

HEAT TREAT NEWSLETTER

Everything to do with heat treating



If you would like the information contained in this newsletter daily instead of monthly, visit us at www.themonty.com daily & you don't have to wait for the most up to date, relevant Heat Treat News in the industry.

CONTENTS

INTRODUCTION

HEAT TREAT NEWS

USED EQUIPMENT

- Batch IQ
- Batch
- Box
- Continuous
- Draw/Temper
- Generator
- Induction
- Lab Equipment
- Miscellaneous
- Vacuum
- Washers

BUSINESS OPPORTUNITES

- Employment Opportunities
- Individuals Seeking Employment

IN PARTING

INTRODUCTION

Wishing you a very
Merry Christmas and a Happy
& Healthy New Year!!!



Best regards,

Gord, Dale and Jordan Montgomery

HEAT TREAT NEWS

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

Continuous Furnace Line Auction

Coming up a company by the name of Cold Heading Company will be auctioning off all of the equipment in a facility they have in Cleveland, Ohio, USA. This location closed a couple of years back and all of the equipment has sat in place, installed and collecting dust since that time. Being a fastener manufacturer the equipment is exactly what you would expect, continuous furnace lines with loading, high heat furnaces, oil quenching, washers and tempers. To be more precise each of the three lines was built by AFC back in the 1990's, with two being mesh belts and one a cast link. Continuous furnace lines are funny things, when the fastener guys are busy they sell quickly, when times are slow you can't give them away. We would guess that the largest line will find a home, the two smaller ones will probably go to the scrap guys.





SOME LIKE IT HARD,
SOME LIKE IT SOFT.

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Bodycote Rotherham, UK

“Over the summer, Bodycote opened a new facility on the Advanced Manufacturing Park (AMP) in Rotherham to support the aerospace and power generation markets in the UK and Europe. The move followed a contract win with Rolls-Royce’s Civil Aerospace business that is expected to be worth over £160m in incremental revenues over the 15-year period. Sales will ramp up over the next five years. Rolls-Royce also has a manufacturing facility on the AMP. For the four month period October 31 2018, Bodycote reported group revenue of £243.5m, 5% higher than the comparative period last year. Civil aerospace revenues grew strongly at 14% compared to the same period last year, with North America and Western Europe both registering good growth. The Macclesfield-headquartered firm said that this reflects increasing output for the LEAP program (work for Safran

Aircraft Engines) and “an easing in the OEM supply chain bottlenecks for Titanium castings.” Bodycote is featured in the latest issue of Manufacturing Today. On the



The advertisement features the IDEMITSU logo at the top, followed by the text "DAPHNE QUENCH OILS" in a blue banner. Below this is a photograph of glowing orange metal parts in a furnace. To the right of the photo, the text reads: "Use the right oil to minimize distortion and cracking." At the bottom of the ad, the website "www.ilacorp.com" is listed.

Rolls-Royce deal. Stephen Harris, CEO at Bodycote, told the publication: “As it is a sole source contract we are operating under, meaning that we are Rolls-Royce’s only supplier for thermal processing on particular components, we have to meet certain standards, in terms of capacity. In order to achieve that, we opened our latest UK facility in July 2018, in the Advanced

Manufacturing Park, in Rotherham, where we offer numerous heat treatment processes, the principal ones being HIP and vacuum heat treatment. “The good news is that we have already started expanding the new site, shortly after we built it. Rolls-Royce is not the only customer available to us; we are looking to support other clients, too, but at the moment, Rolls-Royce is especially demanding for our services, which is helping the Rotherham factory grow very fast.” The most advanced turbine blade casting facility in the world was officially opened by Rolls-Royce in Rotherham in 2014. The 150,000 sq ft facility employs around 150 people and has the capacity to manufacture more than 100,000 single crystal turbine blades a year.”



Seminario ExpoTermicos

Earlier this week we had a photo from the recent Heat Treat Seminar in Querétaro, México. As a follow up to that we have two more photos. In the first one we see from the left Esteban Aguilar Garcia of comercial Heat treater Crio, Steve Thompson of SSI looking very happy about something although we are not sure what and Carlos Torres of Mattsa Crio. In the second photo the only person we are sure of is Carlos Torres Senior of Mattsa Crio.



Thermal Process Holdings Acquires Hudapack Metal Treating Inc.

“November 28, 2018 – Thermal Process Holdings, Inc. (“TPH”) is pleased to



announce its acquisition of Hudapack Metal Treating, Inc. (“Hudapack”), which owns and operates heat treat facilities in Elkhorn and Franklin Wisconsin. Hudapack, co-founded by Gary Huss, Charles Davis, and Earl Pack, represents the third investment in our strategy to build a leading thermal processing company focused on value-

added services. Central to this strategy is identifying and bringing together leading

businesses that share a focus on world-class safety, quality, service, and advanced technology. John Hubbard, Chairman of TPH, said: “We are excited to announce the third acquisition in our strategy to build a best-in-class company that offers a range of advanced services. I have known and respected Gary Huss for over 30 years and am appreciative that he has entrusted us with the two businesses he has successfully built. I am also pleased that Greg Huss has agreed to become the General Manager of both Elkhorn and Franklin and look forward to working with him as we seek to grow Hudapack.” Gary Huss, co-founder and President of Hudapack, remarked: “We began operations in 1985 and have been more successful than I ever imagined. When making the difficult decision to sell the business and retire, an important consideration was finding a buyer who would ensure the continued success of the business and provide opportunities for the Hudapack employees. I am confident that John Hubbard and the TPH team will carry out those objectives. I am also delighted that Greg will become GM of both locations. He has spent his career in the business and this transition provides an exciting leadership opportunity for him.”



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 also owns and operates Diamond Heat Treat, based in Rockford, IL and Certified Heat Treating, based in Springfield, OH. TPH is actively seeking other add-on acquisition opportunities.

ABOUT CALVERT STREET Calvert Street Capital Partners is a Baltimore, Maryland-based private equity firm with a focus on investing in industrial service businesses in the lower middle-market. Since its inception in 1995, Calvert Street has partnered with skilled management teams of privately held businesses to drive profitable growth and organizational transformation. TPH builds upon Calvert Street's experience in other high-value add industrial sectors, including testing and inspection and precision machining. For more information, please go to www.cscp.com."

You Have to be Kidding Me!

Business is good in the industry these days which means a shortage of used furnaces which translates into prices edging up but this is taking it to an extreme!



ION NITRIDING
SOLUTIONS



Just yesterday we were offered this batch IQ furnace for \$59,000 USD as is/where is but loaded on to a truck (the vendor stressed that as though this was a great selling feature). When we suggested that this was overpriced the response was that there was some room for negotiation.

\$59,000? This piece of junk isn't worth \$59.00 much less \$59,000. After 40 years

in this business this has to be the most ridiculous asking price we have ever run across. It is tempting to publicly shame the vendor by mentioning his name but we will refrain from that. I guess at the end of the day it is kind of funny but it still offends us as it is so out of touch.



What Can “The Monty” Do For You?

Besides offering Captive and Commercial heat treaters around the world the latest news and trends in the industry “**The Monty**” offers so much more. For instance our interviews page <https://themonty.com/interviews/> offers almost 50 interviews with some of the most influential people in the industry. **Rich Ott** of **Linamar Gear** one of the largest captive heat treaters in the world is included as are **Mr. Stephen Harris**, CEO of heat treating giant **Bodycote**, **Pat Toruk** of controls company **UPC**, **Pat McKenna** of **Ipsen** and a host of others. Interested in what **Commercial Heat Treaters or Employees at Furnace Manufacturing companies get paid**-we would suggest clicking on the “Articles”

button on the top of the page and while you are at it find out who the **Largest Commercial and Captive Heat Treaters in North America** are.

If you are looking to **Buy/Sell Used Heat Treating Equipment** you have come to the right spot-click on the Used Equipment button on the top of this page for one of the most complete lists of used furnaces in North America. If a **Free Appraisal** of your surplus furnace (s) is of interest feel free to use our contact form. **Looking to Hire?** That would be the **Employment** button at the top of this

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page where you will also find a spot where you can post your resume for free! In short after almost **50 years in business** WG Montgomery Ltd., parent company of **“The Monty”** can help you with pretty well anything to do with heat treating.



Contour Hardening Adding Gas Nitriding

This rather interesting article tells us about another company, Contour Hardening in this case adding gas nitriding. We honestly don't know who the supplier is but there is only a handful of US companies that offer new gas nitriding furnaces.

“Contour is excited to announce the purchase of a gas nitride unit from a major U.S. furnace manufacture. This strategic purchase will help Contour expand their offerings in the automotive sector and expand deeper into the aerospace market. Contour will install the first unit at its Global Headquarters in Indianapolis, IN USA late spring 2019. Since its founding in 1986, Contour has both, manufactured induction heat treat systems, as well as, offered commercial induction processing services for industry partners around the globe. The purchase of a gas nitride unit allows Contour to expand services focusing on distortion critical, complex parts for clients. With the addition of



custom-electric.com

nitriding, it allows increased offerings to solve complex parts demanding dimensional control through engineered processes.

“Innovation is what Contour was built on, today is no different. Our customers rely on Contour’s controlled heat-treatment processes, 100% hardness verification and dimensional inspections. Our goal is to drive out part variation and provide a

repeatable dimensionally accurate part.”

stated Director-Heat Treat, Neil Merrell.

“We have an extremely deep and talented

bench of in-house engineering and

metallurgical teams, and they couldn’t be

more excited about Contour’s entry into the

Gas Nitride market. For several years,

Contour has planned having a more

significant presence in the aerospace,

agricultural, heavy truck and light

automotive industries. The purchase of this gas nitride unit will allow us to do just that and complement our induction and dimensional services.” stated Contour CEO and President, Ben Crawford.

With locations in Indianapolis, Indiana USA, and Silao, Mexico, Contour is a recognized global leader in induction hardening process services and the

manufacture of custom heat treat processing machines to companies on a global

scale. Crawford added, “We plan to make Gas Nitriding capabilities available to

our clients at our Silao, Mexico plant in the near future. We are committed to

offering innovative thermal heat treat solutions to our clients globally and this

investment is proof of our commitment.”. ABOUT CONTOUR Contour

(www.contourhardening.com) is a full service induction hardening system

manufacturer, specializing in induction hardening systems, contract processing,

and application development work. The company was founded in 1986 and brings



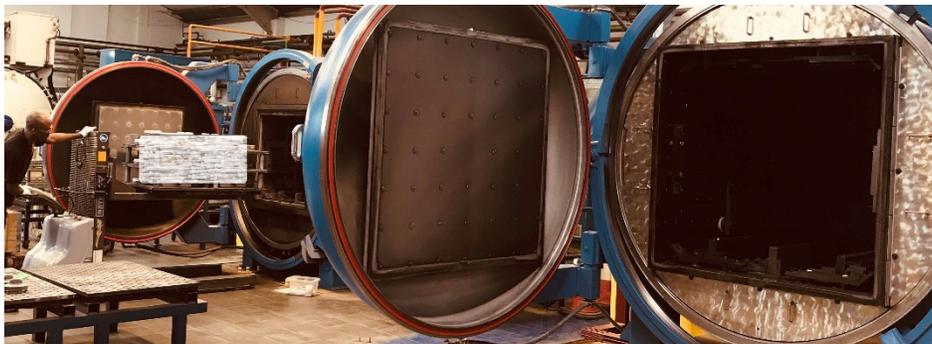
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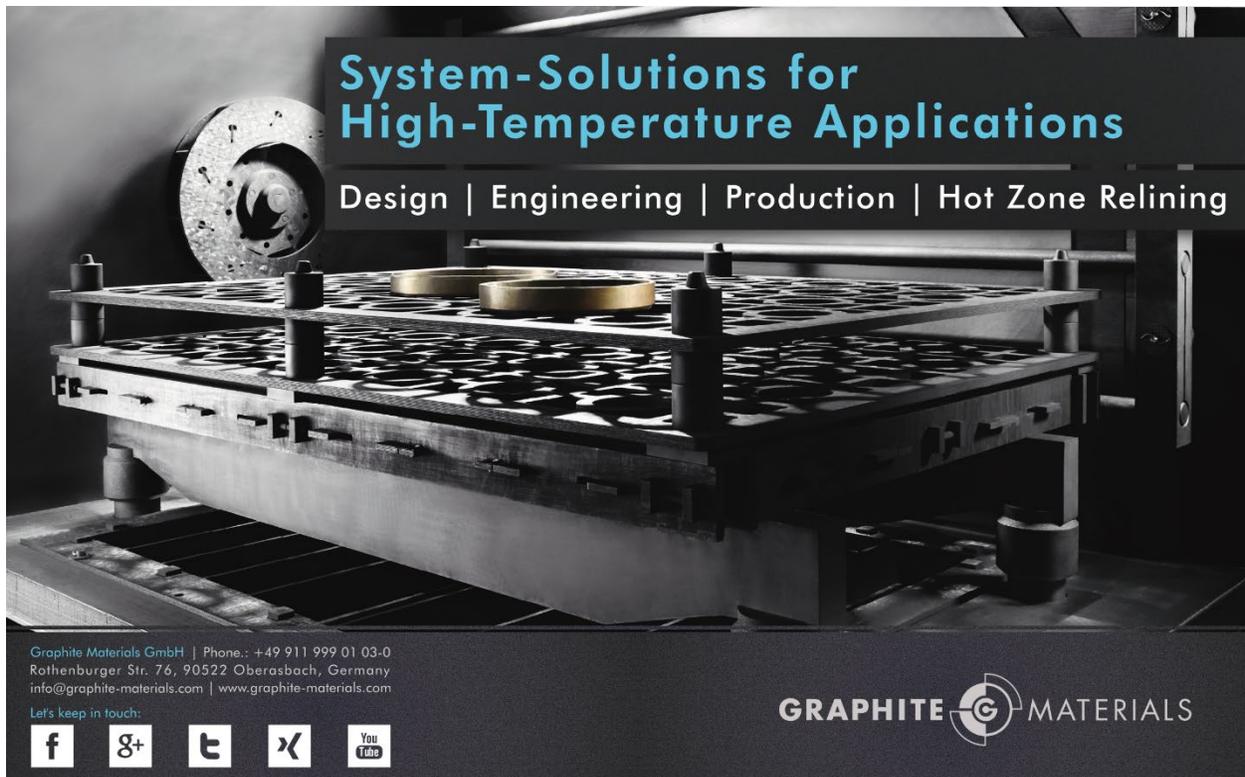
more than 30 years of industry leading research and innovation in the discipline of heat treat techniques and processes.”



