McLeen Cabinet Cooler. Brand New Heating Elements ready to be installed. Internal Fan Circulation. This unit was pulled from service to make room for a new Vacuum furnace just recently. Max Temp 1500° F, 480 Volt / Three Phase.

Asking Price \$50,000 USD

<https://themonty.com/project/itemvf327-surface-combustion-vacuum-temper-furnace/>

Item#VF326 Ipsen Vacuum Furnace

Ipsen 924 Vacuum Furnace. Ipsen Model: VFC-924-R Vacuum Furnace S/N: 58699. Working dimensions of 32" wide X 53" deep X 26" high. Maximum operating temperature of 2400F, recently surveyed from 1400-2000F at +-25F. Molybdenum faced hot zone. Stokes 412 roughing pump, Stokes 615 booster pump, and Varian HS-20 diffusion pump. 40 HP fan. Water cooled. One zone of control. Honeywell controllers and chart recorder. MKS 937B Vacuum Gauge Controller. Good operating condition. 480 Volts. Was used in an aerospace facility before it was very recently removed.

Asking Price \$80,000 USD

<https://themonty.com/project/itemvf326-ipсен-vacuum-furnace/>

Item#VF321 Ipsen Vacuum Furnace

- Manufacturer: Ipsen
- Model: VFC-524, working dimensions of 24” wide X 36” deep X 24” high
- Temperature: 2400F
- Moly-faced hot zone
- Graphite heating elements
- 18” Ipsen Diffusion Pump
- Stokes 412H-10 mechanical pump
- 50 kVA power transformer
- Top-mounted cooling fan with 15 HP Motor
- New control Panel with Athena AT25 Digital Temp Control, Hastings Series 310 Digital Vacuum Controller, and L&N strip chart recorder.
- Currently in storage in San Diego, CA area

Asking Price \$58,000 USD

<https://themonty.com/project/itemvf321-ipsen-vacuum-furnace/>

Item#VF320 Thermal Technologies Vacuum Furnace

High Temperature Vacuum Furnace. Manufactured by Thermal Technologies LLC, Model 121224G. Working dimensions of 12” wide X 12” high X 24” deep. Maximum load weight of 200 pounds. Operating temperature of 1565C, maximum temperature of 2000C. Operating vacuum level 10-2 torr range. Ultimate vacuum level 10-3 torr. Process gas argon. Front and rear doors. Graphite heating elements with rigid fibrous graphite insulation panels (hot zone is NOT installed but virtually all the components are included) 125jVA power supply. Rotary vane pump , Trivac B Leybold Model D65B (53CFM). Eurotherm Model 2704 high performance controller/programmer with SpecView software. Furnace comes complete with parts washer.

Asking Price \$75,000 USD

<https://themonty.com/project/itemvf320-thermal-technologies-vacuum-furnace/>

Item#VF316 AVS Vacuum Furnace

Manufacturer: Advanced Vacuum Systems (AVS). Model: HMF-24-24-48-1100, S/N 4-1284-0683 Approx. 1990. Chamber: Cylindrical, Horizontal, Stainless Steel with front & rear access doors for ease of maintenance. Hot Zone: Used, All-Metal Moly/SS Shielded Hot Zone with Moly Elements and Moly Hearth Ass'y. Vacuum System: Stokes Mechanical Pumps and Varian Diffusion Pump (Typ. 10-4 to 10-6 Torr ultimate) Pumps: Varian HS-20 warranty rebuilt Diffusion Pump. Stokes 310 warranty rebuilt mechanical blower pump (booster). Stokes 212 warranty rebuilt Mechanical Roughing Pump. Holding Pump for diffusion pump. Power: 480V/3Ph/60Hz, 300 Amp, 250 KVA Heating. Floorspace Requirement: Approx. 15' x 15' x 11'H. Work Zone: 24"W x 48"D x 24"H. Max. Temperature Rating: 1100°C (2012°F) Max. Load Rating: > 1500 lb. Upgraded Controls: SSI 9220 Controller with 12.1" Advantech Touch Screen HMI and built in digital data acquisition, SSI Series 804L Hi-Limit, SR12 Remote Input Satellite Recorder, New Allen-Bradley Micrologix 1400 PLC, Televac vacuum instrument & gauges. Gas Cooling: External VFD Drive Blower and Heat Exchanger, 1 Atmosphere Pressure. Other: Included – 24" x 48" used 2-Tier Molybdenum Grid Fixture. Both front and rear doors have ports for adding end heating elements, if desired (not included). Rear door also has a port for a circulation fan, if desired (not included).

