

Heat Treating News

Furnace Suppliers and Heat Treaters Remain Busy During Tough Times

Gear Technology Editorial Staff

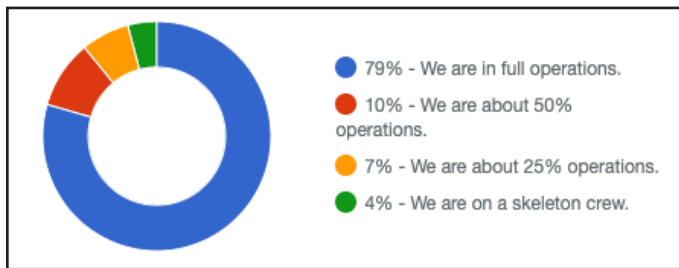
The following section includes the latest news, products and events from the world of heat treating.

MTI

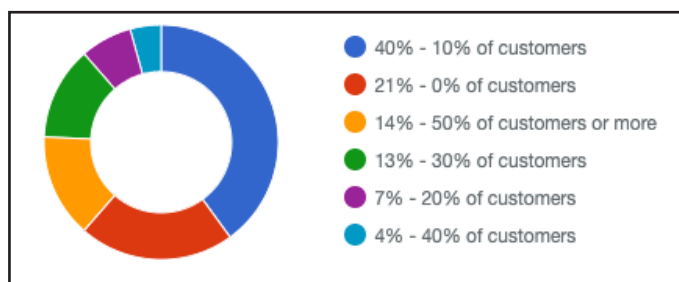
SURVEYS MEMBERS ON COVID-19 ISSUES

The Metal Treating Institute recently conducted a survey of members to determine how the COVID-19 Pandemic has affected the heat treating industry. The survey, which went out the week of May 11, asked members key questions related to their plant operations, customer operations, sales and government support. The results are presented here with MTT's permission:

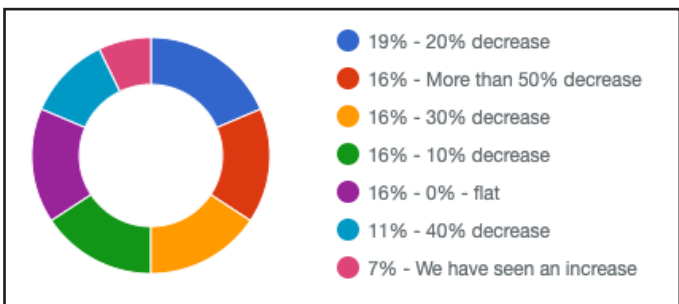
What Level is Your Heat Treat Plant Currently Operating at?



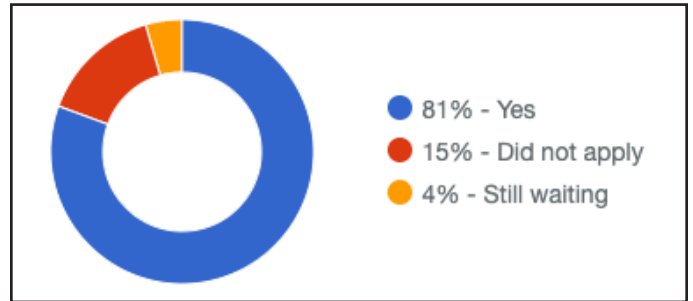
What Percent of Your Customers Are Shut Down?



What Has Been the Impact on Your Monthly Sales Since COVID-19 Started in January?



Have You Actually Received Funding from the PPP Program?



In addition to the survey results, MTI has provided industry with a wide variety of COVID-19-related resources on their web page at www.heat treat.net/cht/coronavirus.

IHEA

ANNOUNCES 2020-21 BOARD OF DIRECTORS AND OFFICERS

The Industrial Heating Equipment Association (IHEA) recently announced its 2020-2021 board of directors and executive officers. The new executive officers are Scott Bishop of Alabama Power Company as president, Jeff Valuck of Surface Combustion as vice president and Brian Kelly of Honeywell Thermal Solutions as treasurer. Outgoing president Michael Stowe of Advanced Energy assumes the role of past president.

IHEA President Scott Bishop says, "It is an honor to serve as IHEA's president for the 2020-2021 term. I look forward to continuing the great work IHEA has done for more than 90 years. Also, during this unprecedented time I would like to encourage our members to be proactive in finding ways to better serve our industry and make an impact." Bishop is highly involved in IHEA's Infrared Division. He has served as IRED chairman, presented at numerous workshops and seminars, and provided key support in the recent revision of the *Infrared Process Heating Handbook for Industrial Applications*.

