

**Cogetherm** insulation is a *mica-based insulation that exhibits high dielectric strength, high compressive strength, a low K factor, and high temperature resistance*. It can be machined, punched, and drilled, and it is a safe substitute for asbestos. Cogetherm is an ideal insulator that will provide low thermal conductivity and not crumble or fall apart. Cogetherm has successfully replaced ceramic and other types of mineral insulation boards as top and bottom rings in coreless induction furnaces of various sizes.

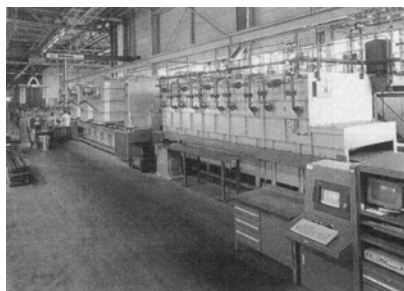
Cogetherm is offered in thicknesses up to 3 in. thick. Other applications include insulating fittings, gaskets in pipe lines, panels in industrial and marine environments, conveyor beds for ovens, casting furnaces, and as a heat sink in electrical equipment. For more information, brochures and samples, contact COGEBI Inc., Customer Service Dept., 14 Faraday Drive, Dover, NH 03820; tel: 603/749-6896; fax: 603/749-6958.

**Davy International**, a member of Trafalgar House, has been *awarded a contract by Dofasco Inc. for the installation of a new electric arc furnace* and casting facility at their Hamilton, Ontario, plant. The new plant, to produce 1.35 million tons per year of liquid steel, will include a twin-shell furnace, a single-strand continuous slab caster, a ladle furnace, and the associated additive systems, environmental controls, and buildings. For further information, contact Shelli Cosmides at 412/566-3330.

**LOI Thermprocess GmbH** has been *awarded a contract to supply and install a roller hearth furnace for normalizing nickel-plated steel strip in a controlled atmosphere* by Hille & Müller of Düsseldorf. The strip is uncoiled upstream from the furnace, stored, fed continuously through the furnace, and recoiled at the furnace discharge. A storage section is necessary to ensure continuous production even when the next strip is being welded on. The plant is designed for strips with a width ranging from 300 to 660 mm and thicknesses between 0.1 and 1 mm. The annealing line has a capacity of 1 tonne/h and is heated by gas-fired radiant tubes.

Production is due to start on 1 Aug 1996 and Hille & Müller have already received large orders for the nickel-plated strip to be produced. For further information, please contact Mr. Tom Zamanski, LOI Inc., 2000 Oxford Drive, Bethel Park, Pittsburgh, PA 15102; tel: 412/835-4646; fax: 412/835-6740.

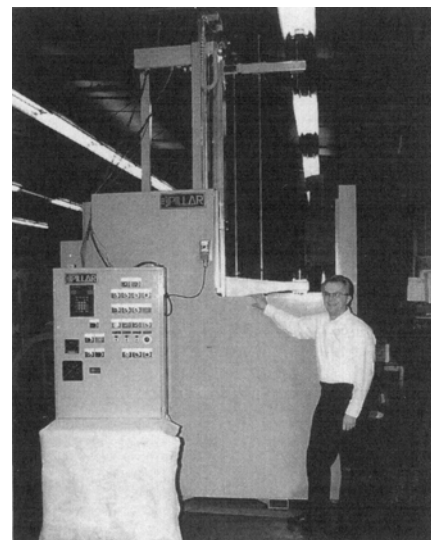
**NASSHFUER LOI** has installed and successfully commissioned a new high convection roller hearth furnace by a nonferrous plant in the southern part of Germany. The new *continuous annealing furnace can treat up to three tonnes of brass bars per hour at a temperature of 4000 °C*. The annealing section of the furnace is equipped with a newly developed high-convection system, which blows the heat produced by the natural gas burners directly onto the charge. This process saves a considerable amount of space (about 50%) and also improves performance. Energy requirements for the air/water cooling system installed are 20% lower than for conventional air cooling systems of the type previously used. The new system operates with a heat exchanger that can even be used to provide additional space heating in the hall, if necessary. For further information, please contact Mr. Tom Zamanski, LOI Inc. USA, 2000 Oxford Drive, Bethel Park Pittsburgh, PA 15102; tel: 412/835-4646; fax: 412/835-6740.



Nassheuer LOI

An all-new and *improved dual spindle vertical scanner* is available from the **Pillar Michigan Induction Center**. The updated scanner offers enhanced processing

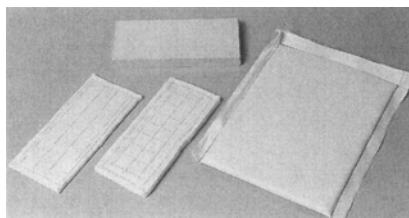
flexibility via a menu-driven Allen Bradley Control with up to 75 different user programmed setup parameters. The control can be free standing or mounted in a preferred position on or off the unit. The system can also be used as a lift rotate fixture for single shot and static hardening. Servo-operated scan towers allow for a choice of scan speed ranges up to 0 to 6 in./s. The dual spindles and rugged construction allow for precision induction hardening two parts at a time up to 60 in. long and weighing up to 250 lb. For more information, contact: Mr. Richard Martin—Manager, Pillar Michigan Induction Center, 2285A N. Opdyke Rd., Auburn Hills, MI 48326; 800/475-5580.