Expansion of Capacity at Hauck Heat Treatment Ltd.

“Hauck Heat Treatment has added further Vacuum heat treatment capacity to its range of Aerospace furnaces at the Letchworth site in Hertfordshire, UK. The high vacuum, high pressure quench furnace increases the total capacity offered on site at >30% by volume and >35% by weight and also increases the previous maximum working dimensions to directly support some specific Aerospace projects. Additionally, growth in the on-site hot isostatic presses (HIP) due to the high demand from additive layer manufacturing (ALM) parts means that faster throughput can be achieved. This will be of particular interest to “fast make” services where a speedy and flexible HIP & Heat Treat in one location creates many saved hours of advantage for the customer.”





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Ismail Vahora 50 Years in the Heat Treatment Industry

We can't recall anybody ever sending us a complete summary of their life in the Heat Treatment Industry so this marks a first and makes for interesting reading.

“After completing his metallurgical engineering degree with first class holding first rank, in December 1968 he joined one of the giant industries in India known as TATA STEEL INDUSTRIES as a trainee engineer in metallurgical department and began his career in the area of heat treatment and metallurgical testing. After working for TATA STEEL INDUSTRIES for 5 years, he worked for one of the giant industries known as BIRLA GROUP carrying more responsibilities as a manager. In India during 1968-1992, he worked for TATA GROUP of industry, BIRLA GROUP of industry and FAG BEARINGS manufacturing facility and earned high respect as a very competent engineer/manager.

In August 1992, Ismail migrated to Canada and got himself registered as a professional engineer and earned a title of P. Eng. from Professional Engineer Ontario, Canada. P. Eng. is the highest title awarded to recognized engineers in Canada by PEO and Canadian Council of Professional Engineer (CCPE), Canada. During 1972-2007, he worked for GABRIEL SHOCKS (ARVIN RIDE CONTROL), MAGNA INDUSTRIES, LISI AUTOMOTIVES and two commercial heat treatment facilities known as A & M Heat Treating Limited and HUQ Heat Treating Limited as a Chief Metallurgist. While working in Canada during 1992-2007, he earned recognition from his employers and kept growing in his position carrying more responsibilities.



Baker furnace is now offering accredited system calibrations backed by the TPS group's combined 17 years of experience.

In November 2007, he moved to USA under work visa and joined RAMPF Mold industries, Inc in Hagerstown, MD as a Chief Metallurgist. RAMPF wanted to expand and add heat treatment facility to their new building. Before Ismail joined RAMPF Mold – Hagerstown, MD, he went to RAMPF-Germany and trained their heat treatment department engineers for quality heat treatment and gained very high recognition for bringing lots of improvement, minimizing distortion and improving their quality. Since November 2007 as on today, he has worked for



RAMPF MOLD, Inc, MD USA (Germany base Company), and Dayton Lamina Inc. OH USA (MISUMI Japan base company) and currently with ALD Thermal Treatment Inc. MI USA (ALD Germany base company) in the capacity of a CHIEF METALLURGIST and earned recognition as a most competent metallurgist in

the area of Thermal Treatment, Research and Development, Product

Development, Process Development, Quality Systems and Technical Sales and Marketing.

Today in December 2018, he is completing his journey of 50 years as a metallurgist and entering in 51st year as he would like to keep working and passing his experience and expertise to others in the above area. He expects blessing from all of his well-wishers, friends and family. His contact email is yvahora@hotmail.com and mobile 810-824-7003.

Monday Morning Briefing

We have always had a real affinity to **Brazil** and have gotten to know a number of the captive and commercial heat treaters in the country. However as many people know the economy is not good and heat treaters are of course suffering also. **Sergio Luiz Figueirego** who has long worked as a heat treat rep through his firm **Metaltech** is unfortunately calling it a day; *“I’m closing Metaltech due to the Brazilian economic situation. Several companies and Commercial Heat Treaters have shut down in the last few years. Too*



many automobiles parts are imported nowadays. I’m selling my inventory and will work more as a consultant and having the Customer importing the products.” Commercial heat treater **Metex Heat Treat** in Canada is pretty proud of all of the investments they have made in 2018. These included a brand new **AFC-Holcroft** batch IQ furnace with working dimensions of 36" X 48" X 36", a 3500 pound per hour Can Eng mesh belt line and a really cool **SAET** automated induction system. This is combined with the fact that they added a fourth facility this year to house all of the new equipment.



So how are we doing these days? According to **MTI (Metal Treating Institute)** commercial heat treaters are doing darn well in North America which will be no surprise to anybody. 2018 was an excellent year with most months showing double digit growth over the course of the year and this is expected to continue right through the first quarter of 2019. At this point forecasts have things slowing down a bit but nothing really bad on the horizon. Vacuum furnace builder **Solar Manufacturing** has this update about their new building; *“The construction site in Sellersville, PA for Solar Manufacturing’s new building is well under way. The new*

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57,500 square foot building is dedicated to vacuum furnace manufacturing. As can be seen in the picture, the four bridge cranes are in place, the full plant and office roof is complete, and much of the concrete floor poured. The \$8 million plus construction project is being financed through Univest Bank and Trust Co. of Souderton, PA. The general contractor is Gorski Engineering.

The project site, Sellersville Business Campus, was developed by the Bucks County Development Authority.”



A company by the name of **Flowserve US Inc.**, is closing their facility in Clarks Summit, USA with the equipment being auctioned off over the next couple of weeks. We mention it because included are a couple of ovens which are nothing fancy but which appear to be in half decent shape. Out in the Los Angeles, California, USA area we see that the relatively new **Heat Treatment Australia** facility continues to grow with the very recent addition of this SECO/WARWICK vacuum brazing furnace. We expect that we will have more announcement about equipment additions to this facility in the future.



Thermal Product Solutions sent us this press release about a truck-in-oven the company recently shipped. [*“Thermal Product Solutions Ships Gruenberg Truck-in-Oven to the Oil and Gas Industry.”*](#) *Thermal Product Solutions, a global manufacturer of thermal-processing equipment, announced the shipment of a Gruenberg truck-in-oven to the oil and gas industry. The truck in oven will be used to test parts used for downhole drilling in the oil and gas industry. If you would like more information on this topic, please contact Andrea Strand at (262) 248-0288 or astrand@cutwingmarketing.com.*”



To round things out we have this from Mexico. Last week industry suppliers **MATTSA, CRIO, AFC-Holcroft, and SSI** hosted **Expos Termicos** in Queretaro, Mexico. This is an event which is held every two years and includes sponsors such as oil fluid suppliers and lab equipment providers. According to **Carlos Torres** of MATTSA/CRIO they wanted to create an event which provides education and value to the Heat treat community in Mexico. As Carlos

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explained *“we have noticed that there are many new show or expos in Mexico where the organizers just want to make money on sponsors and that there not many heat treat users at these events, just a bunch of suppliers looking at one another. We include panels and conferences regarding new trends in the market and we really try to focus on added value conferences and*

not a sales presentation. We brought speakers from high end automotive auditors, heat treat plant mangers who run multiple facilities with different types of heat treat process even university metallurgy professors. It was a real success this year with over 200 heat treaters from around Mexico attending.”



Oldest Commercial Heat Treater in North America

November 20th 2018 we speculated on this page that Bennett Heat Treat headquartered in NJ, USA and founded in 1923 might be the oldest commercial heat treater in North America at 95 years. A few readers chimed in suggesting Robert Wooler Company which was also founded in 1923 and Metlab which was founded in 1928. However to date the oldest that we have run across is Commercial Steel Treating Company in Michigan started in 1916 by Anthony and Ralph Hoensheid. Scott Hoensheid sent us this timeline.

- Hoensheid Steel Treating formed in 1916 by Anthony and Ralph Hoensheid (Father and Son). Both were Metallurgists at Detroit Twist Drill as well.
- Commercial Steel Treating Incorporated in 1927 by Ralph Hoensheid. Ralph was instrumental in the heater's club and was the second President of MTI.
- Ralph's son's Merle and Warren Hoensheid took over upon his passing in 1950.
- Commercial Steel continued its growth through the war and Plant 2 began in 1954 in Madison Heights Michigan.
- Curtis Processing was added in 1962 in Ecorse Michigan. Moved to Troy, Michigan in 1963. Curtis Coatings began in Sterling Heights Michigan in mid-



70's, Combined to form Curtis Metal Finishing Company in 1988 in Sterling Heights, MI

- Merle passed away in 1990 and the business was passed to his 5 son's (Ralph, Mark, Scott, Kurt and Craig).
- Curtis Metal Finishing (Machesney Park, Illinois) began in 1993.
- Ralph and Mark retired in 2002.
- Curtis Thermal Processing began (Machesney Park, IL) began in 2008.
- Brothers Scott, Kurt and Craig still retain major ownership and took on an Equity partner (HCI Equity) in 2015.
- Growth in both Heating and Metal Finishing continues to be rapid and will continue!
- Pictures: Hoensheid Steel Treating ~1917, Commercial Steel 1927, Commercial Steel Plant 1, ~1950, Commercial Plant 2 ~1988, Curtis metal Finishing (Machesney Park, IL) ~1999.



HOENSHEID STEEL TREATING
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COMMERCIAL STEEL TREATING CORP.
Sterling Heights, MI 48304



Phoenix™ Press Release

Carburizing has rapidly become one of the most critical heat treatment processes employed in the manufacture of automotive components. Also referred to as Case hardening it provides necessary surface resistance to wear, whilst maintaining toughness and core strength essential for hardworking automotive parts. The carburizing heat treatment process is commonly applied to low carbon steel parts after machining, as well as high alloy steel bearings, gears, and other components.



Being critical to product performance, monitoring and controlling the product temperature in the heat treatment process, is essential.

Careful control of both the process temperature and duration, both in the heating and quench stages is essential to both product quality and process efficiency. Obviously when considering

temperature we are interested in the product temperature not the furnace. Measuring product temperature through a carburizing process although possible using trailing thermocouples, as performed historically, is certainly not easy, safe and disrupts production for lengthy periods.

PhoenixTM provides a superior solution with the use of a 'Thru-Process' temperature monitoring system. As the name suggests the PhoenixTM temperature profiling system is designed to travel through the thermal process measuring the product and or furnace environment from start to finish. Designed for purpose the system is compact enough to fit

in even the most compact of LPC furnaces, yet robust enough to survive the combination of high temperatures and high-pressure gas quenches (up to 20 bar). Unique to PhoenixTM the innovative TS12 range of barriers even allows the monitoring of the continuous



carburizing furnace including the oil quench. A high performance, 2way RF system option, permits not only real time live monitoring of the process but also full in-process control of the monitoring system (Start, Stop, Reset, Download etc). The real time RF system although useful in product profiling studies is even more beneficial when performing temperature uniformity surveys (TUS) to CQI-9 or

AMS270E. Employing the custom designed Thermal View survey software comprehensive TUS reports can be generated quickly and efficiently.

If you need to **Understand, Control, Optimize and Certify** your LPC or continuous carburizing furnace to guarantee product quality, process operation efficiency and regulatory compliance, contact Phoenix™ today.

Enjoy Your American Thanksgiving!

Happy American Thanksgiving! We wish all the best to our American friends while they celebrate Thanksgiving this year.

United Process Controls-The Year in Review

With 2019 around the corner, we look back at the top 3 corporate milestones that shaped United Process Controls in 2018.

USA HEADQUARTERS MOVES

United Process Controls, Inc. (UPC) has announced plans to relocate its USA headquarters from West Chester, Ohio to Oak Creek, Wisconsin this December.



The relocation is the second-phase of the company's initiative to unify its US operations to one centralized location. Earlier this summer, UPC completed the first phase that saw its two Wisconsin facilities come together under a larger facility in Oak Creek, WI. At present, the 30,000-square-foot premise located in the southeastern corner of Milwaukee county

accommodates the growing flow controls business, and will provide additional manufacturing space for the company's diverse product lines.

“This latest move is an exciting development for UPC and has been coming for a while, as the company has grown steadily over the past few years,” says Paul Oleszkiewicz, President of UPC. “With the acquisition of Atmosphere Engineering in 2017, we understood that moving all USA facilities to a new location was necessary to create operational synergy across our business units – heat treating controls, flow controls, and combustion optimization solutions. Sharing the same facility will bring more cross development and cross manufacturing opportunities, and this interactivity means that the latest products and systems are designed and delivered with better efficiency to our customers. Additionally, cross training will enhance the proficiency of our engineers, manufacturing and service technicians, building a greater team that can interact more effectively with our customers and sales network.”