IHEA also welcomes new board member Alberto Cantu of Nutec Bickley. Alberto has been involved with IHEA since 2011 and participates on the Safety Standards and Codes Committee. "I am very excited about this new role; I think it will be a great opportunity to connect with colleagues in the industry and help move it forward," Cantu states.

Continuing their service on the board of directors for 2020-2021 are: Gary Berwick, Dry Coolers, Bob Fincken, Super Systems, Inc., Doug Glenn, *Heat Treat Today*; Francis Liebens, SOLO Swiss Group, Daniel Llaguno, Nutec Bickley; John Podach, Fostoria Process Equipment, a div. of TPI Corp., and John Stanley, Karl Dungs, Inc.

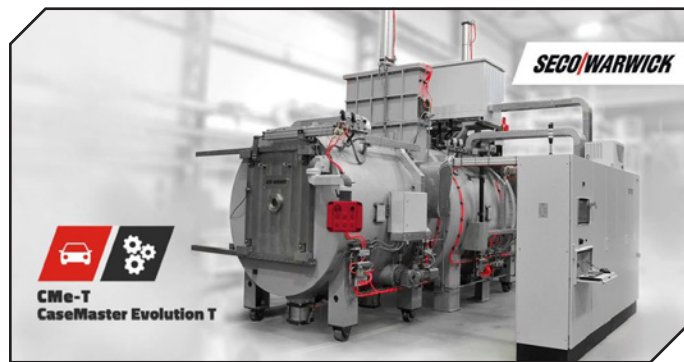
In addition, IHEA also acknowledges its current committee chairpersons: Government Relations Committee led by Jeff Valuck, Surface Combustion, Inc.; Safety Standards and Codes Committee led by Kevin Carlisle, Karl Dungs; Education Committee led by Brian Kelly, Honeywell Thermal Solutions; Marketing Communication & Membership Committee led by Erik Klingerman, *Industrial Heating Magazine*. The Infrared Division is chaired by Scott Bishop, Alabama Power — a Southern Company; and the Induction Division is chaired by Michael Stowe, Advanced Energy. (www.ihea.org)

Seco/Warwick

PROVIDES VACUUM FURNACE TO INDIAN MANUFACTURER

One of India's largest air cooler/heat exchanger manufacturers recently selected a vacuum furnace from Seco/Warwick. The customer's choice is a three chamber CaseMaster Evolution (CMe) furnace which will be used for heat exchangers. The client has decided on Seco/Warwick vacuum technology after a long period of trials with single and double chamber furnaces.

The CMe furnace with vacuum loading and cooling chambers is a semiautomatic brazing furnace that is quickly becoming popular especially in automotive, aerospace and defense industries due to its superb performance and high precision. Here, the client's focus was on increasing production volume of its air cooling/heat exchangers.



The client was previously using single-chamber furnaces but Seco/Warwick's three-chamber technology became so attractive that the client conducted a number of trials at various heat solution providers to finally decide on the furnace. The engineering team played a great role in the process with professional support to train the client's crew and acquaint them with the vacuum technology. As both parties stressed, there was a close cooperation on both sides and on all the levels starting with top management and finalizing on operating levels of the production team. Sharing information was transparent and the learning process was smooth.

CaseMaster Evolution-T (CMe-T) is a three-chamber vacuum furnace that delivers economical surface hardening using low-pressure carburizing (LPC) technology and high-pressure nitrogen quenching. The CMe-T furnace can replace existing lines and generators used for mass heat-treatment under protective atmosphere and oil quenching, while ensuring higher

precision and process repeatability. This solution stands out not simply because of its three-chamber design, but more significantly because of improved process quality, cost reduction from doubling yields, and increased production flexibility.

These are among the key reasons that aviation and automotive manufacturers are becoming increasingly attracted to CMe-T as their heat treat solution of choice.

"The client has chosen Seco/Warwick technology after long trials with other single and double chamber solutions from our competitors. Although initially the client focused simply on increasing the volume of production there was the whole spectrum of benefits not offered by the competitors. In a word, the advantage through technology prevailed," said Maciej Korecki, vice president, vacuum business segment at Seco/Warwick.

"Our engineering team worked closely with the client since this was the first vacuum technology purchased by the manufacturer; furthermore, Seco/Warwick is prepared to provide full customer assistance in implementing both technology and crew training at the site," added Manoranjan Parta, managing director, Seco/Warwick India.