Asking Price \$170,000 USD

<https://themonty.com/project/itemvf316-avs-vacuum-furnace/>

Item#VF315 AVS Vacuum Furnace (Rebuilt)

Manufactured by Advanced Vacuum Systems (AVS) this furnace has a Model Number HMF-24-24-48-1100, S/N 4-1284-0490. Built approximately 1990. Chamber: Cylindrical, Horizontal, Stainless Steel with front & rear access doors. Hot Zone: New in 2015, All-metal, shielded (Moly and Stainless Steel), Moly Hearth, Moly Elements. Hot Zone rated for 2400F. Vacuum System: Currently 10-9 Torr, Cryogenic and Turbomolecular Dry Pumps. Pumps: CTi Cryogenics 10" Cryo Ultra High Vacuum Pump; MAGintegra 10" High Vacuum

Turbomolecular Pump (New in 2015); Pfeifer Balzers Duo 120 2-stage Rotary Vane Roughing Pump; Agilent Technologies SH-110 Dry Scroll Holding Pump for Cryo. Power: 480V/3Ph/60Hz, 300 Amp, 250 KVA Heating, Hunterdon VRT with Halmar Power Control. Floorspace Requirement: Approx. 15' x 15' x 11'H. Work Zone: 24"W x 48"D x 24"H. Max. Load Rating: > 1500 lb. Controls: ProVac computer based control system. New in 2015. Gas Cooling: External VFD Drive Blower and Heat Exchanger, 1 Atmosphere Pressure. Loader: Included. Cooling Water: 90 GPM @ 25-40 PSIG (40 Max.), Open Drain. Air: 1 cu. ft./hr @ 80-100 PSIG. Inert Gas: 35 cu. ft./Load @ 6-8 PSIG. Other: Includes 24" x 48" 2-Tier Molybdenum Grid Fixture, Has blanked off 20" port for easy change to diffusion pumping, if desired. Both front and rear doors have ports for adding end heating elements, if desired. Rear door also has a port for a circulation fan, if desired.

Asking Price \$195,000 USD

<https://themonty.com/project/itemvf315-avs-vacuum-furnace-rebuilt/>

Item#VF314 Ipsen Bottom Load Vacuum Furnace

Work Zone: 60" Diameter x 96" Tall with a Temperature of 2400F. Diffusion pump: 35" diffusion pump, with port and right angle valve. Manufactured in the 1980's with a Power of 480V/3Ph/60Hz; 600kW. Hot Zone: 2008 reline, graphite elements. Cooling Gas: Was running Argon; capable of 1-Bar cooling. Top mounted cooling fan. Water Cooling: Includes Dry Cooler closed-loop AquaVent water cooling system; 2005, 200 GPM, Plate & Frame Heat Exchanger with Thermacare fiberglass Tower.

Asking Price \$325,000 USD

<https://themonty.com/project/itemvf314-ipsen-bottom-load-vacuum-furnace/>

Item#VF313 GT Technologies Top Loading Vacuum Furnaces

Top Loading Vacuum Furnaces (2 available). Manufactured by GT Technologies, Model # AMPF-4836HP – 2015. Working dimensions of 1200mm diameter x 900mm High. Operating temperature of 2100C. Controls by Loy Instruments (Honeywell graphic touchscreen). This unique ultra high temperature furnace is high vacuum, has resistance heating with all graphite hot zone and graphite felt insulation for high efficiency operation. 480 volt 3PH 50/60 HZ, 160 KVA. Maximum load 1,000 KG. Double Wall Stainless Steel Vessel construction. Platform with Stairs included. Halogen Gas Purge equipped, Dry Vacuum Pumping System with Blower. Graphite Purity levels to less than 5ppm. Cycle time 72 – 84 hours. 10 – 3 Torr vacuum level achievable. Options: Exhaust Scrubber System, Overhead Crane. Very good condition.