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Pat Torok, VP Sales & Marketing, added “UPC operations in the USA have outgrown its current space. The larger facility in Wisconsin allows for greater flexibility in inventory management and streamlined manufacturing, and will house an expanded laboratory, as well as engineering, manufacturing, sales, and service personnel. The space at 6724 South 13th Street also has room to accommodate future growth for product development.”

PROCESS-ELECTRONIC CHANGES NAME

On the other side of the Atlantic, our European affiliate Process-Electronic with operations in France, Germany, and Poland has officially changed its name to United Process Controls, consistent with the group’s company name strategy. “Since the founding of UPC in 2012, the brand has become synonymous with innovative process controls and automation solutions. The decision to use the group name reflects our position today to unify the company and its brands, which

are well-established and trusted in the heat treating and combustion markets,” explained European Sales Director, Jens Baumann. “The changeover to the new name came into effect this past fall. The Process-Electronic name will stay as a product brand, alongside the group’s other brands – Atmosphere Engineering, Furnace Control, Marathon Monitors, and Waukee Engineering. As we step forward with the new name, I am proud to continue our tradition of providing quality, reliable solutions and services to customers in Europe and worldwide.”

ERP IMPLEMENTATION

Other important corporate developments at UPC include the digitalizing of the company’s global business. Following a six-month review of potential ERP



software and partners, UPC partnered with SAP expert Projexia to oversee the implementation of SAP Business ByDesign system at its seven locations.

“The cloud ERP will streamline activities by improving synergies between operations within the group, help identify new market opportunities, as well as enable us to pursue further growth,” noted Jason

Jossart, Vice President of Operations. “Additionally, SAP will ensure transparency of our processes and enable improved accuracy of production planning. Among other benefits are better control of inventory levels and effective intercompany cooperation to maximize the utilization of all company resources.” In the first phase, SAP was implemented at the company’s US operations. For subsequent implementations, the ERP system will be deployed across sites in Germany, France, Poland and China.”



And Speaking of US Thanksgiving

Jim Grann of furnace manufacturer Ipsen gives us 5 reasons why you should NOT cook a turkey in a vacuum furnace.

<https://themonty.com/and-speaking-of-us-thanksgiving/>

Commercial Heat Treater Metcor Makes Major Investments

In business since 1950 Metcor is the largest commercial heat treater in the Canadian province of Quebec. This Nadcap Aerospace heat treater offers Vacuum, Induction, Atmosphere and Salt Bath Nitriding all in a 50,000 square foot building located just outside of Montreal, Quebec. The company has been making some major investments recently in new equipment to be able to offer their customers more capacity as well as the latest and greatest technologies. Recent additions include a very impressive vacuum furnace built by Solar Atmospheres of Souderton, PA, an Ajax Tocco Induction scanner and a large oven built by Wisconsin Oven each of which can be seen below. <http://www.metcorht.com/>





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Continuous furnaces



SSi-Mexico Open House

“On Thursday, November 8, 2018, SSi-Mexico (Sistemas Superiores Integrales S de RL de CV) held an Open House and cut the ribbon on a new service center and calibration laboratory in Queretaro, Mexico. The celebration was attended by Stephen Thompson (President, Super Systems), employees, family, friends and customers. The relocated facility is approximately 5,500 square feet (500 sq. meters) with modern office environs and state-of-the-art repair and calibration lab. SSi-Mexico employees a talented staff



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of fifteen which serves all sectors of the heat treat industry in all the Mexican states within four major industrial zones of the country. SSi-Mexico is ISO/IEC 17025:2005 accredited which covers in-house laboratory calibration of sensors, analyzers, controllers, instrumentation and recording devices. The future is bright for the SSi Mexico operation with business opportunities and expansion room for world-class customer support and service.”



Solar Atmospheres and the Spirit of Thanksgiving

“In the spirit of Thanksgiving, Solar Atmospheres in Souderton, PA, along with sister companies Solar Manufacturing, Magnetic Specialties, and Vacuum Pump Services, held a food drive to support the Keystone Opportunity Center. Together, they were able to donate more than 790 lbs of food and supplies to those in need within the community. The mission of Keystone Opportunity Center is to help community members in need by offering a comprehensive array of social services that educate, encourage and empower them to become self-sufficient. Pictured with some of the donations are Solar employees Jon Schweitzer, Kim Harrison and Kristin Twardowski.”



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Big Changes at Retech Systems LLC

Since 1963 Retech Systems has been manufacturing vacuum melting systems in Northern California...but that is all about to change. The next step in the story of Retech comes with a transition of much of the manufacturing and assembly previously done in Ukiah, CA to facilities in Świebodzin, Poland. All of the future work done at the SECO/Warwick facilities in Poland will be per the established Retech standards with the focus on maintaining all expectations associated with the Retech brand. The Ukiah office will be downsized and will retain our experienced engineers, leading technical directors, technologists, and service staff. Key leadership roles will continue to be filled and Retech's unique R&D Center will continue to be built up. Ultimately, the company will then maintain a west coast office along with the recently opened east coast office in Buffalo, NY.

In the words of Retech's President, Earl Good, *"This is an effort to both strengthen our organization and to satisfy our customer's expectations. Ultimately, we are confident that the new organizational structure and footprint will enable Retech to be much closer to our global customers while improving our competitiveness in the*



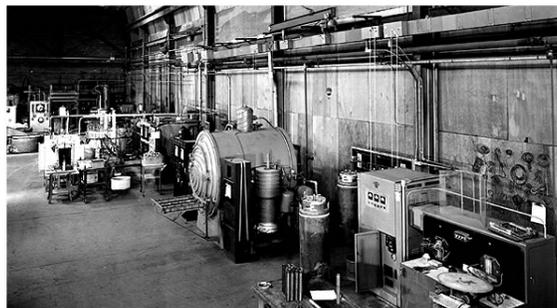
industrial markets we serve." Retech will now be better positioned to support both large capital projects while also satisfying the regular, daily customer service needs our customers demand and deserve. This transformation has taken place due to efforts by both the Retech and SECO management teams as a purposeful reinvestment into the company with the

most significant beneficiaries being Retech's customers.

About Retech Systems LLC

Retech is the world's leading supplier of Electron Beam (EB) and Plasma (PAM) Cold Hearth furnaces for melting and refining titanium and titanium alloys. Retech advanced vacuum metallurgical systems also include Vacuum Arc Remelt (VAR), VAR Consumable (Skull) Casting, EB and PAM Consolidation furnaces, Plasma Welders, Vacuum Induction melting (VIM), Precision Investment Casting (DS/SC/EQ), Cold Wall Induction melting and casting, Vacuum Heat Treating, and Gas Atomization for metal powder production. All our furnaces are available in various sizes and configurations, from simple laboratory-scale to large, custom engineered systems. Further, we provide customer access to a wide range of in-house resources, including technology, material and process development. Identifying customer needs, as well as understanding the importance of producing relevant, viable, and cost-effective technologies, is the foundation upon which Retech is built. Learn more about Retech by visiting the Retech website: <http://www.retechsystemsllc.com/>
About SECO/Warwick

SECO/WARWICK is a technological leader in innovative heat treatment furnaces. Expertise includes end-to-end solutions in 5 categories: vacuum heat treatment, atmosphere and aluminum thermal processing, controlled atmosphere brazing of aluminum heat exchangers and vacuum metallurgy. SECO/WARWICK Group has 10 companies located on three continents with customers in nearly 70 countries, has its production facilities in Poland, USA, India and China. In addition, the Group includes a number of service and sales offices in such countries as: Germany, Russia and France. The company provides standard or customized state-of-the-art heat processing equipment and technologies to leading companies in the following industries: automotive, aerospace, electronics, tooling, medical, recycling, energy including nuclear, wind, oil, gas, and solar and production of steel, titanium and aluminum. Learn more about SECO/Warwick by visiting the SECO website: <https://www.secowarwick.com/>



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www.HeatTreatCentral.com

* 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.

East Carolina Metal Treating Recertifications

“East Carolina Metal Treating doing business as Virginia Metal Treating is proud to announce that Virginia Metal Treating in Lynchburg, VA has successfully completed their recertification for AS9100D and ISO 9001:2015 for Salt Heat Treat (Austemper, Mar Temper) Black Oxide, Tempering/Aging, and Abrasive Blasting. www.ecmtinc.com”



Do Manufacturers Make Good Commercial Heat Treaters? Kern Liebers

Generally our opinion is that manufacturers who have in house heat treating capacity make poor commercial heat treaters for a wide variety of reasons. However having said that we very recently visited a manufacturer who for years



now has been offering commercial heat treating from their in house heat treating departments and has been very successful at it. KERN-LIEBERS is a medium-sized family owned company based in southwest Germany who specializes in the production of highly complex strip and wire parts and assemblies. The KERN-LIEBERS group of companies develops and manufactures

precision products at over 50 locations around the world and currently 6 of these

locations have in house heat treating capacity which offer commercial heat treating.

Two weeks ago we visited the Schramberg, Germany location which has the ability to offer Gas Nitriding, Nitrocarburizing – also of stainless steels, case hardening, carburizing, austempering and vacuum hardening. One look at the equipment tells us why the company is successful at commercial heat treating, it is new and varied. In addition as Kern Liebers services a number of different industries they have a wide variety of certifications including IATF 16949 and CQI9 to name a few. While a majority of the heat treat capacity is dedicated to their own products by sales volume, the commercial heat treating side of the business is substantial and contributes a significant part on it. It is important to note that while the company probably did not set out to be a commercial heat treater they certainly treat it as an independent profit center with worldwide



heat treatment . Mrs. Li Haas li.haas@kern-liebers.de is working for the sales department in Germany, who is connected to all the heat treatment teams of the other locations.

Other locations offering commercial heat treating include China – Taicang near Shanghai and Tianjin near Beijing, India – Tumkur near Bangalore, Czech Republic – Budweis, and Mexico – Querétaro . While many of the processes are duplicated in the various locations some such as Plasma Nitriding is only available in one location (Taicang/Tianjin, China) or Induction Hardening which is only available in India and the Czech Republic. As we speak the company is making major investments in many of their plants, including two new pit furnaces from Rohde Furnaces in Germany-one for the Mexico location and another for the Czech Republic. Rohde has already equipped all worldwide Kern Liebers plants

with either pit or chamber furnaces. Other planned additions include more of an emphasis on nitriding capacity especially in China and especially as it relates to heat treating of stainless steels. So while we feel that most captive heat treaters do not make a good commercial heat treater we can point to Kern Liebers and say; *“here is a company that manufactures a very good product and is also a darn good commercial heat treater.”*



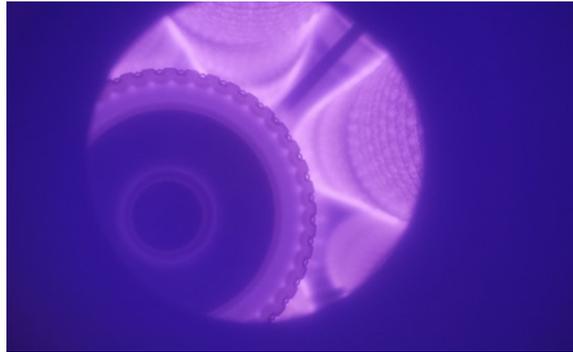
Kern-Liebers Mexico



Gord Montgomery, Li Haas, Joern Rohde



Furnace for nitriding of stainless steels, Taicang, China



Kern-Liebers Plasma Nitriding Furnaces, Taicang, China:



Kern-Liebers Plasma Nitriding Furnaces, Taicang, China

C.H. Hanson Company Orders Quench Tank

In Naperville, Illinois, USA die metal stamping company and captive heat treater C.H. Hanson just installed this quench system.

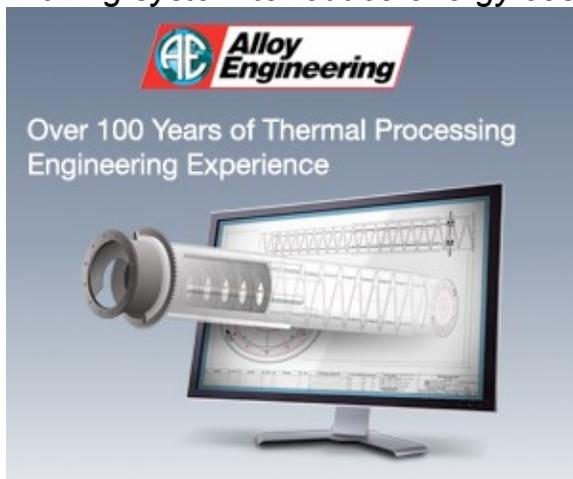
“L&L Special Furnace Co., Inc., has supplied a custom designed and manufactured oil quench tank to a metal stamping manufacturer in the Midwest. The quench tank is specifically used to quench metal stamping dies that are heated to 1,550°F. Usable dimensions are 12” wide by 12” high by 24” long. The parts are placed in a basket prior to being quenched. They are then manually placed into the quench oil. The quench tank



has an oil media that is agitated by a 1 horsepower pump that is directed up under the parts basket. There is an oil to water cooling heat exchanger to control the oil temperature. The system is designed to run one cycle per hour with 35 pounds of material.”