In addition, the company recently celebrated its 10-year anniversary in China.

"We started in 2010 in the Chinese Year of the Tiger. The Tiger, considered to be brave, cruel, forceful, and terrifying, is the symbol of power. Founded in the tiger year, we were forging ahead, and we were brave enough to challenge and strive for larger market share," says Sławomir Woźniak CEO of Seco/Warwick Group and former managing director of Seco/Warwick China.

"We went through different years representing various animals learning their skills, their ways of thinking and acting. Today Seco/Warwick is in a different place since the start, and we're proud of the whole team and their achievements, and looking to the future with the belief that we are on a good track to our Seco/Revolution," adds Liu Yedong, current managing director of Seco/Warwick China.

Seco/Warwick China gained new momentum in 2015 when Yedong became its general manager and implemented a number of actions to strengthen its presence in the local market. His reputations and industry experience in the Beijing Machine Tool Research Institute and the International Cooperation Department at The Ministry of Machine-building Industry, Voss GmbH, were crucial in achieving Seco/Warwick's objectives.

Heat treating technologies are being developed by the common efforts of all the engineering and technical staff working with clients on various markets across different industries, to understand common and new problems that lead to developing solutions. The Chinese team has provided many great insights and solutions which resulted in 12 unique patents in heat treatment processing.

With today's total of over 60 employees, Seco/Warwick China boasts over 70% staff with higher education and 25% with professional title certifications. The company has a complete talent training plan and promotion system, it pays attention to the improvement and development of each employee's abilities, it organizes leadership, skill improvement and other trainings, and it is committed to shaping a good corporate culture for employees. (www.secowarwick.com)

Salto

ENTERS CANADIAN HEATTREAT MARKET

Salto Heat Treating offers commercial heat treatment services in Ontario, Canada. The company's equipment allows for higher capabilities, larger projects, quicker set-up time for recurring jobs, and product order charting and traceability. The custom-built I.Q. line allows a 24 to 48-hour turnaround on most applications. Capabilities include:

Annealing: A heat treatment process which alters the microstructure of a material to change its mechanical or electrical properties. Typically, in steels, annealing is used to reduce hardness and help eliminate internal stresses.



Through Hardening: In an atmosphere-controlled furnace, parts are heated to the exact temperature and then quenched in oil, ensuring minimal warping and uniform properties to the parts.

Case Hardening: A cost-effective solution with fast turnaround for surface hardening and improved part or component wear resistance that increases toughness and prolongs component life.

Carburizing: Also referred to as case hardening, carburizing is a process that produces a carbon gradient extending inward from the surface and a surface which is resistant to wear. This treatment is applied to both low carbon steel, and high alloy steel as well.

Air Hardening: This occurs in an I.Q. furnace which results in a better finish and appearance on the part, and controls the minimizing of oxide, scale, distortion and decarburization.

Normalizing: An annealing process applied to ferrous alloys to give the material a uniform fine-grained structure, and to avoid excess softening in steel. It involves heating the steel to 70–120°F above its upper critical point, soaking it at that temperature for a period of time.

Black Oxide: Offers a long-term corrosion resistance and a durable, attractive finish. Unlike paint coatings, black oxide is non-dimensional and will not interfere with the function of the metal parts.

Induction Hardening: While typical scanners can scan up to three feet, this equipment can scan up to 6 ft, with a 9½" diameter and up to 600 lbs. With 24 different diameters of coils in their inventory, Salto offers quick turnaround time on most jobs.

Stress Relieving: Machining and welding induce stresses that can cause long-term distortions, cracking, and tolerance loss, especially in bigger and more complex parts. Stress relieving benefits large complex weldments, castings with heavy machining, and parts with tight dimensional tolerances.

With technology constantly evolving, Salto offers state of the art equipment and custom-designed software. The heat treat team has more than 35 years of experience in the heat treat industry. (saltoheattreating.ca)

Bodycote

TO OPEN NEW ILLINOIS HEATTREATMENT FACILITY

Bodycote will open a new state of the art facility in Elgin, Illinois, USA.

The new purpose-built facility has been designed as a replacement for Bodycote's ageing facility in Melrose Park, Illinois. The Elgin facility is scheduled to be operational in June 2020. It will support manufacturing supply chains in the Midwest region. The Melrose Park facility will be closed once the transfer of customers' work has been completed.

