

The philosophy of elterma s.a.

We meet our clients' unique demands with equipment technology and design of exceptional quality and value.

Our company

ELTERMA S.A. is a premier Polish manufacturer of heat processing equipment with a tradition of more than 50 years in equipment production for heat treating metals in controlled atmospheres.

We have manufactured and installed production lines for over 1.500 customers in 35 countries worldwide.

Investments and developmental research begun in 2003 have laid the groundwork for a multi-level re-engineering of the firm, making ELTERMA S.A. today one of the leading European manufacturers of heat processing equipment for working in controlled atmospheres.



Client support

Constant access to spares

ELTERMA provides spare parts for all components of our heat treatment equipment. We are also able to deliver spare parts for the heat treatment equipment of other brands according to their designs and specifications.

To meet emergency needs quickly and to minimize downtime, we maintain a constant stock of critical parts.

Our company

Service

Service

We have our own engineering office, which manages the design and technical documentation of our furnaces. Our design engineers incorporate the latest design standards and technical requirements, creating products that will also meet our customers' individual needs.

In our engineering office, young, creative, and well-qualified engineers work alongside designers of long-standing experience. This mix gives us the capability of using state-of-the-art design tools.

ELTERMA S.A. operates ca. 13.000 square meters of manufacturing spaces that is fully equipped and staffed with experienced technicians for steel fabrications, mechanical assembly, pipefitting, and electrical wiring.

ELTERMA S.A. is a key member of the SECO/WARWICK Group and benefits from our globally integrated engineering and manufacturing resources.

We offer a full range of warranty and aftermarket service for all of the equipment that we produce.

Our service team is comprised of well-qualified specialists with extensive knowledge and experience in servicing different types of heat treatment equipment. Our service department provides a broad spectrum of services, including equipment assembly, quality analysis, and adjustment of new equipment, and upgrades and modernization of equipment currently in use.

As a supplier to home and foreign markets for many years, the name ELTERMA stands for professionalism, reliability, and heat treatment equipment effectiveness.



SECO/WARWICK Group

Elterma[®]
S.A.
SECO / WARWICK GROUP

Atmosphere furnace systems

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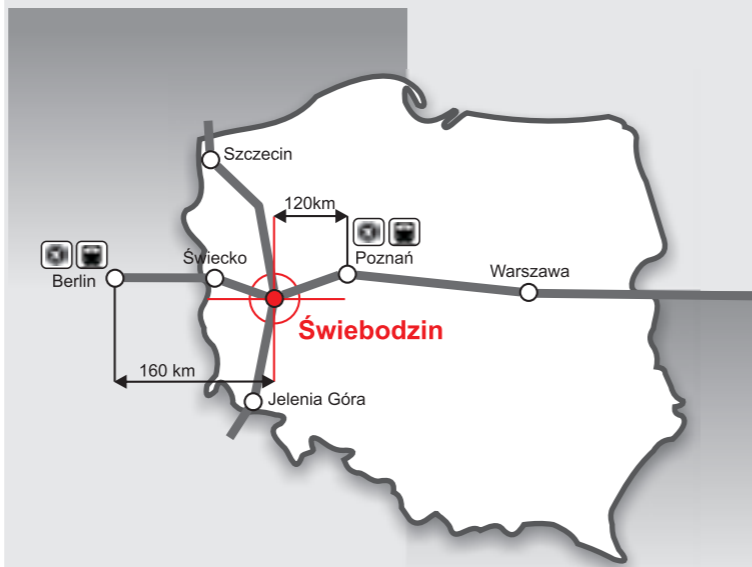


Vacuum technology, CAB
and aluminium process furnaces

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Atmosphere furnace systems,
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HEAT TREATMENT

EQUIPMENT FOR METALS

Batch furnaces

PIT FURNACES AND THE COMPLETE TECHNOLOGICAL SYSTEMS BASED ON PIT FURNACES

Pit retort furnaces with standard retort design and pit furnaces with fixed hearth for heavy-duty loads