NBR Cooling Systems, India, Installs CAB System

“NBR Cooling Systems in Indian selects SECO/WARWICK Controlled Atmosphere Aluminum Brazing (CAB) system for automotive heat exchangers. NBR Cooling Systems, an independent heat exchanger manufacturer for the domestic automobile industry, recently purchased a SECO/WARWICK signature CAB Brazing system to reduce energy costs as well as improve production quality and



operate within the latest environmental regulations in India. “We selected SECO/WARWICK because they provided a high quality production assurance which we needed to keep our plant running efficiently along with low atmosphere consumption, minimum maintenance and repeatable process results, all at a low capital cost investment. A

SECO/WARWICK CAB system was definitely our first option – the company leverages many years of experience and guarantee continuous trouble-free operation at a high technological level and provides local contact, care and service” according to Aarif Hussain, NBR Cooling Systems Managing Director. He continued, “The government has put greater emphasis on the environmental impact issues, therefore our goal with this purchase is to put NBR Cooling Systems on track for sustainable development in the future.” “SECO/WARWICK is a well-known CAB Brazing technology creator and one of the world’s most experienced suppliers. Dozens of patents and R&D projects, thousands of deployed solutions

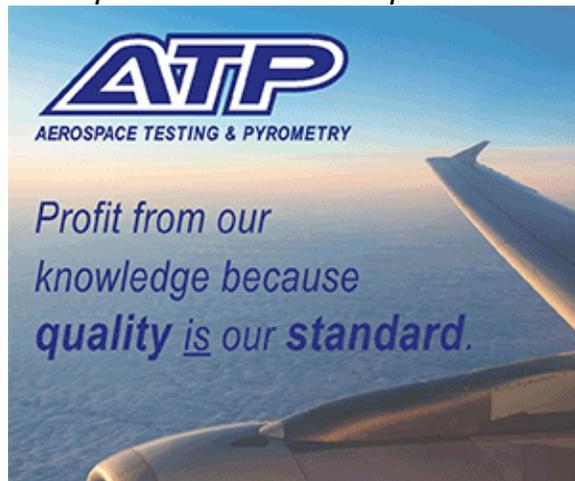
and CAB Brazing customers in more than 30 countries are proof of our technological expertise, and the reason why companies like NBR choose SECO/WARWICK. Together with professional technical services, we can support our customers from the beginning until the end of the product life. We are pleased to support NBR Cooling Systems' vision to become the leader in the national and international market for commercial heat exchangers and air conditioning systems for the automotive industry," said Liu Yedong, Managing Director, SECO/WARWICK RETECH (China)."



Bodycote Trading Update

Bodycote, the worlds largest heat treater just released a trading update for the four month period from 1 July to 31 October 2018. A summary can be found below with all the details at <https://www.bodycote.com/>

“Group revenue for the period was £243.5m, 5% higher than the comparative period last year and 6% higher at constant currency, and in line with our expectations.



This represents solid growth, particularly given the strong performance in the comparative period in 2017. Group revenue for the 10 months to 31 October 2018 grew 6% (8% at constant currency), with Specialist Technologies continuing its strong growth, up 11% at constant

currency (both in the period and year-to-date). All percentage movements in the following review of the Group's markets compare to the same period in 2017, at constant currency. Car and light truck revenues grew 5%, notwithstanding weak background market demand in Europe and North America. The growth has been driven by continued strong performance in Emerging Markets and Specialist Technologies. Civil aerospace revenues grew strongly at 14%, with North America and Western Europe both registering good growth. This reflects increasing output for the LEAP program and an easing in the OEM supply chain bottlenecks for Titanium castings. Energy revenues grew 4%, as the Oil & Gas business continues to perform well, while our Industrial Gas Turbines (IGT) business weakened further with underlying revenues falling by more than 25% in the period. General industrial revenues were 4% higher, in line with the general trends in industrial production. On a divisional basis, ADE revenues were up 6% to £97.8m (up 6% at constant currency, and for the 10 months to 31 October 2018, 8% ahead), while AGI revenues were up 5% to £145.7m (up 6% at constant currency, and for the 10 months to 31 October 2018, up 8%).”



Wallwork Group Adding “LOTS” of New Heat Treating Capacity

*“One of the UK’s largest heat treatments and hard coatings suppliers to aerospace, automotive, motorsports and surgical implant industries is starting 2019 with increased capacity coming online and is exhibiting on stand L75 at Southern Manufacturing at Farnborough. The Wallwork Group operates from four locations, Manchester, Birmingham, Cambridge and Newcastle to provide a rapid service to customers in all corners of the UK. Operating capacity has increased as a number of new investments in equipment go live at the end of 2018. These include a large capacity **Seco vacuum furnace** and **Rübig Plasma Nitride furnace** in*

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*Cambridge. A new **1200kg payload furnace for processing aluminium** is coming on stream in Birmingham and this will be followed closely by a **new sealed quench furnace** due to be in operation early 2019. Howard Maher, group sales manager, commented, “Additional plant is only part of the story. We have a strong service ethic that is rooted in our people.*

Combined with a dedicated pick-up/delivery fleet, UKAS certified in-house mechanical testing and multiple aerospace prime accreditations, customers really appreciate the full end-to-end service we can provide. Fast, efficient and without

compromising quality.” Processing aluminium and vacuum brazing, particularly, are seeing greater demand, so the new capacity is coming on stream just at the right time. In the light of REACH and also important is the in-house developed environmentally safe PVD coating that is a full HCP (hard chromium plating) replacement.”



California Aerospace Company Replaces Vacuum Furnaces

An aerospace company near Los Angeles, California recently replaced their older vacuum furnaces with brand new units and in the process sold the older furnaces to a used equipment dealer who has just put them on the market. They are going to have a limited market as they are relatively low temperature (1650-1700F) but for size they are extremely impressive. There are a total of 6 units and this shows the largest one a monster at 83” wide X 143” deep X 65” high. We can think of very, very few vacuums this size.



Mahindra Vehicle India

A reader in India wanted to brag about a very impressive batch IQ installation at Mahindra Vehicle in India. The line consists of 3 Ipsen Sealed Quench furnaces (Integral Quench furnaces for our North American readers) with working dimensions of 36" X 48" X 36", pre wash, post wash, tempers, loaders and endo generator-in short everything needed for a complete heat treating department.



Thermetco

We are getting a real kick out of seeing commercial heat treater Thermetco moving into their brand new building just outside of Montreal. The first picture you see was taken very recently, the second one was taken last February.



SECO/WARWICK Installs Vacuum Furnace in Japan

We have to hand it to SECO for selling a vacuum furnace into Japan-it is not an easy job. Japan in our opinion is the most close knit heat treating region in the world with Japanese heat treaters usually always buying from Japanese suppliers and only selling to Japanese customers. Having said that we will also say that heat treating in Japan is second to none. The attached photo shows a commercial heat treat shop we visited a few years back-a top notch operation.

“The Japanese manufacturing sector demands optimal performance quality in all of their capital purchases. SECO/WARWICK developed a precision vacuum furnace system to meet the Japanese customer’s expectations and standards for quality production. This specialized system reduces energy consumption through



power optimization and cycle time reduction, customized to work within the tight physical space limitations. Even though this is the first vacuum heat treatment furnace that we’ve introduced into the Japanese market, SECO/WARWICK Group has been active in Japan for many years, delivering solutions from different product segments,

for example, vacuum melting furnaces. Being present on this market, enabled SECO/WARWICK to better understand local needs. In terms of heat treatment processes, we already had the furnace that the client needed. However, because the traditional solution was too big and did not fit the customer’s tight physical space limitations, our engineers customized the furnace and created one that fits the limited manufacturing space perfectly. Transforming a horizontal furnace door into the special system of vertical opening and lifting was the secret sauce, keeping outstanding thermal process performance, especially with regard to quenching

control” explained Maciej Korecki, VP, Vacuum Heat Treatment Furnaces at SECO/WARWICK.”



Tracy Dougherty Named Vice President of Sales at AFC-Holcroft

“Tracy Dougherty has been named Vice President of Sales at AFC Holcroft. The announcement was made by William Disler, President and CEO. According to Disler, “Tracy has a genuine ability of keeping the best interest of both AFC-

Holcroft and our customers in mind as he deals with day to day activities within our group. This promotion will further reinforce Tracy’s key leadership role within our company”. Dougherty has been with AFC-Holcroft since 2008, and served in several sales-related roles, most recently as the company’s



*Sales Manager. As Vice President of Sales, Dougherty will now have a number of added responsibilities, including overseeing the company’s activities in Europe. **About AFC-***



***Holcroft:** Founded in 1916, AFC-Holcroft, is one of the US market leaders in the production of industrial furnace equipment for ferrous and non-ferrous*

metals. The company manufactures turn-key heat treating systems for applications including commercial heat treating, bearings, automotive, aerospace, mining, aluminum heat treatment, gear manufacturing, fastener manufacturing, and alternative energy industries. Member of the Aichelin Group since 2016 and headquartered in Wixom, Michigan, AFC Holcroft operates its own subsidiaries in China and Switzerland and has a global presence through a network of partners located in Australia, Brasil, China, India, Mexico, Poland and Spain.”

Used Endothermic Generators-What Are They Worth?

The backbone of most heat treatment departments doing carburizing, neutral



hardening or related processes is an endo generator to produce a carbon rich atmosphere. A typical older style unit can be seen in this photo—a Surface Combustion 5,000 CFH Endothermic generator and at one point in time this unit would have been in high demand but those days are long gone. The advent of air cooling, atmosphere control, multi retorts and automatic turn down of gas production on

new units has rendered these older units pretty well obsolete and consequently almost worthless. New generators are actually selling fairly well these days, and even used units with most or all of these newer modifications have a ready market but it is pretty well the end of the line for the old timers such as this one.



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Meritorious Service To Heat Treatment Industry Award Goes To.... Richard Burslem

From the UK we have this press release about Wallwork Heat Treatment. By the way if you recall this was the company which had the really cool video of the motorcycle rider, riding over the furnaces at Wallwork.

“At the annual Surface Engineering and Heat Treatments Awards, Richard Burslem, a former director at Wallwork Heat Treatment, received the Meritorious Service to Heat Treatment Industry Award. Presented on October 12th at the Radisson Blu in Manchester by Alan Hick, the secretary of the Contract Heat Treatment Association (CHTA), it recognises the massive contribution Richard has made to the industry since Wallwork Heat Treatment joined in 1990. The CHTA formed in 1973 to champion the use of contract heat treatment companies over internal departments and promote industry standards. While Richard stepped down from being a director at Wallwork in 2013 he has remained active on the CHTA management committee until February 2018”.



Abar Ipsen Turbotreater

This is a story which is repeated on a very regular basis. A captive heat treater (in this case an aerospace company in the US Northeast) finds that they need to upgrade their furnace (s) making their older unit (s) surplus. A commercial heat treater with pockets not quite as deep as an aerospace company needs more capacity (in this case a commercial heat treater, again in the US Northeast) and a

marriage is made. The furnace you see here is now on its way to a new home and everybody walks away happy.



Monday Morning Briefing

In people news we see that **Linda Hasenfratz**, CEO of auto parts company **Linamar** was recently named Canada's outstanding CEO of the year. Over the years Canada based Linamar has grown at an amazing pace and in the



process become one of the larger captive heat treaters in the world with heat treating departments now on several continents. It's amazing how often the Linamar name comes up when it comes to heat treating. **James Cross** who for many years worked with controls company **SSI UK** recently left the company which we mentioned a few weeks back. We can now

say that he just got engaged to his long time girlfriend and will be taking a new position in Dubai of all places. We see that **Thermal Processing Services** <http://www.vacuumheattreat.com/> in Greenville, SC, USA is adding some more equipment. The company was started a number of years back by Kevin Cook (who was formally with **Accurate Brazing** also in Greenville) and while it is still a relatively small commercial heat treater we are impressed by how far he has

come. The addition is an Ipsen vacuum with working dimensions of 24" X 36" X 18" and it will join several other vacuums Kevin has including the VFS show below.



Another company which is adding capacity is **Thermex Metal Treating** in Edmonton, Canada. Recently they took delivery of their second vacuum nitridier from **SECO/WARWICK** a Zero Flow Gas Nitridier which came from Poland. It is either operational now or very close. Thermex has been quite busy these days as they also recently added a batch IQ furnace with working dimensions of 36" X 48" X 36".



Well lets see how **Nickel Pricing** is doing so we can decide whether it is a good time to buy more baskets and base trays. It would appear that over the past year it has gone up but is now on a downward trend again so it is almost exactly where it was a year ago. We would suggest that probably at least for the near future there should not be any shocks when it comes to alloy purchases which is the best you can hope for when it comes to replacing alloy.



Heat Treating Indonesia. *Damian Bratcher* of **SSI** sent us this brief report about a recent seminar he did in Indonesia; “*Super Systems Inc, KANTHAL and PT Tempsens conducted a technical seminar in Cikarang, Jakarta, Indonesia this week. The seminar covered CQI-9, atmosphere generation, process verification, furnace and heater maintenance, thermocouples, flow control and several other areas of interest to the participants. The heat treat market in Indonesia is primarily Japanese Automotive, motorcycle components and fasteners. Super Systems Inc. develops and manufactures products for the thermal processing industry. The products*

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include probes, analyzers, controllers, software solutions, flow control and engineered systems. Kanthal(r) is a world-leading brand for products and services in the area of industrial heating technology and resistance materials. TEMPSENS has become one of the largest providers for thermal and cables solutions, having manufacturing facilities in Germany, India and Indonesia.”

