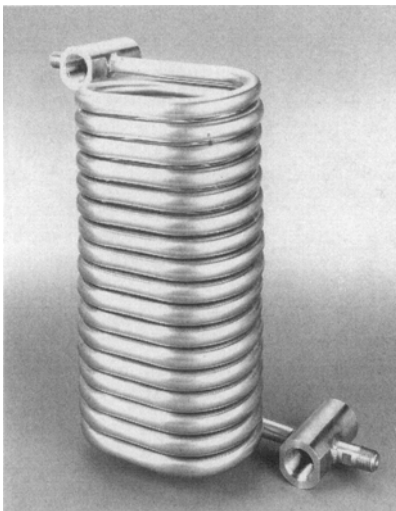


Lindberg, a General Signal Company, has introduced two series of small production furnaces, the Treat-All Series 2000 and the Temperite Series 2000. The latter is designed for heat-treating from 200 to 1400°F (93-760°C). The Treat-All Series is designed for applications requiring up to 1400 to 2150°F (760-1176°C). *The furnaces are compact in design, stackable and available with furnace stand and quench tank.* For further information, contact Lindberg, a General Signal Company, 304 Hart Street, Watertown, WI 53094.

An easy-to-mount tube-in-tube heat exchanger for fluid sampling applications involving a low flow rate, combined with high pressure and temperature differential has been introduced by Exergy Incorporated.



Exergy Incorporated

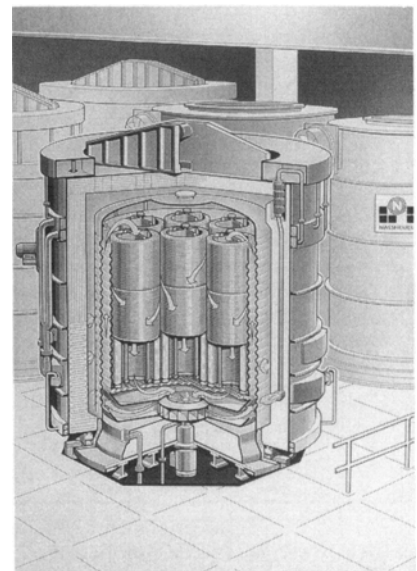
rated. Capable of operating from cryogenic to 1000°F, with a 1000°F differential between fluids, this rugged cooler is designed for low flow rates up to 1.5 GMP. For further information, contact Walter Hubbard, Exergy Incorporated, 1062 Main St., PO Box 209, Hanson, MA 02341; tel: 617/294-8838; fax: 617/294-8144.

Tucker Induction Systems, Inc. has published *new literature on their standard and custom induction heat treating system design, build, re-build and repair capabilities.* The literature includes a modular, unitized annealing system designed for fast start up, changeover and easy adaptation to automation. For a copy, contact Tucker Induction Systems, Inc., 6070 Wall Street, Sterling Heights, MI 48312; tel: 810/939-2400; fax: 810/939-7449.

Cabot Performance Materials has installed a second 1200 kW electron beam furnace at its Boyertown PA location. Addition of this furnace provides Cabot with some of the largest tantalum and niobium melting capacity in the world. *The furnace doubles the company's state-of-the-art electron beam melting capacity* and has the capability of producing twelve-inch diameter tantalum ingots and 14-in. diameter niobium ingots. For further information, contact Cabot Performance Materials, PO Box 1607, 144 Holly Road, Boyertown, PA 19512-1607; tel: 610/367-1500.

In connection with the third stage of the development of the **Baoshan Works**, the China Baosteel Group International Trade Corporation has announced a contract for the supply of equipment and technology from a consortium under the leadership of Kawasaki Steel Corporation for the new No. 2 Steelworks of Baoshan Iron and Steel Corporation. The contract for the supply of a recirculatory degassing unit with KTB equipment has been awarded to **VACMETAL Gesellschaft fuer Vakuum-Metallurgie GmbH.** *The unit is designed for the treatment of heat sizes of 250 t initially and is of the fast vessel exchange type, providing very high availability.* The contract also includes a burner system for heating of the vacuum vessels, equipment for automatic temperature and chemical sampling, and engineering design for the required electrical, instrumentation, and monitoring equipment.

NASSHEUER LOI Industrieofenanlagen GmbH has been awarded a contract by VA Austria Draht for the supply, erection and commissioning of a *multi-stack bell-type annealing plant for the bright annealing of rolled wire without scale formation.* The plant will be used for heat treating the entire range of cold upsetting grades and has a useful diameter of 4000 mm and a clear height of 2800 mm. The plant has a homogenizing capacity of 1.6 tph, with a charge weight of 26 t. For further information, contact Dr. Iris



NASSHEUER LOI

Berozzi, LOI GROUP, Moltkeplatz 1-45138 Essen Germany; tel: 201/1891-77; fax: 201/1891-211.