Asking Price \$175,000 USD Each

<https://themonty.com/project/itemvf313-gt-technologies-top-loading-vacuum-furnaces/>

Item#VF312 Vacuum Furnace

2400C Vacuum Furnace. Capable of 2400C (4320F). Working dimensions of 10" high x 22" wide x 36" deep element-to-element. External dimensions of 86" high x 76" wide x 85" deep. 480 volts, 3 phase, 225 kw. This unit is capable of both vacuum and atmosphere operation. Graphite rigid board insulations, graphite heating elements on all 4 sides, graphite hearth plate, 6 channel digital chart recorder, Yokogawa UP 550 digital programmable controller. High accuracy Raytek digital optical pyrometer. All New Vacuum Chamber – Tested and Certified and new graphite hot zone. Very good condition.

Asking Price \$149,000 USD

<https://themonty.com/project/itemvf312-vacuum-furnace/>

Item#VF299 Sunbeam Vacuum Furnace

Model # 40236, Serial Number F-170-82. Working dimensions of 36" wide X 120" long X 36" high. Maximum operating temperature of 2552F (1400C). 460 volts, 400Kw, 3 phase. Honeywell digital program control, Honeywell digital overtemperature control, Honeywell strip chart (inoperative) and Granville-Phillips 375 Convectron vacuum controller in enclosed panel. Double walled water cooled horizontal load vessel. Interior has a molybdenum liner with graphite heating elements on both walls, roof and floor. 20 HP cooling fan mounted in rear. Pumping system consists of a Stokes 412-11 mechanical pump with Roots booster. Power to the heating elements is through VRT's. A battery powered loader is included. Some of the heating elements were damaged during shipment and will need to be replaced by buyer.

Asking Price \$95,000 USD

<https://themonty.com/project/itemvf299-sunbeam-vacuum-furnace/>

Item#VF282 AVS Vacuum Debinding/Sintering Furnace

This is a horizontal graphite vacuum debinding sintering furnace for steel MIM parts completely rebuilt from top to bottom by AVS in 2010. Working volume – approximately 18 cubic feet, 28" wide x 26" high x 42" long graphite retort, 1500# capacity. Temperature – rated for continuous operation at 1400°C ±10°C in vacuum, 1450°C burn-out. 50μ ultimate vacuum; leak rate <10μ / hour, CEDORT (Clean, Empty, Dry, Outgassed, Room Temperature). De-bind system – nitrogen or argon sweep gas, 0 – 100 torr differential pressure controlled by PLC and automatic I-to-P modulating vacuum valve, binder trap, condenser assembly; options available for hydrogen gas and burn-off. De-bind lines heated to keep vapor from condensing in vacuum lines. Fast cooling with circulation fan and automatic gas re-circulation ports. Control system – AVS ACE™ control/data acquisition system. Estimated cold-to-cold cycle time of 16 to 20 hours with AVS "Fast Cool" option. Horizontal jacketed chamber – 60" dia. x 80" long, nominal dimensions, flanged, on legs. SA-516-70 mild steel construction on water jackets and door + body flanges. Stainless Steel inner jacket & dished head plus all

power ports Front-loading chamber with 2 doors – both doors on adjustable hinges, with buna o-rings, manual clamps, for operation from 50 millitorr vacuum to 3 psig positive pressure; rear door opens for service. Ports – rough line on side of chamber, delube line from bottom, fan housing flange on rear door Additional PORTS added to the system to accommodate future system modifications for processing ‘sinter-hard’ P/M materials – a total of up to 7 additional ports ranging from 18” in diameter down to 1” in diameter will be added. Further details available upon request. Currently installed and in excellent condition.

Asking Price \$149,000 USD

<https://themonty.com/project/itemvf282-avs-vacuum-debinding-sintering-furnace/>

WASHERS

See something you need, click on the link or scroll through all the items for sale. Searching for something we don't have listed, let us know.

Item#W431 Surface Combustion Dunk Spray Washer 36x48x30

Manufactured by Surface Combustion in 1983 this is a dunk/spray washer with working dimensions of 36" wide X 48" deep X 30" high. Serial number BC-42072-1. Maximum temperature of 180F. Installed and in operation. Very good condition. Available September 2019.

Asking Price \$25,000 USD

<https://themonty.com/project/itemw431-surface-combustion-dunk-spray-washer-36x48x30/>

Item#W428 Abar Ipsen Parts Washer

Model WRD-5-G Dunk/Spray washer. Serial number 60099. Working dimensions of 24" X 36" X 24", maximum load capacity 1200 pounds. Gas heated. 460/3/60 electrical. Currently installed. Very good condition.

Asking \$19,900.00 USD.