We have two items from the **UK** to round things out for this out for the beginning of this week, the first about a captive operation **TWI**; *“TWI is pleased to announce*



the opening of a new, state-of-the-art vacuum furnace facility to be used in supporting members with their development and pre-production requirements. The new furnace enhances TWI’s commitment to support its members in solving their industrial challenges. The new furnace facility will offer a range of thermal processes, including vacuum brazing and heat treatment, with capability

for operation with argon, nitrogen and also a partial pressure of hydrogen. To enable us to support our members’ manufacturing and quality requirements, the furnace is run in accordance with the requirements of AMS 2750E standard and full quality documentation is available in support of process development.”



Our last item is also about the UK where it appears a company by the name of, ***Kepston Furnace Brazing & Bright Annealing*** in the West Midlands is just taking receipt of a new vacuum furnace from ***Vacuum Furnace Solutions Ltd.***, another UK company.



Marc Angenendt

We are very pleased to be able to offer you an interview with Marc Angenendt, CEO of Ipsen Europe. As one of the largest furnace manufacturing companies in the world (if not the largest) Ipsen does not need an introduction. We enjoyed his comments and the only thing we will add is that Marc is a truly nice guy who knows his stuff.

Marc, over the years we have interviewed Geoffrey Somary and Pat McKenna – both of Ipsen North America but this, I believe, is the first time we have interviewed somebody from Ipsen Europe. Consequently we very much appreciate the chance to get a “European” perspective. We’ll start off with

one of our favorite questions: what is your background and how did you end up in the heat-treating industry?

“Even at an early age, I was interested in technology of all kinds. As an apprentice, I became familiar with Ipsen technology at a young age, so I started working for the Ipsen customer service team once I had completed my course. After that, I studied industrial engineering at Rosenheim University of Applied Sciences because I was particularly interested in the link between technology on the one hand and the commercial side of an industrial enterprise on the other. I successfully completed my thesis for Ipsen in 1997 and started my career at the Ipsen in 1998. Because of my field of study, I worked in international sales of heat treatment systems.. After spending six months abroad at Ipsen Industries (Shanghai) Ltd., I was appointed to production manager at the headquarters in Kleve. Later, in the role of authorized signatory (“Prokurist”), I became responsible for design and some of the firm’s purchasing activities as well as production. I left the organization in 2013 to manage a German industrial corporation with sites in the USA and China before returning as CEO of Ipsen Europe in early 2016.”

Read more:

<https://themonty.com/marc-angenendt-ceo-of-ipsen-europe-speaks-out/>



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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#B462 Beavermatic Batch IQ Furnace

Beavermatic Batch IQ Furnace. Standard "Beavermatic" Integral Quench Furnace which includes top cool chamber, dunk & spray wash, 1400°F atmosphere temper, charge car and air to oil heat exchanger. This furnace has a total of eight (8) single ended radiant tubes with recuperators, four (4) on each sidewall. Quench tank is heated. Natural gas fired with a max temperature of 1950°F. Model # 46-26-I.G.LQ.F and Serial # 1192-50-1. Voltage 460/3/60. Working dimensions of 24"W x 24"H x 36"L and external dimensions of 100"W x 12'5"H x 18'L. Controls Mounted & wired in a free standing panel includes a Honeywell UDC 3000 digital controllers for control and high-limit, Honeywell UDC 5000 for carbon control and Honeywell digital round chart recorder. Very good condition and available immediately.

Asking Price \$55,000 USD

<https://themonty.com/project/itemb462-beavermatic-batch-iq-furnace/>

Item#B461 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#B460 Surface Combustion Batch IQ

Surface Combustion "Super 30" Allcase Batch IQ furnace. Working dimensions of 30" x 48" x 30". Serial number BX 37769. Early 1970's vintage. Alloy in good condition and comes with a new spare trident tube. 2,000 F operating temperature, gas fired. Updated SSI controls. Currently installed and in good condition.

Asking Price \$45,000 USD

<https://themonty.com/project/super-30-batch-iq-30-x-48-x-30/>

Item#B459 Surface Combustion Batch IQ

Surface Combustion batch IQ furnace. Serial number BX 36347-1. Gas fired, 1750 operating temperature. Endo atmosphere. 800 pound capacity. Does not require a pit. Complete and installed. Updated SSI controls with oxygen probe. Alloy and brickwork in fair condition. Working dimensions of 24"W x 36" deep X 20" high. Some cast fixturing is also included.

Asking Price \$25,000 USD

<https://themonty.com/project/472/>

Item#B453 Williams Batch IQ's

Williams Industrial Batch, high temperature, electric, Internal Quench furnaces. 24" W X 36" deep X 24" high load size. Mid 1990s built. 2 identical units

available. Currently used for solution heat treat, water and Polymer quench. Max temp. 2100F, very tight +/-10F or better uniformity. Set up for Nitrogen atmosphere. Waukee meters for air and N2 with solenoids tied to recipes. SSI Oxygen probe with panel/display. Sand Lion PLC touch screen controls for recipes, charting, temp, agitator, atmosphere control etc. Horizontal SiCarbide glow bars for heating. SiCarbide rails make up the hearth for tray support and transfer. Chain guide and roller rails over the quench vestibule. Air operated inner and outer doors. Units are in use but ready to take out for the floor space. Transfer car not included.

Asking Price \$25,000 USD Each

<https://themonty.com/project/itemb453-williams-batch-iqs/>

Item#B451 Surface Combustion Batch IQ

Manufactured by Surface Combustion this is a batch IQ furnace. Working dimensions of 30" wide X 48" deep X 24" high. Gas fired. Nitrogen/Methanol with updated controls and an Atmosphere Engineering SmartMeth panel. Included datalogging and trending. SSI oxygen probe. Honeywell overtemp. Currently installed, complete and in good condition. Ready to go and available immediately.

Asking Price \$30,000 USD

<https://themonty.com/project/itemb451-surface-combustion-batch-iq/>

Item#B445 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-igs-3-available/>

Item#B442 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#B441 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#B439 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#B438 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 \$85,000 USD

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

Item#B398 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#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#B470 METCO Pit Furnace

METCO Pit Furnace. The furnace has been retrofitted with new controls, combustion system, and refractory lining. There are four North American burners tangentially fired around the retort. The retort is supported from the top of the furnace and has a removable cover with circulating fan. The retort cover is sealed by a gasket a series of swing bolts. The furnace is lined with fire brick on the floor, ceramic fiber modules on the wall, and fiber modules on the top plate. The flue is located in the floor and vents through a separate insulated chamber the length of the furnace to the top. Natural gas heated – 2,000,000 BTU/Hr. Max operating temperature of 1850°F with a voltage of 460/3/60. Working dimensions

of 24" diameter x 48" deep with external dimensions of 8' dia. x 12' high. Controls mounted in a free standing, fully enclosed panel are the following. 1 Honeywell UDC series digital controller for each of the two zones. 1 Honeywell UDC series digital high limit . 1 Honeywell Tru-Line circular chart recorder. A Honeywell flame safety relay for each of the burners is mounted to the sub panel. All the necessary starters, switches, relays, etc. are wired to a common terminal strip. The safety valves, pressure monitoring switches, and motorized zone control valves are directly mounted to the combustion plumbing. Each burner is spark ignited and monitored by a Honeywell ultra violet flame sensor.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb470-metco-pit-furnace/>

Item#B469 Surface Combustion Pit Furnace

Surface Combustion Pit Furnace. Heated by natural gas it has a voltage of 460/3/60. Model # 36-72 and serial # G-3535-1. Max temperature is 1750°F with working dimensions of 36" Diameter x 72" Deep. Controls need to be replaced.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb469-surface-combustion-pit-furnace/>

Item#B468 Leeds & Northrup Pit Furnace

Leeds & Northrup Pit Furnace. Standard vertical steam pit furnace with manual operated cover. The coiled heating elements are mounted to a cylindrical rack that surrounds the work area. The circulating fan is located below the work support and circulates across the elements and down through the work load. A steam inlet port is located on the bottom and a pressure relief flapper on the cover. A cooling blower is mounted to the side for accelerated

cooling. Electrically heated with a voltage of 230/6/60/49 kW. Model # 09522-261CX and serial # 77-48912-1-1. Max temperature is 1250°F. Working dimensions of 22" Diameter x 26" Deep and external dimensions of 6'6" x 8'2"H. The controls are mounted in a free standing panel with main disconnect switch. There is a Honeywell digital controller, L&N analog high limit, strip chart recorder, and a process timer. Also control switches for the motors and control power. The motor starters and element contactors are mounted on the sub panel inside along with the necessary relays and fuses.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb468-leeds-northrup-pit-furnace/>

Item#B467 Lindberg Carbottom Furnace

Lindberg Carbottom Furnace. 20,000 pound car capacity, 460V, 437 kW, 400°F to 1700°F temperature range. Fans, grid and refractory on car are new. Furnace has forced air cooling. Powered car has a VFD to control car speed. Electrically heated with a voltage of 460/6/60/437 kW. Model # 41-MT-8106-ECB-17 and serial # 868533 (1986). Max temperature 1700°F with working dimensions of 8'W x 6'H x 10'L (will handle 12'L part) and external dimensions of 15'W x 25'H x 36"L with car. Complete controls.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb467/>

Item#B466 Wild Barfield Carbottom Furnace

Wild Barfield Carbottom Furnace. Electrically heated with voltage of 480/3/60/110 kW. Max operating temperature is 1250°F and the serial # is AP 4074 M. Working dimensions are 60'W x 60"H x 120'L. Controls mounted and wired in a free standing control panel includes SCR for heating elements, digital temperature controllers for control and high limit, strip chart recorder etc.

For Pricing Please Contact Jordan@themonty.com

<https://themonty.com/project/itemb466-wild-barfield-carbottom-furnace/>

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#B442 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#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

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Item#B465 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.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb465-electra-box-furnace/>

Item#B464 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.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb464-lindberg-box-furnace/>

Item#B463 Lindberg Box Furnace

Lindberg Box Furnace. This furnace has an air operated vertical lift door with foot pedal control. "Rod Overbend" heating elements are located in the hearth and both sidewalls. An Alloy hearth with brick piers supports the work load. The atmosphere system consists of a "Waukee" Nitrogen flowmeter and flame curtain. Atmosphere enter the furnace chamber through the rear wall. Manuals and drawings are included with this furnace. Electrically heated with a max temperature of 2000°F. Model # 11-ROMT243618-20A and serial # 859266. Voltage is 460/3/60/40 kW, 92V Secondary. Working dimensions of 24"W x 18"H

x 36"L with external dimensions of 6'W x 9'H x 8'L. Controls Mounted in a free standing panel includes a Honeywell UDC digital temperature controller, Honeywell Dial-a-Trol high limit and a Honeywell strip chart recorder. The step down transformer for the heating elements is mounted in the same enclosure. Power to the heating elements is controlled through a "Halmar" SCR. This electrical enclosure is air conditioned to prevent overheating of the SCR.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemb463-lindberg-box-furnace/>

Item#B458 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#B454 Lindberg Box Furnace

Model #11-MT-489336-14. Serial #888809-L (9/1989). Electrically heated. Operating temperature of 1400F. Voltage: 480/3/60/164 kW. Working dimensions of 48" wide X 36" high X 96" deep. Controls: Mounted and wired in a free standing control panel includes SCR for heating elements, digital temperature controllers for control and high limit, strip chart recorder etc. Description: Standard Lindberg design box furnace with "Moldatherm" heating elements, vertical lift door, roller rail hearth, cast alloy tray, alloy air plenum for air

distribution, roof mounted fan and stationary powered loader/unloader. Very good condition.

Asking Price \$70,000 USD

<https://themonty.com/project/itemb454-lindberg-box-furnace/>

Item#B449 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#B437 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#B425 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#B397 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#B374 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/>

Item#B352 Pacific Scientific Box Furnace

Working dimensions of 72" wide X 120" long X 48" high, Gas fired radiant tube, maximum operating temperature of 2050F. Air operated vertical lift door, fiber lines, new refractory piers (12), hi-temp horizontal radiant tubes (6 above, 6 below), full safeties, side exhaust guard. Free standing control panel-prewired panel with Honeywell Tru-Trend circular chart and Honeywell digital controllers and overtemp. Atmosphere capable. Comes with spare radiant tubes. Very good condition.

Asking Price \$70,000 USD

<https://themonty.com/project/itemb352-pacific-scientific-box-furnace/>

CONTINUOUS FURNACES

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Item#C336 BTU-TCA Series Mesh Belt Conveyor Furnace

Manufactured by BTU this is an electrically heated mesh belt furnace capable of 1100C. Heated length is 120" with a 18" wide belt and 4" clearance over belt. Metallic muffle, 10 zones of temperature control. 24" long load/unload table at each end. Overall length 29'. 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.

Asking Price \$50,000 USD

<https://themonty.com/project/itemc336-btu-tca-series-mesh-belt-conveyor-furnace/>

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#C330 Lobo Hornos Mesh Belt Furnace Line

Lobo Hornos built this mesh belt furnace line with all the engineering coming from Sunbeam. The line consists of a loader, high heat furnace, quench tank, wash, temper, and post wash. It has Honeywell, Shinha, and Siemens controls that are approximately 12 years old. The furnace has a heated length of 6 meters and a tempering length of 11.09 meters. Both the high heat and tempering lines can handle 500 KG/Hour each. The high heat furnace has an opening of 7" high by 40" wide. The tempering line has an opening of 6" high and 47" wide. Max temperature is 930 C. This mesh belt line is capable of either controlled atmosphere or Nitrogen gas. The alloy (AISI I-330, AISI I-310) and brickwork (T23& ceramic fiber) are in good condition. The quench oil is Equimsa 770 and there is a washer included. The furnace is complete in good condition and currently installed in Mexico.