Pillar Michigan Induction Center

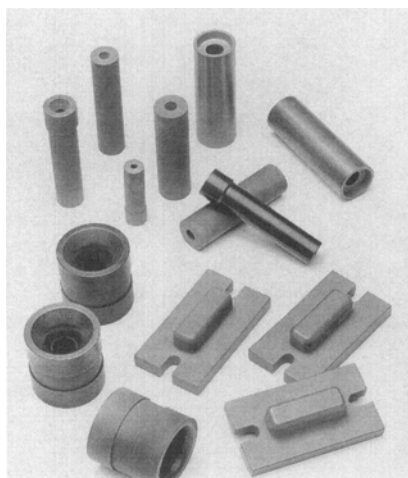
The new MT-29 microporous insulation materials from **Pyrotek** offer an alternative to ceramic fiber, mineral wool, and calcium silicate insulations. *The energy-efficient materials can help reduce shell temperatures, increase vessel capacity, or, without impacting the overall lining thickness, increase the thickness of hot face refractory*. Based on the results of ASTM thermal conductivity testing, MT-29 materials provide the most effective, overall, thermal insulation available. The microporous insulation is available from Pyrotek in four styles, including boards

and panels. For more information, contact, Anna Henry, Pyrotek, Inc., E. 9503 Montgomery Ave., Spokane, WA 99206; tel: 509/926-6212; fax: 509/927-2408.



Pyrotek, Inc.

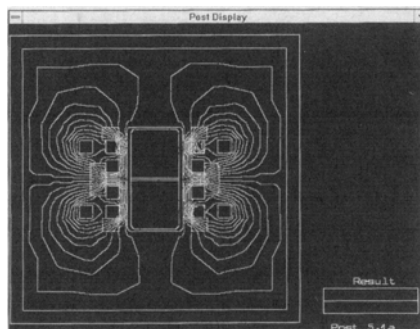
**Ceradyne Inc.** announces a grade of material, Ceralloy 147-3 NeedleloK silicon nitride, which is *ideally suited for induction heating applications where thermal shock resistance and wear are of prime importance*. Ceralloy 147-3 NeedleloK silicon nitride, an electrical insulator, has excellent strength, high temperature and



Ceradyne Inc.

thermal shock capability, and outstanding wear resistance. Components produced from Ceralloy 147-3 NeedleloK silicon nitride have a minimum theoretical density of greater than 99.3% and average strengths of 100 ksi (700 MPa). These components are produced with "as fired" dimensional tolerances of  $\pm 1\%$ ; precision machining can hold final tolerances to  $\pm 0.0005$  in. For further information, please contact: John A. Mangels, Product Manager, 3169 Redhill Avenue, Costa Mesa, CA 92626; tel: 714/549-0421; fax: 714/549-5787.

**Lepel Corporation** can recommend *proven coil designs for common applications or construct coils to exacting parameters* using the most advanced computer modeling programs. State-of-the-art coil design software includes finite element analysis and a sophisticated drawing program that produces 2D and 3D models. From customers' samples or drawings, Lepel engineers enter specific process parameters such as the geometry of the part and the coil with a 2D or 3D drawing. Materials, either isotropic or anisotropic, are assigned to the drawing parts while characteristics such as resistivity and permeability can be defined as linear



Lepel Corporation

or nonlinear. An electrical circuit is constructed and current (or voltage) and frequency are defined. Solutions such as magnetic flux, current, voltage, and power can be presented as global or plotted as graphs, flux, isolines, and shaded plots. Contact: John Stoll, Marketing Manager, Lepel Corporation, 50 Heartland Blvd., Edgewood, NY 11717; tel: 516/586-3300; fax: 516/586-3232.

A roller hearth furnace, designed and

manufactured by **Nassheuer LOI**, for normalizing and recrystallizing welded steel pipes has started production in the city of Harbin in northern China. The *furnace has a maximum capacity of 4.5 tonnes per hour (annealing temperature 680 °C) or 3 tonnes per hour at a temperature of 920 °C*. Tubes up to 200 mm in diameter will be produced. For further information, please contact Mr. Tom Zamanski, LOI Inc. USA, 2000 Oxford Drive, Bethel Park Pittsburgh, PA 15102; tel: 412/835-4646; fax: 412/835-6740.

**Neural Applications Corporation** has introduced its new family of 300 Class Intelligent Arc Furnace Controllers. The Model 300 class of controllers has enhanced features, such as *the capability of accommodating a variety of I/O platforms* including PLCs, Wonderware interface screens, and electronic heat sheet reporting. Benefits include reduced power consumption, increased furnace productivity, reduced current variations, and voltage flicker. The company has also signed an agreement with Concast Ltd. of India to be the exclusive distributor in that country. For further information, contact Kurt W. Kimmerling at 319/626-5000.