<https://themonty.com/project/itemw428-abar-ipсен-parts-washer/>

Item#W426 Mart Corporation Table Washer

Mart Corporation Table Washer. Equipped with: Thermal Insulated Skins, Rinse Pump for Hand Wand, Wash-Rinse, Gas Heat, Oil Skimmer, Variable Pressure Switch Low-High, Rinse Pump Off-Auto, Turntable Off-On, Turntable Jog, 24 Vee-Jet Wash Nozzles, Oscillating Manifold 4 Revolutions Per Minute, 30 Minute Cycle Timer, 55 HP Duplex Pumps 399 GP, Reservoir Capacity 967 Gallons 260 Gallon Sludge Capacity, Table Load Capacity 20,000 lbs. Initial Heat Up Time 45-60 Minutes. Note: Unit is in very good condition. Table Bearings are good all

maintenance up to date, recent items include, turntable drive replaced, as well as pump rebuild. Heated with natural gas. Model # Hurricane 84 and Serial # H3013. Max temperature 140°F – 180°F with a voltage of 480 3 Phase 60 HZ, 71 FLA. Working dimensions of 84" Diameter x 75"H and external dimensions of 143" W x 139"H x 125"L – 16,000 pounds. Controls Mounted and wired in an enclosure attached to the left hand side of the washer includes.

Asking Price \$49,000 USD

<https://themonty.com/project/itemm426-mart-corporation-table-washer/>

Item#W425 Proceco Rotary Table Washer

Proceco Rotary Table Washer. Standard Proceco "Typhoon" stainless steel rotary table washer with 2000 pound table capacity. This washer has a wash stage, rinse stage and electrically heated blow-off stage. Wash tank is 600 gallons, rinse tank is 295 gallons. 25 HP wash pump, 360 GPM, 40 psi. 7-1/2 HP rinse pump, 115 GPM, 60 psi. Manual and drawings are included with this washer. Washer options include the following: Center Nozzle Pipe (CNP), Full Flow Filtration, Exhaust Blower, Oil Skimmer, Fresh Water Rinse, Oil Coalescer, PLC Controls, Stainless Steel Construction. Electrically heated with voltage 460/3/60/39 Amps. Model # HD 62-60-S-2000-CO-2-R-BO-SS and Serial # 96-224. Working dimensions of 62" Diameter x 60" High with external dimensions of 8'W x 16'H (11'H shipping) x 13'L. Controls Mounted and wired in a free standing panel includes an Allen Bradley SLC 500 PLC control with operator interface flush mounted to the door. There are three (3) digital temperature controllers, 1 for 1st stage, 1 for 2nd stage and 1 for blow-off stage. Excellent condition and available immediately.

Asking Price \$55,000 USD

<https://themonty.com/project/itemm425-proceco-rotary-table-washer/>

Item#W415 Surface Combustion Parts Washer

Manufactured by Surface Combustion of Ohio this is a spray washer with working dimensions of 30" X 48" X 30" high. Radiant tube gas heat and rotary drum oil skimmer and separate skim tank located on back of wash. This is partially reconditioned . It is in overall good condition. BEST OFFER.

For Pricing Please Contact Jordan@themonty.com

<https://themonty.com/project/itemm415-surface-combustion-parts-washer/>

Item#W348 Ipsen Automatic Dunk/Spray Washer

Model #WRD-11, Serial Number 57690. Working dimensions of 36" wide X 48" deep X 24"+ high, 2200 pound capacity. Electrically heated, 72KW. Companion washer-In/Out or straight through design. Door each end, Cal Rod element bundle. 12" wide belt oil skimmer, air operated-full width elevator rack for submerged oscillation, overhead spray rinse. Overall dimensions of 7' 5" wide X 5' 4" long X 11' 8" high.

Asking Price \$35,000 USD

<https://themonty.com/project/itemm348-ipsen-automatic-dunk-spray-washer/>

Item#W314 Holcroft Dunk/Spray Washer

Model GPWS 24-36-24. Electrically heated, 480/3/60/50 amps. Working dimensions of 24" wide X 24" high X 36" deep. External dimensions of 96"W X 143" high X 124" long (91" without skimmer attached). This is a standard dunk/spray washer with 4 Warren Electric immersion heaters. Spray nozzles are arranged over and all sides of the wash area. Load height is 51" from floor to top of rollers. Wheel centres are 14-1/2". Controls are mounted and wired on the right hand side of the washer and includes all necessary pushbuttons and signal lights. There is a dunk cycle timer and spray cycle timer. A Honeywell UDC 2000 digital temperature controller controls wash temperature. Good condition.