For Pricing Please Contact Jordan@themonty.com

<https://themonty.com/project/itemc330-lobo-hornos-mesh-belt-furnace-line/>

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#C308 AFC Mesh Belt Hardening Furnace

Manufactured by Atmosphere Furnace Company this furnace has working dimensions of 6" high x 54" wide x 12' long (heated section). Gas fired with radiant tubes. Operating temperature of 1800F. S/N 6948. Temperature Controls: Free standing enclosed panel. Honeywell solid state digital readout indicating controllers, L&N overtemps. L&N strip chart temperature & carbon recorder. Marathon Monitors Carb-Pro carbon control. Description & Features: Fiber lined. Heated by (9)North American 4724-2-E burners firing into recuperated U-tubes. Two zones of control. Rear zone has a roof mounted recirculating fan. Cold belt return. Furnace has a flame curtain and complete combustion controls and safeties. Includes quench tank and conveyer.

Asking Price \$75,000 USD

<https://themonty.com/project/itemc308-afc-mesh-belt-hardening-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#C283 Denton Thermal Rotary Hearth

Denton Thermal Systems (O'Brien & Gere) 2150°F Rotary Hearth Furnace System. Includes high temperature furnace, Nitrogen-Methanol Panel and Quench Press. Working Zone: 6 ft Diameter Hearth, Door Opening is 14"W x 13"H Overall Size: 9ft-8in Diameter x 10ft-10"Tall. Heating: Electric, 125 kW, 1 Zone, Globar Heating Elements. Power Requirement: 200 Amps, 480V/3Ph/60Hz. Temperature Rating: 2150°F. Water Requirement: 3 GPM. Air Requirement: 100 PSI. Controls: GE90 PLC. Honeywell Temperature Controller and Overtemp (missing but will be replaced). Marathon Monitors Carbon Control System. Includes Quench Press that was handling up to 5" Diameter bearings. Prior user reference available upon request.

Asking Price \$29,000 USD

<https://themonty.com/project/itemc283-denton-thermal-rotary-hearth/>

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. Globar 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/>

Item#C265 Sunbeam Pusher Carburizer

This is a very unusual style of furnace and perfect for carburizing of large gears, bearings or races. Working dimensions of 50" X 50" X 34" high. Operating temperature of 1750F. 3,000 pound capacity. Gas fired 12 Honeywell composite single ended recuperated tubes (recently replaced). Surface Casemate controls. 1800 gallon quench tank. System does not need a pit. Comes with a spray washer, temper and an oversized IHRE air cooled quench oil cooler. System is installed but not currently in use. Very good condition.

Asking Price \$40,000 USD

<https://themonty.com/project/item265-sunbeam-pusher-carburizer/>

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#T357 Surface Combustion Electric Tempering Furnaces (3 available)

Surface Combustion Electric Tempering Furnaces (3 available). Bricked Lined Box Tempering Furnace complete with Alloy Roller Rail Hearth, Stainless Steel Air Baffles, Top-Mounted Recirculating Fan, and Vertical Rising Pneumatic Door. Model # BX41758-1. Serial # BX41758-1. Working dimensions of 30" Wide x 48" Deep x 30" High. Electric – 460/3/60 – 81 KW. Max operating temperature of 1400° F. Controls consist of Side-Mounted Control Panel complete with Love Series 2500 Digital Temperature Controller, Love Series 16 Digital High Limit Controller, and Honeywell Truline 12" Round Chart Recorder. Overall dimensions of 8' Wide x 7' Deep x 11'8" High. Approximate weight of 8,000 lbs.

Asking Price \$39,500 USD Each

<https://themonty.com/project/itemt357-surface-combustion-electric-tempering-furnaces-3-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#T355 Wisconsin Oven Temper Furnace

Wisconsin Oven Model EWN-610-6G, 500F, 6'W x 10'D x 6'H, overall 9'6" W x 11'D x 9'9"H, 5HP/4,500CFM recirculating fan, combination airflow, adjustable louvers, airflow switch, 900 CFM exhaust with motorized dampers, Eclipse 500,000BTU Winnox Low NOx burner, UL listed control panel, Eurotherm Nanodac digital recorder/programmer, digital hi-limit, disconnect switch, 8 position T/C jack panel, 3" port.

Asking Price \$19,000 USD

<https://themonty.com/project/itemt355-wisconsin-oven-temper-furnace/>

Item#T354 Surface Combustion Temper

Surface Combustion "Super 30" temper. Model HFC 36-54, Serial number BX 37159-7. Gas fired, maximum operating temperature of 1400F. The unit needs some minor brick work and the circulation fan reinstalled to be ready to run. The fan was removed from service, has a new shaft which has been balanced.

Footprint; 9' 7" Deep x 6' Wide x 141" High (door frame only). Weight capacity is 2000 lbs. Installed and overall in good condition.

Asking Price \$15,000 USD

<https://themonty.com/project/itemt354-surface-combustion-temper/>

Item#T353 Surface Combustion Temper

Surface Combustion "Super 30" Temper. Model HFC 36-54, Serial number BC-39843-1. Maximum temperature of 1400F. Gas fired. Footprint; 10' Deep x 6'-8" Wide x 141" Tall (door frame only) weight capacity is 2000 lbs. Currently installed. Complete and in very good condition.

Asking Price \$22,500 USD

<https://themonty.com/project/itemt353-surface-combustion-temper/>

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#T343 Wisconsin Temper Oven

Batch Temper 36"W X 36"H X 96"L. Manufactured by Wisconsin Oven, Model SDB-6616-10G, S/N 033899307. Natural gas fired, 1 MBTU's/hour. Maximum temperature rating 1000F. Voltage 480/3/60/16 amps. External dimensions of 96" wide X 13' 4" high 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 controls 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. 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. General Description; 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. Manual and drawings are included with this furnace. Very good condition.

Asking Price \$49,900 USD

<https://themonty.com/project/itemt343-wisconsin-temper-oven/>

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#T336 Industrial Heating Equipment Mesh Belt Temper

Mesh Belt Temper Furnace 48" Wide. Continuous belt temper furnace manufactured by Industrial Heating Equipment, Model # TF-5. Inside dimensions 10" over belt, 48" wide X 12' heating. Gas fired, Eclipse package burner. Maximum operating temperature 1000 F. Temperature Controls: Free standing enclosed panel. Solid state digital readout indicating controller & overtemp. Top mounted brick lined combustion chamber houses high velocity stainless steel circulating fan. Steel lined work chamber has 8-1/2" insulation. Stainless steel mesh belt on top of edge wire belt. Very good condition.

Asking Price \$29,500 USD

<https://themonty.com/project/itemt336-industrial-heating-equipment-mesh-belt-temper/>

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 \$39,500 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 \$30,000 USD

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

Item#T290 Tempering Ovens (2 Available)

Working dimensions of 36"W x 48"D x 36"H. Shells have just been completed and buyer has the option of Gas-Fired or Electric, Hearth Height, Burner Locations (Left or Right) and Panel Location. These can be completed, fully tested and ready to ship to your facility in 8-9 weeks at a very attractive price.

For Pricing Please Contact Jordan@themonty.com

<https://themonty.com/project/itemt290-tempering-ovens-2-available/>

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

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Item#G202 AFC Endo Generator

AFC-Holcroft EZ-4500 CFH Endothermic Generator. New in 2006. SSi 9200 controller. This stand-alone unit can be integrated into an array of up to 3 generators. Currently in operation. Manuals and drawing are included. Very good condition. Includes a spare retort (\$4000). Features:

- Recuperative type combustion system, providing 18% to 20% fuel savings
- High efficiency air-cooled heat exchanger
- 5:1 Automatic Turndown to produce only the gas required
- Ease access swing door for horizontal retort access
- SSi E-Z dew point analyzer
- Atmosphere Engineering endo injector

Asking Price \$55,000 USD

<https://themonty.com/project/itemg202-afc-endo-generator/>

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#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#I175 Inductoheat/LepeL Induction Power Supply

This is a LepeL/ Inductoheat SP5-40 kW, 3/10 kHz SCR type induction heating power supply with a separate Heat Station (I believe this could be operated at 3 kHz but the heat station is currently arranged for 10 kHz). This is an "HS-3" Heat Station with 3 capacitors and a Jackson Transformer with ratios of 5-3 to 17-3. The Inductoheat SP5 has been a proven reliable power supply for heating and heat treating for many years. It can be used for short heat times as it has fast and consistent ramp up to set power. There is no warranty but it is sold with the assurance it is in good working order. It has recently been connected and tested in our facility. I can supply a video of the unit in operation. Start up and Training service is available at extra cost by an experienced induction heating service engineer. Excellent condition.

Asking Price \$17,500 USD

<https://themonty.com/project/item175-inductoheat-lepel-induction-power-supply/>

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#L10 Mitutoyo Rockwell Hardness Tester

Mitutoyo HR-521 Series 810 Rockwell Type Hardness Testing Machine (2 Available) – Two hardness testers. Model #810-202-03A. Calibrated and in good working order. May require new calibration upon installation at a new location.

Asking Price \$8,500 USD Each

<https://themonty.com/project/iteml10-mitutoyo-rockwell-hardness-tester/>

Item#L9 Wilson Rockwell Hardness Tester

Wilson Rockwell Series 2000. Capacity of 150 Kg. Power Requirements 100/120/220/240 Volts with a 3 Amp slow blow. Max power 370 VA. Frequency 47/63HZ.

Asking Price \$4,200 Euro

<https://themonty.com/project/iteml9-wilson-rockwell-hardness-tester/>

Item#L7 Leco Micro Hardness Tester

Model M400. Complete and in good condition. Unit has become surplus to the vendors organization.

Asking Price \$7,000 USD

<https://themonty.com/project/iteml7-leco-micro-hardness-tester/>

Item#L3 Microtrac Laser Diffraction Particle Size Analyzer

Manufactured by Microtrac, Model S3500. Measurement capability from 0.02 to 2800 microns. Wet and dry measurements. Complete and in very good shape.

Asking Price \$5,000 USD

<https://themonty.com/project/item13-microtrac-laser-diffraction-particle-size-analyzer/>

Item#L1 Spectra-Tech Infrared Microscope

Model WHK 10X 201, Reflected & Transmitted light, multiple objectives, Polaroid 4x5 attachment.

Asking Price \$6,500 USD

<https://themonty.com/project/item11-spectra-tech-infrared-microscope/>

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#M424 AFC-Holcroft Transfer Car

Built in 2007 this is a double ended AFC-Holcroft Charge car suitable for a 36" X 48" batch IQ furnace. Currently in storage. Complete. Also available is a second unit which could be used for spare parts.

For Pricing Please Contact Jordan@themonty.com
<https://themonty.com/project/itemm424-afc-holcroft-transfer-car/>

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#M420 SBS Quench Oil Coolers

SBS "Quench Airs", (9 available). We have available 9 SBS air to oil quench oil coolers "Quench Air". These are all in good condition and range in size from 2' long up to 10' long with a total of 5 different models. All are 460V. Asking from \$1,000 USD for the 2' units up to \$5,000 USD for the 10' long model.

Asking Price \$1,000-\$5,000 USD

<https://themonty.com/project/itemm420-sbs-quench-oil-coolers/>

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#M412 Atmosphere Engineering Endo Injector

3 year old Atmosphere Engineering Endoinjector for controlling output on an endothermic generator. S/N 0601-DP1, Endo Output 600-3000 CFH. Includes PLC. Good condition and less than a third of the price of new.

Asking Price \$6,500 USD

<https://themonty.com/project/itemm412-atmosphere-engineering-endo-injector/>

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, approx. 12' wide. (Includes loading at the facility)

Asking Price \$20,000 USD

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

Item#M366 Wheelabrator Rubber Belt Tumblast

Model # TBR-12, Serial # A142403, Voltage 480/3/60, 12 cubic feet, Controls – complete. Available Immediately, very good condition.

Asking Price \$55,000 USD

<https://themonty.com/project/itemm366-wheelabrator-rubber-belt-tumblast/>

Item#M363 SBS Quench Oil Cooler

Specs: S/N: 4926. Year: 2007. Three (3) Fans with side mounted disconnects. Overall Size: 6'w x 6'h x 21'l. W-RES, MAWP 75 psi @ 450°F, MBMT -20°F, 75 psi.

Asking Price \$15,500 USD

<https://themonty.com/project/itemm363-sbs-quench-oil-cooler/>

Item#M346 SBS Quench Oil Cooler

SBS "QuenchAir". SBS Corporation air/oil quench oil cooler. Single fan unit model 5084-Q4. Serial number: 2365, 230/460 voltage, overall size: 74"wide X 104"long X 55"high. Comes with disconnects. Very good condition.

Asking Price \$5,500 USD

<https://themonty.com/project/itemm346-sbs-quench-oil-cooler/>

Item#M341 AFC Charge Car

Drawing # MT-237014. Voltage 480/3/60. Suited for a 36" wide X 48" tray. External dimensions of 100" wide X 84" deep X 84" high. Side mounted control panel with Allen Bradley SLC 500 PLC Logic Control. Double ended chain driven powered charge car with roller rail top. Excellent condition.

