

## Hotspot

Mikron Instrument Co., Inc. has introduced their M9000 Series Imaging Pyrometer. Using a unique patented, solid state detector array camera, the M9000 operates in the near infrared part of the spectrum and measures in the 500 to 3000 °C temperature range. Performance is further enhanced by high resolution with a 640 × 480 pixel image, fast response at 30 frames per second, and the capability to eliminate image blooming and light scattering from bright areas in the process image. Applications include heat treatment furnaces, forging operation, and other high temperature applications. For further information, contact Mikron Instrument Co., Inc., 445 West Main Street, Wyckoff, NJ 07481; tel: 201/891-7330; fax: 210/891-1205.



Mikron Instrument Co., Inc.

ZIRCAR Products, Inc. has designed, built and installed a large fibrous ceramic pit furnace lining system utilizing rod over bend heating elements. The furnace lining system was designed for a specialty heat treating company to meet their need for a more economical system to combat the increasing cost of energy. The new 37.5 KVA system utilizes ZIRCAR alumina-silica insulation type AXHTM Staved cylinders with iron-chrome-aluminum alloy heating elements. The new system heats up to 1200 °C (2192 °F fully loaded in 2 h versus 10 h and cool down in a more controlled manner than the conventional system. For further information contact ZIRCAR Products. Inc., 110 North Main St., PO Box 458, Florida, NY 10921-0458; tel: 914/651-4481; fax: 914/651-3192.

The electrically heated furnace for treating the casing segments of the Ariane 5 rockets is being supplied by LOI Thermprocess GmbH. The furnace will have a clear diameter of 4300 mm and a useful depth of 5200 mm, with a maximum height of 8 m. When the charge has been loaded into the furnace, the furnace space will be purged by a controlled atmosphere of nitrogen. The annealing cycle will then be implemented with reduced nitrogen flow. It will consist of two phases, heating from 20 to 570 °C in about 4 h and annealing at 570 °C over approximately 6 h. If each component is treated twice, the capacity of the furnace will be sufficient for 180 annealing cycles or the treatment of 90 segments per year. With a heating system rated at 500 kW, the furnace is designed for a rated temperature of 650 °C at an accuracy of ±5 K. For further information, please contact George Miekehor, LOI Thermprocess GmbH, Moltkeplatz1, 45138 Essen, Germany; tel: 49/201-1891-310; fax: 49/201-1891-211.



LOI Thermprocess GmbH

Berry Metal Company now provides complete oxygen lancing systems for electric arc furnaces. The competitively priced installations include custom design, commissioning, and start-up assistance. Both a sidewall design, as well as a door-mounted arrangement are available. The sidewall design offers the advantages of best lance positioning for oxygen efficiency, reduced bottom refractory wear, and energy conservation. In addition, the sidewall lance can be used with the furnace tilted. The alternative, a floor

mounted lance system through the furnace door, lowers initial costs. This door lance system also provides a complement to the sidewall system for increased energy input. For further information, contact Berry Metal Company, Harmon, PA 16037; tel: 412/452-8040.

Drever Company has received an order for a steel powder annealing and reduction furnace from Quebec Metal Powders Ltd. The powder production capacity of QMP will increase by 30% with the addition of this furnace, bringing QMP's total powder producing capability to 151,000 tons per year. The furnace will be designed for exacting thermal cycles and will include a Convecool convection cooling section. It will be the largest powder annealing furnace supplied by Drever to the powder metallurgy industry.

Kyocera Industrial Ceramics Corporation has appointed Pyrotek, Inc. as its North American distributor. Pyrotek will exclusively represent the Kyocera line of silicon nitride components to the aluminum industry. These components include thermocouple protection tubes, immersion heater protection tubes, rotary degassing shafts, pump components, and low pressure die casting stalk tubes. For further information, contact Anna Henry, Pyrotek, Inc., E. 9503 Montgomery Ave., Spokane, WA 99206; tel: 509/926-6212; fax: 509/927-2408.

Davy International has received a contract from Reynolds Metals Company Alloys plant in Sheffield, Alabama, for the complete installation and start-up of two aluminum pusher furnaces. These new furnaces are designed to heat and homogenize aluminum ingots at accelerated production rates and at superior levels of temperature uniformity. For further information, contact Shelli Cosmides at 412/566-3330.

Michigan Induction has added two dual station lift and rotate induction systems. Each system is capable of processing parts up to 20 cm in length and will be used to

expand automotive component prototype and production capacity. The system is optimal for case hardening shaft, pin, and gear type parts, which require hardness patterns between 1 and 5 mm. For further information, contact Ric Hutton, Michigan Induction, 8468 Ronda Drive, Canton, MI 48187; tel: 313/459-8514; fax: 313/459-8795.

A full line of asbestos-free mica insulation products offered in rolls and rigid thick plates for melting metals is available from COGEBI Inc. The products resist temperatures up to 2200 °F and are available in rolls from 0.016 in. thick or plates up to 3 in. thick. Applications include top rings and electrical insulators for shunts/yokes and coil spacers in coreless induction furnaces and gaskets in channel induction furnaces. For further information, contact COGEBI Inc., 14 Faraday Drive, Dover, NH 03820; tel: 603/749-6896; fax: 603/749-6958.

Vacuum Tube Industries rebuilds the oscillator tubes used in RF tube welding, induction and dielectric heating equipment. Rebuilt tubes carry a new tube warranty while providing substantial savings. Each tube is tested under full power conditions, then custom packed for shipment. Vacuum Tube Industries also has over 300 machines for welding and induction heating in stock, both RF and solid state. Samples are processed at no charge for induction heating feasibility. For further information, contact Vacuum Tube Industries, Inc., 506 North Warren





Vacuum Tube Industries

Avenue, PO Box 2009, Brockton, MA 02405-2009; tel: 800/528-5014; fax: 508/584-0096.

Schmitz & Apelt LOI has supplied the first three of seven elevated temperature age hardening furnaces for extruded aluminum sections to Rackwitz Aluminum GmbH. The furnace, using transverse flue gas recirculation, ensures extremely homogeneous temperatures even with high working temperatures and long sections. Working temperatures in the gas-fired furnace chambers range from 125 to 250 °C with a tolerance of only ±2 K. The charging racks have a width of 1380 mm, a length of 6000 mm, and a height of 670 mm. The capacity of each furnace chamber is sufficient for 16 racks, giving an average net charge weight of 12 t. The charge is fed to and discharged from the furnace by a roller table system. For further information, contact Tom Semanski, LOI Inc. USA, 2000 Oxford Drive, Bethal Park, Pittsburgh, PA 15102; tel: 412/835-4646.