Asking Price \$18,500 USD

<https://themonty.com/washers/>

EMPLOYMENT OPPORTUNITIES ADVERTISING

The cost is \$150.00 USD per month for a minimum of two months. Payment can be made by Visa or Check. Opportunities should be in the form of a “Word” document and e-mailed to jordan@themonty.com All “Employment Opportunity” ads can include your company logo and will automatically appear both on the website and in the monthly newsletter “The Monty”.

Item#O381 Chief Operating Officer

A Midwest Heat Treater is seeking a hands-on, results-minded and strategic Chief Operating Officer with a high sense of urgency and strong leadership skills to oversee operations. The candidate will be responsible for ensuring operational excellence across the organization. The primary tasks will be to increase our organization’s productivity, efficiency, and profitability.

Responsibilities:

- Leads and directs the day to day operations. This includes providing leadership and direction to the management team to ensure new opportunities to accelerate growth.
- Drive continuous improvement initiatives that will result in safe, compliant, and cost-effective processes.
- Oversee employee productivity, building a highly inclusive culture to ensure team members thrive and organizational outcomes are met.
- Help improve our maintenance program with an organized system. Direct, lead, minimize equipment downtime.

Qualifications:

- 15+ years of heat treat experience.
- 5+ years of Top Management experience.
- Bachelor’s degree in business or equivalent.
- Leadership skills, with steadfast resolve and personal integrity.
- Diagnose problems quickly and foresight into potential issues.

- Oversee operations of the company and work of executive.
- Design and implementing business operations.
- Establishing and enforcing policies that promote company culture and vision.
- Strategic planning and business development experience.
- Strong written and verbal and presentation skills.
- Strong leadership and organizational skills.

Culture: Candidate will demonstrate the ability to work in a family owned and team-oriented culture where they foster a fast learning and continuously improving organization that will enhance our competitiveness and profit.

Benefits: Medical, dental, 401K, paid time off, and holiday pay.

How to Apply: Applications will be accepted until the position is filled. To apply, please email your resume and cover letter to info@tcht.com.

Item#O380 Vacuum Furnace Operator

Byron Products. 3781 Port Union Road, Fairfield, Ohio 45014

Compensation: \$15-\$20 / Hour

Employment Type: Full Time

Shift: 2st Shift & 3rd Shift

Benefits: 401k, Dental, Life, Health, Vision, Online Heath & Wellness Program

Why Work Here? "The Byron Products environment is about team effort and taking pride in your hard work. We care about our employees and do our best to offer them a happy and balanced work life."

Job Summary: We are seeking full-time vacuum furnace operators to assist us at our first plant in Fairfield.

Responsibilities and Duties:

- The employee will need to be able to do the following:
- Ability to work from furnace operation and calibration sheets and furnace logs with minimal supervision.

- Operates a variety of standard power tools and equipment.
- Maintains records and logs, as needed.
- Performs duties as needed or assigned by Production Manager
- Ability to follow oral and written instructions and to communicate effectively.
- Ability to work cooperatively with others. Excellent work history and attendance record.

Qualifications:

- Valid driver's license
- Graduation from high school / GED or experience in a variety of trades or manufacturing work; or any equivalent combination of education and experience which would provide the required knowledge, skills, and abilities.
- Pre-Employment drug screen required and random drug test throughout the year

Experience:

- Experience working with vacuum, atmosphere brazing and tempering furnaces (Knowledge and experience of furnace set-up, operation and every-day maintenance): 1 year (Preferred)
- Experience working to FAA, and ISO specifications concerning aerospace furnace brazing and heat treating: 1 year (Preferred)
- Experience using various tight tolerance measuring instruments including micrometers and calipers.

Work authorization: United States (Required)

Work Location: Plant 1 (3781 Port Union Road, Fairfield, Ohio 45014)

Pay Frequency: Weekly

About Byron Products: Byron Products is a thermal processing company specializing in Brazing, Heat Treating, Welding, & Coatings. Byron Products has earned a reputation as a leader in supplying quality parts and services for a wide and diverse group of clients.