Lepel Corporation has introduced the **MR-Series of solid state power supplies, which feature a manually adjustable, multi-tapped tank coil to match a wide range of load coils.** This patented design requires fewer circuit components than any comparable unit on the market, making it easier to maintain, adjust, and operate. Available with a power output from 0.5 to 25 kW and output frequency range of 100-400 kHz, the MR-Series has con-



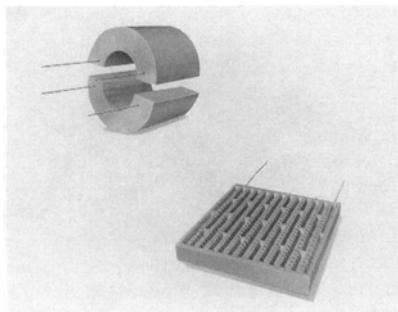
Lepel Corporation

version efficiencies of 85-90%. For further information, contact Lepel Corporation, 50 Heartland Blvd., Edgewood, NY 11717; tel: 516/586-3300; fax: 516/586-3232.

The Wolfson Heat Treatment Center's three-day *Understanding Heat Treatment course* will be held on April 25-27, October 3-5, and November 21-23, 1995. Held at Aston University in Birmingham, the syllabus covers basic metallurgical theory of heat treatment, quenching principles and practice, surface hardening theory and practice, furnace types, materials and heating methods, salt-bath heat treatment, controlled atmosphere theory, production and control, temperature measurement, quality control and laboratory testing of heat-treated materials. For further information, contact the Course Administrator, Wolfson Heat Treatment Center, Aston University, Aston Triangle, Birmingham B4 7ET, England; tel: 0121/359-3611; fax: 0121/359-8910.

By specifying Aqua-Quench 3629 from **Houghton International Inc.**, an automotive leaf-spring manufacturer has *eliminated the need for two quenchant* and in the process has cut operating costs in half. The quenchant has improved product quality and solved potential distortion and cracking problems. The product qual-

ity improvement is attributable to the quenchant's slower quenching rate in the third stage of the quenching mechanism. Aqua-Quench 3629 is a concentrated polymer solution, soluble in water, with inhibitors to reduce ferrous and nonferrous corrosion. The quenchant is recommended for all hardening applications for steel forgings and castings to replace tra-



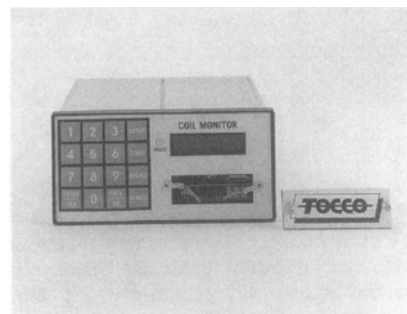
Custom Electric Manufacturing Company

ditional quenching oils. The company has also introduced Mar-Temp Oil 3530 for use in the martempering of distortion-prone parts, which features medium viscosity and a medium quenching seed throughout its use range. For further information, contact Jack Hasson, Houghton International Inc., Madison and Van Buren Avenues, Valley Forge, PA 19482; tel: 610/666-4000; fax: 610/666-1376.

Custom Electric Manufacturing Company has introduced *high-power density replacement ceramic heating elements for electric furnaces and ovens*. The after-market elements have power ratings of up to 2500 watts/ft² to operate at temperatures up to 2200°F. Ceramic fiber elements are widely used in curing and drying applications, as well as in applications with long process cycles, and in solution treating and annealing nonferrous metals. The elements are offered in conventional flat, cylindrical or semi-cylindrical shapes. For further information, contact Bob Edwards, Custom Electric Manufacturing Company,

48973 West Road, Wixom, MI 48393-3555; tel: 810/304-7700.

TOCCO, Inc. has introduced the first device of its kind to *measure induction heating energy (kilowatt-seconds) directly at the coil for providing more precise control over heat patterns, case depth, and heat cycle time*. The Coil Monitor can be



TOCCO, Inc.

used in both audio frequency (from 1 kHz to 50 kHz, 1 kW to more than 1 megawatt) and radio frequency (from 25 kHz to 450 kHz, 1 kW to 1 megawatt) applications. One Coil Monitor can simultaneously monitor both harden and temper operations. For further information, contact Paul Choinard, TOCCO, Inc., tel: 810/399-8601; fax: 810/399-8603.

HI TecMetal Group has installed an *automated batch heat treat line* at its Thermal Treatment Center facility in Wickliffe, OH. This is the first totally automated line of its type in the United States. The line consists of four high-temperature heat treat furnaces, five tempering furnaces with the capability of tempering a nitrogen atmosphere, and two washers for cleaning parts for before and after quenching. For further information, contact HTG Sales at 216/881-8100.