Asking Price \$28,500 USD

<https://themonty.com/project/itemm341-afc-charge-car/>

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#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#VF347 Vacuum Furnaces Available

We have available 6 very large, lower temperature Ipsen, Abar/Ipsen and Lindberg vacuum furnaces. Vendor would like to sell them as a package for \$500,000 USD but will consider selling individual items. Furnaces are located in California, USA and are installed but not in operation.

1. Lindberg Vacuum Furnace. Working dimensions of 42" W x 59" L x 35" H. Stokes vacuum pumps and Varian diffusion pump. Single zone of control. Operating temperature/uniformity 900F +-25, 1000F-1400F +-15F, 1400F-1600F+-25F. All Metal Hot Zone. Honeywell Controls with Honeywell Paper Chart Recorder. Thermocouples; Controls type K, Load type K, SAT type N. MKS Vacuum Controller.
2. Abar/Ipsen Vacuum Furnace. Working dimensions of 51" W x 120" L x 42" H. Stokes vacuum pumps and Varian diffusion pump. 2 zones of control. Operating temperature/uniformity 900F +-25, 1000F-1400F +-15F, 1400F-1600F +-25F. All Metal Hot Zone. Honeywell Controls with Honeywell Paper Chart Recorder. Thermocouples; Controls type K, Load type K, SAT type N. Inficon Vacuum Controller.
3. Ipsen Vacuum Furnaces (2 available). Working dimensions of 84" W x 120" L x 58" H. Stokes vacuum pumps and Varian diffusion pump. 2 zones of control. Operating temperature/uniformity 900-1000F +-25F, 1000-1400F +-25F, 1400 -1750 +-25. All Metal Hot Zone. Honeywell Controls with Honeywell Paper Chart Recorder. Thermocouples; Controls type K, Load type K, SAT type N. Inficon Vacuum Controller.
4. Ipsen Vacuum Furnace. Working dimensions of 83" W x 143" L x 65" H. Stokes vacuum pumps and Varian diffusion pump. 3 zones of control. Operating temperature/uniformity 900-1000F +-25F, 1000-1400F +-15F, 1400 -1750 +-25. All Metal Hot Zone. Honeywell Controls with Honeywell Paper Chart Recorder. MKS Vacuum Controller.
5. Ipsen Vacuum Furnace; Working Dimensions of 60" W x 119" L x 59" H. 480 Volts. Stokes vacuum pumps and Varian diffusion pump. 2 zones of control. Operating temperature/uniformity 900-1000F +-25F, 1000-1400F +-15F, 1400 -

1800 +/-20. All Metal Hot Zone. Honeywell Controls with Honeywell Paper Chart Recorder. Inficon Vacuum Controller.

Asking Price 500,000 USD

<https://themonty.com/project/itemvf347-vacuum-furnaces-available/>

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 ±10°F (±6°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#VF340 Vac Aero Vacuum Furnace

Vac Aero Model VAH 4848 HV-2. Working dimensions of 48" X 48" X 48". Furnace includes controls, vacuum pumps (Stokes 412 roughing, 615 booster, 20" diffusion, holding), furnace quench system (gas blower, heat

exchanger, gas accumulator), water cooling system (cooling tower, similar to EVAPCO LRWB).

Asking Price \$220,000 USD

<https://themonty.com/project/itemvf340-vac-aero-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#VF334 Degussa Vacuum Hardening Furnace

Year of construction 1990. The furnace name is VKSQ 80/80/120. The maximum temperature is 1350 ° C, the max. The load is 1500Kg gross, the heating capacity is 250kW, the working space is 800x1200x800mm, the permissible pressure of the system is 6bar absolute and the furnace has the possibility of convective heating. The furnace control was renewed a few years ago (Demig). Located in Germany.

Asking Price \$60,000 Euro

<https://themonty.com/project/itemvf334-degussa-vacuum-hardening-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#VF328 Ipsen Vacuum Furnace

Abar Ipsen Model HS-26 Vacuum Furnace. Model HS-26 Abar Ipsen vacuum furnace. Working dimensions of 24" wide X 18" high X 36" deep. Working capacity of 750 pounds. Varian HS-16 Diffusion pump and Spencer GH 3025 gas booster. All metallic hot zone. Single zone temperature control. Components included from control panel: Honeywell controllers, Honeywell paper chart recorder, and MKS vacuum instruments. Operating temperature of 2400F. 480 volts. Was used in an aerospace facility before it was very recently removed.

Asking Price \$15,000 USD

<https://themonty.com/project/itemvf328-ipsen-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-ipsen-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#VF319 Vacuum Induction melting System

Manufactured by Ionex, Model 260 LB VIM, S/N 93978. Electrically heated 480/3/60/200 KVA. Work area 150 kW, 3 kHz, 260 Pound. External dimensions of 10' wide X 10' high X 15' long. Controls; Complete with PLC and touchscreen HMI interface. 260 pound horizontal front loading VIM with water cooled stainless steel vacuum chamber. Pumping system includes a BOC/Edwards 1722 package with mechanical pump/booster and a stainless steel 20" T-M Vacuum diffusion pump. Induction power supply consists of a Pillar 150 kW, 3 kHz and includes water cooled power leads. This furnace has automatic tilt and includes two (2) crucibles. Also included with this VIM is a rotating load table that moves up and down for accurate pouring. Lot of misc. spare parts and molds are included. Excellent condition.

Asking Price \$285,000 USD

<https://themonty.com/project/itemvf319-vacuum-induction-melting-system/>

Item#VF317 Seco Warwick Twin Vacuum & Sintering Furnaces

Twin High Temperature Vacuum HT & Sintering Furnaces. Two each Seco/Warwick Model V40-35/48 Vacuum Furnaces, 1500C (2732 F) Max. operating temperature, 1600C (2912F) burn-out temperature, Work Zones: 600mm x 650mm x 1200mm (23.6" x 25.6" x 47.2"), Design uniformity +/- 10C, but with elements on all 6 sides we would expect much better uniformity, One furnace hot zone is in excellent condition and the other is nearing time for replacement, All-Metal Hot Zones (Layers: 1 Tungsten, 7 Moly, 1 Stainless Steel), Low voltage Tungsten Heating Elements, Moly hearth, Load Rating: 2850 lb. (1300 Kg), Power: 480V/3Ph/60Hz, 390 kW SCR Heating Input with 3-zone control, 420 kVA total power, Stainless steel chamber, water jacket and hot zone plenum, Controls are CompactLogix PLC with computer, touch screen and SCADA software, Leybold TTR91 pirani vacuum sensor, Edwards (Stokes) 212J mechanical pump with Edwards 607 booster pump, Gases set up for Argon cooling and hydrogen purge, Hydrogen mass flow controller, Gas quench pressure rating is 1.05 Bar absolute. Mezzanine-mounted power supplies for minimal floor space requirement. Both furnaces (2), factory loader and existing spare parts are included at this price. Disassembly and Loading: Buyer's responsibility. Built in 2010 these furnaces were only used for 1 year. Excellent condition!

Asking Price \$275,000 USD for Both

<https://themonty.com/project/itemvf317-seco-warwick-twin-vacuum-sintering-furnaces/>

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 Convector 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#VF289 Ipsen Vacuum Temper Furnace

Built in 1981. Working dimensions of 280 mm high X 420 mm wide X 590 mm deep (11" X 16.5" X 23.2"). Maximum load 100kg (220 pounds). Minimum operating temperature 150C, maximum operating temperature 700C. Input power 94 KVA, heating 71Kw, 575 volts, 60Hz. Type K T/C's, Honeywell controls. Vacuum contact point 1.0×10^{-1} mbar, operating pressure 1000 mbar. Maximum vacuum level 5.0×10^{-2} mbar. Circulated nitrogen atmosphere gas. Elements Cr-Ni Steel. Stokes model 149H vacuum pump. SS hot zone. Class 3 furnace with a temperature uniformity of ± 8 C. Used in an aerospace heat treat facility until it was replaced with a new furnace. Complete although missing the temperature recorder. Included are a manual loader and 3 baskets. Excellent condition.

Asking Price \$59,500 USD

<https://themonty.com/project/itemvf289-ipsen-vacuum-temper-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 \$169,000 USD

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

Item#VF266 Vacuum Pump

Kinney 75 CFM Vacuum Pump. Warranty Rebuilt Kinney Model KTC-75, Part No. 804982-D, S/N 1105-Y 7710-5 mechanical vacuum pump. 12 Month warranty on rebuild. Will be repainted at rebuilders shop. Running without problems when removed from service.

Asking Price \$5,700 USD

<https://themonty.com/project/itemvf266-vacuum-pump/>

Item#VF243 Diffusion Pump

35" Diffusion Pump. CVC Model PMC-32C, 35" Diffusion Pumps (Today this is the Varian HS-35. Varian purchased CVC rights to this pump.) Rebuilt condition with a 12 Month warranty. 35" Throat Diameter. Bolt Circle is approx. 38-3/4" with 14 Holes on approx. 8-9/16" Centers. Flange O.D. is 41-3/4". O-Ring Center Diameter is 36-1/8". Approx. 72-3/4" Overall Height (79" on 48" x 48" shipping pallet). Note: Mating 35" Cryo-Baffle is also available for improved low-range vacuum and elimination of backstreaming (See Item# 3161 Below). 6" Foreline with approx. 9-1/2" Bolt Circle with 8 Holes on approx. 3-5/8" Centers. 1/4" dia. O-ring is approx. 8-7/8" diameter to center. Shipping Wt. with pallet approx. 2050 lb. Price in Warranty Rebuilt Condition, Painted: (with existing working elements. Add \$6,000 if you want brand new elements.)

Asking Price \$12,250 USD

<https://themonty.com/project/itemvf243-diffusion-pump/>

Item#VF242 Diffusion Pump

35" Diffusion Pump. CVC Model PMC-32C, 35" Diffusion Pumps (Today this is the Varian HS-35. Varian purchased CVC rights to this pump.) Can be purchased either in As-Is condition or in Rebuilt condition with a warranty. 35" Throat Diameter. Bolt Circle is approx. 38-3/4" with 14 Holes on approx. 8-9/16" Centers. Flange O.D. is 41-3/4". O-Ring Center Diameter is 36-1/8". Approx. 72-3/4" Overall Height (79" on 48" x 48" shipping pallet). Note: Mating 35" Cryo-

Baffle is also available for improved low-range vacuum and elimination of backstreaming (See Item# 3161 Below). 6" Foreline with approx. 9-1/2" Bolt Circle with 8 Holes on approx. 3-5/8" Centers. 1/4" dia. O-ring is approx. 8-7/8" diameter to center. Shipping Wt. with pallet approx. 2050 lb. Price in Warranty Rebuilt Condition, Painted: \$ 12,250.00 (with existing working elements. Add \$4,500 if you want brand new elements.)

Asking Price \$6,400 USD

<https://themonty.com/project/itemvf242-diffusion-pump/>

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#M427 Detrex Continuous Belt Washer

Continuous Belt Washer. Natural gas fired 2500 CFH. Model # SAB-131-GG and Serial # 73769. Max temperature 160°F Wash, 200°F Dry-Off and voltage of 480/3/60. Working dimensions of 48"W x 15"H and external dimensions of 9'10"W x 10'H x 50'L. Controls Mounted and wired in free standing panel with fused disconnect. All functions of this washer in controlled through an Allen Bradley SLC PLC with touchscreen interface.

Stainless steel conveyor type belt washer with the following sequence: 3'l load end x 3'l vestibule x 9'l wash x 3'l air knife x 2'l transition x 5'l 1st rinse x 2'l transition x 5'l 2nd rinse x 3'l D.I. rinse x 3'l air knife x 10'l dry-off x 3'l unload.

Zone 1: WASH ZONE 9' 160 Deg. F

Wash zone is equipped with a 15 HP Stainless Vertical Pump 335 GPM @ 80 PSI

Stainless Steel Bag Filter Housing with 100 Micron Bag

Liquid Level Control

Pump Temperature Alarms

Inlet and outlet plumbing connections

Quick Access Marine Type Clean-Out Door

Lift-off viewing door with window

Viewing lights

Eclipse Gas Burner and heat system with stainless steel burner tube and necessary gas controls

Digital Temperature Read Out

800 Gallon Sump

Intermittent Zone 2' with Air Knife

A 20 HP pressure blower is mounted at the end of the wash zone with one air knife each above and below the conveyor belt. The volume air in each air knife is controlled with individual adjustable dampers. The blower inlet is complete with an air filter to protect the blower and remove particulate from the air stream. The filter also serves as a silencer by reducing the noise level of the moving air.