“WHATEVER IT TAKES” is our motto at BYRON PRODUCTS. By that statement we are dedicated to supplying our customers with the best service at competitive pricing in the brazing, heat treating, welding and plasma coating business. Being able to react with personalized and professional service is what has allowed us to be in business and grow since 1982.

Company Website: www.byronproducts.com

Company Phone: 513-870-9111

Item#O379 Seeking Machine Maintenance Worker

Byron Products. 3781 Port Union Road, Fairfield, Ohio 45014

Compensation: \$18-\$25 / Hour

Employment Type: Full Time

Shift: 1st Shift

Benefits: 401k, Dental, Life, Health, Vision, Online Health & Wellness Program

Why Work Here? “The Byron Products environment is about team effort and taking pride in your hard work. We care about our employees and do our best to offer them a happy and balanced work life.”

Job Summary: We are seeking a full-time maintenance worker to assist with our Fairfield properties.

Responsibilities and Duties:

- The maintenance employee will need to be able to do the following:
- Perform regular maintenance needs on equipment and facilities
- Basic mechanical, electrical, plumbing and welding skills

Qualifications:

- Valid driver’s license
- Reliable transportation
- Must possess own tools
- Able to respond to after-hours emergency calls as part of rotating on-call

- Graduation from high school / GED or experience in a variety of trades or manufacturing work; or any equivalent combination of education and experience which would provide the required knowledge, skills, and abilities.
- Pre-Employment drug screen required and random drug test throughout the year

Experience: Maintenance: 1 year (Preferred)

Working Authorization: United States (Required)

Work Location: Multiple locations (We have 4 plants located within a mile of each other)

Pay Frequency: Weekly

About Byron Products: Byron Products is a thermal processing company specializing in Brazing, Heat Treating, Welding, & Coatings. Byron Products has earned a reputation as a leader in supplying quality parts and services for a wide and diverse group of clients.

“WHATEVER IT TAKES” is our motto at BYRON PRODUCTS. By that statement we are dedicated to supplying our customers with the best service at competitive pricing in the brazing, heat treating, welding and plasma coating business. Being able to react with personalized and professional service is what has allowed us to be in business and grow since 1982.

Company Website: www.byronproducts.com

Company Phone: 513-870-9111

Item#O378 Seeking Experienced Inside Sales Manager

About CEL: Cleveland Electric Laboratories (CEL) is a family-owned business that has served our customers since 1920 by proudly providing top-quality, configure-to-order products and exceptional customer service. We place the highest importance on serving the needs of customers while focusing on quality, efficiency and integrity. CEL is looking for the right candidate possessing the character, experience, and drive to continue our expansion.

Summary: CEL is seeking Inside Sales Manager experienced in pyrometry or industrial/aerospace heating applications. The Inside Sales Manager will manage the entire sales administration process, analyze/create pricing, drive new revenue growth, and develop the inside sales team. They will collaborate with

numerous departments, so it's essential that they have excellent communication skills and are effective in a team environment. The Inside Sales Manager should be able to build a high-performing team to ensure customer satisfaction.

Principal Duties and Responsibilities:

- Manage inside sales representative team & the business development team
- Accurately and efficiently evaluates product cost and establishes pricing
- Analyze cost and pricing trends at a product line/market level
- Coordinate wide variety of quotations from transactional orders to project level bid proposals
- Quotation, Contract Review, and Sales Order Entry process-owner
- Executes business development strategy through development of a tactical plan
- Liaise with Application Engineering, Engineering, and Quality on new product configurations
- Works closely with Sales, Certification Lab, Quality, and Production in a professional and timely manner
- Knowledge, Skills, and Abilities Required:

Education: BS (Business/Engineering) preferred:

- Experience: 7+ years in a supervisory/management capacity in a sales, marketing, or product management role, preferably in an industrial product manufacturing environment. Preferential consideration for individuals with a background in industrial pyrometry or thermal experience.
- Must be an effective communicator with solid interpersonal skills to serve cross-functional stakeholders (Customers/Outside Sales/Production/Purchasing/Engineering/ Certification & Quality)
- High problem-solving, organizational, analytical, and numerical capabilities

If Interested Please Contact Brittany Bowles at: bbowles@cel-tcg.com

In Parting

We always enjoy comments, feedback and constructive criticism. Thanks for your feedback and don't hesitate to let us know your thoughts. Don't forget to visit us daily at www.themonty.com.

Gord Montgomery,

William G. Montgomery Limited

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