Technological applications

- carburizing
- carbonitriding
- annealing
- normalization
- hardening
- tempering

Main technical data

- Nominal temperature: 180°C... 1.050°C
- Load weight for pit furnaces with standard retort design: up to 3.000 kg
- Load weight for pit furnaces with fixed hearth: up to 20.000 kg
- Useful dimensions of the heating chamber: designed to customer's requirements



Auxiliary equipment that may be incorporated into the pit furnace production lines

- PEG non-retort pit furnaces for tempering and annealing
- Spray washing and spray-dip washing equipment
- Quench tanks for quenching in hot oil and water
- Cooling wells
- Atmosphere generators
- Nitrogen cylinder stands
- Batching appliances for liquid organic compounds
- Control cabinets
- Special instrumentation



Auxiliary equipment

ATMOSPHERE GENERATORS

Endothermic atmosphere generators with air or water cooling system

Main technical data

- Capacity: 10...120 m³/h
- Atmosphere type: endothermic



Exothermic atmosphere generators

Main technical data

- Capacity: 7...150 m³/h
- Atmosphere type: exothermic



AMMONIA CRACKERS

Main technical data

- Capacity: 6...56 m³/h



SPRAY WASHING AND SPRAY-DIP WASHING EQUIPMENT

Main technical data

- Load weight: 400 kg...1.360 kg
- Useful chamber dimensions: from 610x610x 910 mm to 910x910x1220 mm



Quality policy

The main goal of ELTERMA S.A. is to ensure superior quality and innovation in equipment manufacturing. In 1999, ELTERMA S. A. made significant strides toward this goal when we implemented a new system of quality management and obtained a certificate of Quality System in conformity with ISO 9001 issued by TÜV Germany.

All stages of the production process are organized and managed according to established procedures and quality standards, beginning with equipment design and purchasing of materials through testing and the "turn-key" installation of equipment at the customer's heat treatment shop.

The high-quality products and services provided by ELTERMA S.A. are also certified by other inspection agencies such as SLV Hall, Germany, Technical Inspection Office (UDT, Poland), or TÜV Rhineland, Germany. We also hold a certificate of conformity with the Russian standard GOST R.



HEAT TREATMENT EQUIPMENT TO WORK IN CONTROLLED OR NATURAL AIR ATMOSPHERES

- Single and multi-chamber, multipurpose chamber furnaces, with or without quench tank and complete production systems
- Pit furnaces and production systems based on pit furnaces
- Chamber and car bottom furnaces
- Rotary hearth furnaces
- Mesh Belt furnaces, Cast Link furnaces, Mesh Belt Conveyor furnaces; muffle belt furnaces and non-muffle furnaces
- Pusher furnaces and units based on pusher furnaces
- Roller hearth furnaces for annealing, hardening, tempering and units based on roller hearth furnaces
- Rotary retort furnaces
- Atmosphere generators and ammonia crackers
- Atmosphere controls and regulators
- Auxiliary equipment such as washing machines and dryers
- Oil and quench tanks

Units utilizing electrical power, natural gas or diesel oil as a heating medium are available, depending upon the customer's preferences.

MODERNIZATION, REBUILDING, AND MAINTENANCE

- Upgrading heating systems
- Furnace lining repair and replacement
- Control systems for carbon potential and temperature
- Computer monitoring and archiving of processes

ADDED SERVICES

- Full range of warranty and aftermarket service
- Regular monitoring of heat processing equipment for metals
- Control-measurement apparatus maintenance

SPARE PARTS

- Spare parts for units produced by ELTERMA S.A.
- Spare parts for other brand heat treatment equipment

Industrial Uses of systems offered by elterma s.a.

ELTERMA S.A. engages in intensive R&D. These projects have a dual purpose: to perfect the design of equipment in current production, and to implement new automatic control systems for heat treatment equipment for metals.