Bodycote continues to invest in acquiring, updating and building new facilities with new capacity and more operationally efficient services. The new Elgin facility is part of this ongoing strategy to provide the best possible capabilities, mix, and geographical network to better serve customers.

Tom Gibbons, president of classical heat treatment, North America, commented "I am delighted to be able to announce the opening of our plant in Elgin, Illinois. Our investment in the new facility enables us to expand our capacity and improve our ability to deliver high-quality heat treatment capabilities to our customers."

Bodycote has more than 70 facilities in North America. (www.bodycote.com)



Ipsen USA

ANNOUNCES NEW DIRECTOR OF HUMAN RESOURCES

Ipsen is pleased to announce the hiring of **Janet Nanni, PHR, SHRM-CP**, as its new director of human resources. Nanni stepped into this role after the May 6 retirement of longtime Ipsen HR director Nancy Kolar.

Nanni is responsible for managing all personnel and human resources programs for Ipsen USA, which includes locations in Illinois and Pennsylvania. Before joining Ipsen, Nanni was the director of human resources at Zenith Cutter in Rockford, accountable for global HR initiatives in two countries.

Nanni has more than twenty years of human resources experience in the industrial manufacturing and engineering service industries. She received a bachelor of business administration with an emphasis in human resources from the University of Wisconsin-Whitewater. She is also a Society of Human Resources Management Certified Professional.

Nanni's talent for transforming workplace culture and aptitude for building trust and accountability make her an ideal fit for the role. (www.ipsenusa.com)



IHEA

FALL COURSE REGISTRATION OPEN

The Industrial Heating Equipment Association's Fundamentals of Industrial Process Heating Online Learning Course continues to provide a high-level of learning to those in the industrial heat processing industry. IHEA is pleased to announce that registration for the 2020 Fall course is now open; for the past few years, both the Spring and Fall courses have sold out, so the association recommends early registration for those interested. Scheduled to begin October 5, the six-week class will run through November 15. The flexible online format and interactive forums with other students, along with scheduled office hours with the instructor are just a few of the benefits of this program.

The course is designed to allow students to learn in a flexible online format while at home or work. It is an affordable alternative to campus-based classes and allows students to go at their own pace. The course is intended for industrial process heating operators and users of all types of industrial heating equipment. Throughout the in-depth online course, students learn safe, efficient operation of industrial heating equipment, how to reduce energy consumption and ways to improve the company's bottom-line.

The curriculum includes the basics of heat transfer, fuels and combustion, energy use, furnace design, refractories, automatic control, and atmospheres as applied to industrial process heating. Weekly coursework, quizzes and a final exam project are

administered to guide students on their progress and evaluate their knowledge of the material. For a complete listing of the topics covered visit www.ihea.org/event/FundamentalsFall20.

Industry expert Jack Marino will lead students in this 6-week online course. Jack, a registered Professional Engineer with over 40 years' experience in the heat processing business, is a graduate of Rensselaer Polytechnic Institute with a bachelor's degree in Aeronautical Engineering and holds a master's degree in Engineering Science from Penn State.

A former online student remarks, "Because of balancing an extremely busy workload and family life, I am not able to be on a regular schedule or take time in the evening to travel to a class. The advantage for me is that I can check in when time permits and still stay current on all activities. The course information is directly related to my work and I found it to be very beneficial."

Registration for the Fundamentals course is open now through October 1, at www.ihea.org/event/FundamentalsFall20. \$750 for IHEA members; \$925 for non-members. Cost includes an electronic course handbook, course instruction, quizzes and projects, class forums and the opportunity to contact the instructor throughout the course. Printed materials are available for an additional fee.

Thomas M. Crafton

SEPTEMBER 25, 1952–APRIL 28, 2020

Thermcraft President, **Thomas Morris Crafton**, 67, of Winston-Salem, NC passed away Tuesday, April 28th, 2020. He was educated at Trinity High School in Washington, PA, West Virginia University and the Art Institute of Pittsburgh.

Thermcraft was founded in 1971 by Tom's father and mother, Morris L. Crafton and Clara Martin Crafton. In 1978 Tom and his wife, Nancy, moved to Winston-Salem where Tom joined his parents working at Thermcraft, Inc. He was a successful businessman and was greatly admired by his colleagues.

Tom became President & CEO of Thermcraft, Inc. and expanded the company internationally. He has given presentations about small businesses in Washington DC and has relationships with companies throughout the US, Europe and Asia. (thermcraftinc.com)

