



*Continuous Conveyor Furnaces
For Heat Processing Pipe & Tube*



For over 40 years, SECO/WARWICK has designed and built roller hearth continuous furnaces for annealing both in-process and finished tubes in ferrous, nonferrous, and stainless steel materials.



5,000 pounds (2,270 kg) per hour continuous roller hearth for wound copper tubing



12,000 pounds (5,440 kg) per hour continuous tube annealer - carbon steel pipe



10,000 pounds (4,540 kg) per hour roller hearth for stainless steel tubing

SECO/WARWICK manufactures continuous conveyor furnaces for annealing and stress relieving tube and pipe:

- Electric or gas-fired operation
- Roller hearth or mesh belt designs
- Ferrous or non-ferrous applications
- Full annealing, clean anneal, spheroidize anneal or stress relieving heating cycles

Equipment

SECO/WARWICK roller hearth furnaces heat quickly and uniformly. No matter what the length of run or size of tubing, SECO/WARWICK furnaces provide even heating - end to end - as the work progresses through the furnace.

SECO/WARWICK furnaces are capable of processing a wide variety of tube diameters up to 10 inches and lengths in excess of 100 feet. Wall thickness may vary from several thousands of an inch up to an inch. SECO/WARWICK will custom design each roller hearth furnace line to suit plant layout, process configuration and desired production rates.

Zoned Construction

SECO/WARWICK can design both electric (resistance heating) and fuel fired (natural gas, propane) heating systems. The heating and cooling chambers are designed with separate control zones for more precise temperature control and uniformity.

Protective Atmospheres

A variety of protective atmospheres can be introduced into the furnace. Let SECO/WARWICK work with you to determine the best gas system for your application. Leased gases may be used, or SECO/WARWICK can provide atmosphere generators for endothermic (Endogas®), exothermic (Exogas®) or dissociated ammonia (Ammogas®).

Control Systems

SECO/WARWICK offers total control systems featuring PC/PLC integration along with graphic software packages and over temperature control instrumentation. The computer relates a wide range of variables and provides constant feedback for instant recall and downloading of data to a centralized computer system. Temperature, tube wall gauge, conveyor speed, loading and atmosphere conditions are but a few of the parameters that can be monitored, controlled, recorded, stored, and varied by the operator with the push of a button. The control system uses a PLC and is on the leading edge of controls regardless of the particular process. A single PLC, located adjacent to the furnace, allows the operator to have fingertip control of all of the inputs and furnace operations. The graphic interface, programmed by SECO/WARWICK, is custom tailored to exclusive requirements as specified by the end user. All the conveniences of a digital display panel are combined into a single computer terminal screen with recording and retrieval capabilities available on demand. If utilized to the full capacity of the system, the input of a customer order code number is all that is needed to implement a specified pre-programmed cycle for heat treating the entire lot of tubing. This type of system can be programmed to integrate with your facility ERP (Enterprise Resource Planning) and CMMS (Computer Maintenance Management System).

Auxiliary Equipment

For fully integrated production lines, SECO/WARWICK can supply system components such as charge and discharge tables, quench systems, protective atmosphere systems, cooling equipment and loaders that can be integrated into the overall plant production operations.



15,000 pounds (6,800 kg) per hour continuous roller hearth furnace line for carbon steel and alloy tubing



Roller hearth furnace line to anneal, blue and stress relieve at rates up to 18,000 pounds (8,165 kg) per hour of carbon steel pipe



SECO/WARWICK

P.O. Box 908, 180 Mercer Street
Meadville, Pennsylvania 16335-6908
Phone: 814-332-8400
Fax: 814-724-1407
E-mail: info@secowarwick.com
www.secowarwick.com

SECO/WARWICK Group Poland

SECO/WARWICK Ltd.

Sobieskiego 8
66-200 Swiebodzin, Poland
Phone: +48-68-3820-500
Fax: +48-68-3820-555
E-mail: info@secowarwick.com.pl
www.secowarwick.com.pl

Elterma S.A.

Swierczewskiego, 76, 66-200 Swiebodzin, Poland
Phone: +48-68-3819-800
Fax: +48-68-3819-805
E-mail: lzt@elterma.com.pl
www.elterma.com.pl

SECO/WARWICK

Beijing Representative Office
A1109 Beijing VanTone New World Plaza
2 FuChengMen Wai Avenue
Xicheng District, Beijing China 100037
Phone: +86-10-680-32526 or +86-10-680-32276
Fax: +86-10-680-32235
E-mail: warwick@public.bta.net.cn
www.c-secowarwick.com
Website published in Chinese

The latest design, materials and equipment specifications should be obtained from the company before any reliance is placed on the enclosed, since changes may occur due to product improvement.