20 HP Pressure Blower rated at 1000 CFM@ 65" w.c.

Stainless Steel Air Knives

Air inlet filter with silencer

Zone 3: Rinse

First rinse with RO Reverse Osmosis

5 HP Stainless Vertical Pump 200 GPM

CPVC Spray Headers

Removable Spray nozzles

Liquid level control

Pump temperature alarm controls MAX 160 Deg. F

Inlet and outlet plumbing connections

Lift-off viewing door with window

Viewing lights

Zone 4: Rinse

Second rinse

5 HP Stainless Vertical Pump 200 GPM

CPVC Spray Headers

Removable Spray nozzles

Liquid level control

Pump temperature alarm controls MAX 160 Deg. F

Inlet and outlet plumbing connections

Lift-off viewing door with window

Viewing lights

Gas heat system with stainless steel burner tube, Eclipse Burner

420 Gallon Capacity

Zone 5: Rinse

1 HP Stainless Vertical Pump 60 GPM

CPVC Spray Headers

Removable Spray nozzles

Liquid level control

Pump temperature alarm controls MAX 160 Deg. F

Inlet and outlet plumbing connections

Lift-off viewing door with window

Viewing lights

Gas heat system with stainless steel burner tube, Eclipse Burner

100 Gallon Capacity

Zone 6: FINAL RINSE

After the product travels through the last rinse zone, it receives a spray of pure DI water flush. This DI flush consists of one spray header above and one spray header below the conveyor belt. Water to this section is provided by a remote located Deionized (DI) Water System

ZONE 6: Air Knife

A 20 HP pressure blower is mounted at the end of the final rinse zone with three air knives above and one below the conveyor belt.

20 HP Pressure blower rated at 1000 CFM

Stainless Steel Air Knives

Air inlet filter with silencer

Zone 7: Dry Zone

As the product enters the dry zone it is subjected to heated air for drying of the water. The air is pulled from the bottom of the dry chamber and travels through stainless steel air ducts through a filter, gas heated burner assembly, through the blower, and through stainless steel ducting to the zone distribution headers. In essence, the product will be baked dry. An exhaust duct has been provided to allow the removal of the high humidity air and place the module under a slight negative pressure.

20 HP pressure blower 4700 CFM

Indirect gas fired duct heater

High temperature control

Air inlet plenum

Ten upper air knives

Nine lower fixed air knives

Blower and temperature controls

Chamber exhaust

High Temperature 2 inch insulation

Blower and temperature controls

Specifications: Belt: 48" Wide x 15" Part Height Capacity

Asking Price \$125,000 USD

<https://themonty.com/project/itemm427-detrex-continuous-belt-washer/>

Item#M426 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#M425 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#M423 Williams Dunk/Spray Washer

Working dimensions of 36" X 72". X 36". Gas fired, capable of 210F. 30A, 3 Phase. Built in 1993. Footprint; 71"Wide x 126"Deep x 196". Weight capacity 5,000 pounds. Oil skimmer not included. Installed, complete and in very good condition.

Asking Price \$29,000 USD

<https://themonty.com/project/itemm423-williams-dunk-spray-washer/>

Item#M422 Surface Combustion Dunk/Spray Washer

Dunk/Spray Washer 36" X 48" X 36". Manufactured by Surface Combustion this is a Dunk/Spray batch IQ washer with working dimensions of 36" X 48" X 36". Electrically heated.

Asking Price \$22,500 USD

<https://themonty.com/project/itemm422-surface-combustion-dunk-spray-washer/>

Item#M415 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#M406 Surface Combustion Spray Washer

Manufactured by Surface Combustion this is a Spray washer with working dimensions of 30" wide X 48" deep X 30" high. Gas fired with an operating temperature of 200F. Good overall condition.

Asking Price \$12,500 USD

<https://themonty.com/project/itemm406-surface-combustion-spray-washer/>

Item#M348 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#M314 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#O356 Maintenance Manager

**Vac Aero International Inc., Thermal Processing Division – Oakville, ON.
Full Time Position.**

Company Profile: For over half a century VAC AERO has been providing the very best in metallurgical services and solutions to clients around the world. Specializing in vacuum processing, VAC AERO is one of the largest subcontract aerospace heat treaters in North America. We hold numerous heat treating, brazing and quality system approvals from prime manufacturers.

Job Summary: Vac Aero’s Maintenance Manager will be responsible for the completion of maintenance tasks using the highest level of quality, safety and effectiveness to ensure production requirements can be met. In addition to performing maintenance tasks, this position requires management and coordination of the activities of maintenance employees, contractor and vendors.

Responsibilities:

- Report directly to the General Manager.
- Administer and promote the company safety program to ensure a safe work environment.
- Investigate, report, provide and implement corrective actions for all safety and environmental incidents/near misses.
- Ensure preventative maintenance is being performed on all equipment and building.

- Ensure all unscheduled equipment and building repairs are performed in a timely manner.
- Performance of maintenance tasks and supervision and co-ordination of maintenance employees, contractors and vendors.
- Schedule maintenance shutdowns with production planning.
- On call availability required including nights and weekends.
- Order/purchase maintenance supplies, parts, tools, and equipment.
- Maintain inventory of supplies/parts.
- Schedule annual equipment and plant power inspections.
- Attend daily production meetings.
- Maintain maintenance records including CMMS software.
- Ensure productivity, housekeeping and quality of work standards are maintained within the maintenance department.
- Provide and coordinate training for maintenance employees.
- Promote good relations and communication between maintenance and other departments.

Job Qualifications:

- Minimum of 10 years mechanical or electrical skilled trades experience which includes management experience.
- *OR* Minimum 10 years mechanical or electrical skilled trades experience which includes management experience.
- Experience in Heat Treating would be an asset

Preferred Skills:

- Extensive experience in equipment repair (heating elements, pumps, motors, hydraulics, heat exchangers, water systems, fans, etc.).
- Proven experience in executing major work and plant shutdowns.
- In depth knowledge of preventative and predictive maintenance.
- Strong problem-solving ability.
- Strong communicator (both oral and written).
- Excellent interpersonal skills with demonstrated ability to interact with plant personnel.
- Highly motivated with ability to work with minimal supervision.

- Comfortable with heights and confined spaces.

Please Inquire With Brent Rosart at brosart@vacaero.com

Item#O355 Quality Manager

Seeking Quality Manager. An established Heat Treating Company is looking for a full time Quality Manager. This position is based in Newark, NJ. Applicant will coordinate the Quality Management System and Continuous Improvement initiatives to meet customer expectations. Major customers include aerospace, military, nuclear, automotive and agriculture.

Responsibilities:

- Maintain Quality system that meets customer Quality requirements.
- Maintain Quality manual and related procedures per Nadcap standards.
- Host/participate in audits performed by Customers.
- Host/participate in audits performed by PRI/Nadcap registrar.
- Maintain a Pyrometry system as required in AMS 2750 .
- Coordinate and conduct quarterly management Review Meetings.
- Manage a calibration recall system for periodic testing including Pyrometry and Hardness testing equipment.
- Perform external and internal audits.
- Write and review Heat Treat procedures from customer drawings, procedures and quotations.
- Ensure timely responses to corrective action requests to customers.
- Train shop employees for continuous improvement as well as for changes as a result of Corrective/Preventative Actions
- Perform RC/CA analysis for customer and interally issued NCRs.
- Support the Production Department with quality issues.

Job Requirements:

- Bachelor's degree in a technical field or a minimum of 3 years experience in quality management.
- Heat treat experience preferred.
- Must be organized and motivated.

- Plan, prioritize and organize work with appropriate timeliness.
- Must be a Team player and communicate well with others.
- Manage Metallurgical Lab.
- Must have strong verbal, written communication and interpersonal skills. Calm under pressure.
- Proficient in Microsoft Office software including Excel, Power Point and Word

Qualified applicants are encouraged to send resume
to johnquaglia@bennettheat.com

Item#O354 Metallurgist

POSITION SUMMARY: There is currently an opening for a senior metallurgist in the RBC Bearings New Product and Process Development Center, located within our Oxford CT headquarters. We are looking for a corporate level, technological leader in metallurgy and materials science who is a hands-on, team player. The person will be expected to act as consultant and metallurgical expert to all divisions of RBC, as necessary, responding to queries about materials, material acceptability, specifications, failure investigations, material performance improvements and material quality issues both internal and with our supplier base. The successful applicant will be expected to take a leadership role in material development as RBC expands its current product offering into new applications with structural and environmental challenges beyond our current knowledgebase and capability. The candidate is required to have excellent interpersonal and communication skills, be a team player that is driven to succeed within in a fast paced, challenging, and demanding environment.

RESPONSIBILITIES:

- New Product Development: Research and Development of performance enhancing materials and material heat treatments.
- Design: Support RBC engineers on materials selection and evaluation, testing, fabrication, heat treatment, and plating.

- Manufacturing: Support the evaluation of material quality, obtain and maintain NADCAP heat treat accreditation where required, consult and assist with internal/external customer concerns regarding product quality, customer audits and approvals, materials and testing, failure analysis, destructive testing, procedures, evaluation of vendors for heat treating and plating
- Metallurgical Analysis: Improve existing metallurgical laboratory and maintain a list of vendors that can provide services outside of the labs capabilities.
- Manage Corporate Metallurgy Function: Conduct bi-weekly department update meetings, coordinate the projects of two Fellow level metallurgists with more than 80 years combined experience, and oversee a lab. Technician.
- Oxford Heat Treat Department: Technically oversee and support a newly implemented heat treat department within the Oxford, CT, manufacturing facilities.

REQUIREMENTS / QUALIFICATIONS:

- BS/MS/PhD in Metallurgy, or Metallurgical Engineering, or Materials Science
- 10 + years of related experience.
- Expertise in metallurgy, thermal processing, machining, chemical processing, plating, stress relieving, material standards, material processing and potential process changes affecting material performance.
- Keen knowledge of the causes of fatigue and failure of metals, especially — but not limited to – the field of bearings.
- Anticipate travel requirements to various customers, suppliers, and RBC facilities of approximately 25%.

Please Send Resumes To WSamuels@rbcbearings.com

Item#O353 Controls Engineer

Controls Engineer. About Super Systems Inc.: Super Systems Inc. is a light manufacturing company located in northern Cincinnati, Ohio with 65 employees. We are a leading integrator in the thermal processing industry with a dynamic workplace that includes manufacturing, software development, field service engineers and a robust research and development department. Company address: 7205 Edington Drive, Cincinnati OH 45249. Company website: <http://www.supersystems.com>

JOIN OUR TEAM! SIGN ON BONUS!! Exciting opportunity with Excellent Benefit Package including 401K match on day one! Super Systems Inc. is a growing industrial automation systems integrator looking for full time Controls Engineer. We are a leading integrator in the metal treating industry with a dynamic workplace that includes manufacturing, software development and field service engineers. Positions for field service/project engineers are currently available in Cincinnati Ohio. We are looking for talented people with a good work ethic, enthusiasm and a customer centric attitude. We offer exciting opportunities to work on challenging projects that encompass a variety of technologies. Super Systems Inc. offers a complete package of benefits including Health, Dental, Long Term disability, 401K, paid vacation and holidays. Project Engineer to design and retrofit control systems and for thermal processing equipment. Our customers are heat treating facilities across the United States. Candidate will be responsible for analyzing customer requirements, designing and commissioning controls and SCADA equipment. FSE will be responsible for PLC programming, instrument configuration and setup, SCADA screen design, customer support, project management and end user training. This job will require 75% travel, but always home on weekends. Knowledge / Studies / Experience:

- Electrical/electronics
 - PLC programming a must; Allen Bradley a plus
 - Ladder logic

- PID control
 - SCADA software
 - Field wiring
 - Control system integration
 - Familiarity with industrial atmosphere and vacuum furnaces a plus
 - SQL
 - Education and Experience:
 - Required: 4-year Electrical or Electro-Mechanical Engineering Degree
 - Required: 5 years experience
- Other:
- Ability to travel required, approximately 50-75% U.S. travel. Always home on weekends/holidays
 - Company car
 - Will pay to relocate to Cincinnati
 - Sign-on Bonus!

Please Send Resumes To preeder@supersystems.com

Item#O352 Sales Positions

Mountain Rep, (www.mtnrep.net), a Manufacturer's Representative Firm, since 1983, is looking to open multiple offices in the United States, concentrating in the Thermal Processing Industry. Searching to mentor younger persons who want to take a stab at sales and/or looking for that retired person who is bored and wants to get back in the industry. Management and Ownership opportunities available.

Please call Rosanne Brunello at 216 217-7769 or email her
at rosanne@mtntrep.net

Item#O345 Multiple Positions Available

Vesco-McLaughlin located in East Windsor, CT and McLaughlin Services located in Avilla, IN are looking to expand and hire people in the industry with any of the following experience:

- Hot Zone Design
- Vacuum and Atmosphere Furnace Design
- Vacuum and Atmosphere Furnace Service Experience
- Vacuum and Atmosphere Furnace Manufacturing Experience
- Electrical and Controls Experience

Please send all resumes and questions regarding positions to Ben Tackett, btackett@vacuumengineering.com, Main: (860) 627-7015, Fax: (860) 627-9964.

SEEKING EMPLOYMENT ADVERTISING

If you are looking for a job position ads are completely free! Simply send us a brief summary of your skills along with what you are looking for in a “Word” Document and e-mail to jordan@themonty.com Your ad will appear both on the website themonty.wpengine.com and in our monthly newsletter “**The Monty**”.

Item#SE01 Sales Position

Seeking employment as a direct hire for **sales**. Mechanical Engineering degree with 20+ years experience in consultative outside sales roles to all industries utilizing thermal processing equipment. Varying experience with design, sizing, sales, support and commissioning of combustion systems, electrical resistance heating, controls, furnaces, ovens, air heaters, refractories, mineral/aggregate drying/processing equipment, pyrometry, temperature uniformity surveying equipment, polymer & oil quenchants, and furnace alloy fixturing, baskets, grids, radiant tubes & related furnace parts.

Please contact me at reply12345@yahoo.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
Phone: 905 271-0033
Email: gord@themonty.com