In order to ensure accurate quality specifications for heat treatment processes and the parts treated by these processes, ELTERMA uses a metallographic laboratory for testing. This metallographic laboratory facilitates research into the effects of different treatments, such as the gas carburizing, hardening and hard soldering of metals and the like.

ELTERMA has the capacity to develop the technology of heat treatment processes to meet an individual customer's process requirements. ELTERMA cooperates with well-known technical universities and outside consultants on heat treatment technology, and makes use of their broad research facilities.

The heat processing and heat-chemical processing equipment that offered by ELTERMA has these primary industrial applications:

- automotive
- aircraft
- machine building and tool
- bearing
- commercial heat treating shops
- foundry and castings.

The equipment manufactured by ELTERMA operates with success wherever the application of modern heat processing technology is needed.



BELT FURNACES

Technological applications

- carburizing
- carbonitriding
- hardening
- tempering
- brazing/soldering
- sintering
- ageing

Main technical data

- Nominal temperature: 200...1.100°C
- Capacity: 50...2.700 kg/h
- Belt type: Mesh Belt, Mesh Belt Conveyor, Cast Link and welded plates belt



PUSHER FURNACES

Technological applications

- carburizing
- carbonitriding
- hardening
- annealing



Main technical data

- Working temperature: up to 1.000°C
- Standard tray dimensions: from 560x560 mm to 760x760 mm



FURNACES FOR HEAT TREATMENT OF SPRINGS

Main technical data

- Bar diameter range: from 10 to 65 mm
- Bar length range: from 1.250 to 10.000 mm
- Max capacity: ca. 3.200 kg/h



ROLLER HEARTH FURNACES

Technological applications

- hardening
- tempering
- annealing
- normalization
- spheroidal annealing

Main technical data

- Nominal temperature: 750...1.100°C
- Capacity: 700...4.500 kg/h



ROTARY RETORT FURNACES

Technological applications

- hardening
- annealing

Main technical data

- Nominal temperature: up to 950°C
- Capacity: 225...1.800 kg/h



ROTARY HEARTH FURNACES



Technological applications

- carburizing
- carbonitriding
- hardening
- preheating before forging

Main technical data

- Nominal temperature: 950°C...1.250°C
- Capacity: 200...1.000 kg/h

BELL FURNACES

Technological applications

- annealing of wire coil, steel strip and non-ferrous metals



CAR-BOTTOM FURNACES

Technological applications

- annealing
- preheating before hardening
- tempering

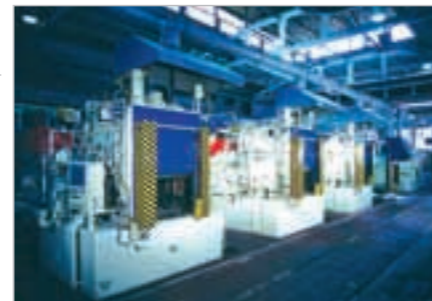


CaseMaster® MULTIPURPOSE SEALED QUENCH CHAMBER FURNACES AND ITS TECHNOLOGICAL SYSTEMS

Batch (IN-OUT) and continuous operation furnaces, single and multi-chamber Sealed Quench Chamber Furnaces

Technological applications

- carburizing
- carbonitriding
- annealing
- normalization
- hardening
- tempering



Main technical data

- Nominal temperature: 760...1.000°C
- Load weight: 400 kg...1.360 kg
- Useful dimensions of the heating chamber: from 610x610x910 mm to 910x910x1220 mm



Auxiliary equipment

- BREW high tempering chamber furnaces to work with protective or air atmosphere
- BREN low tempering chamber furnaces to work with air atmosphere
- TaskMaster® mobile loading and/or loading-unloading cars
- Spray washing and drying equipment
- Loading tables
- Control cabinets
- Special instrumentation



UNIVERSAL CHAMBER FURNACES

Technological applications

- carburizing
- carbonitriding
- annealing
- hardening
- tempering
- preheating

Main technical data

- Nominal temperature: up to 1.000°C
- Max load weight: up to 750 kg

