



Continuous Homogenizing

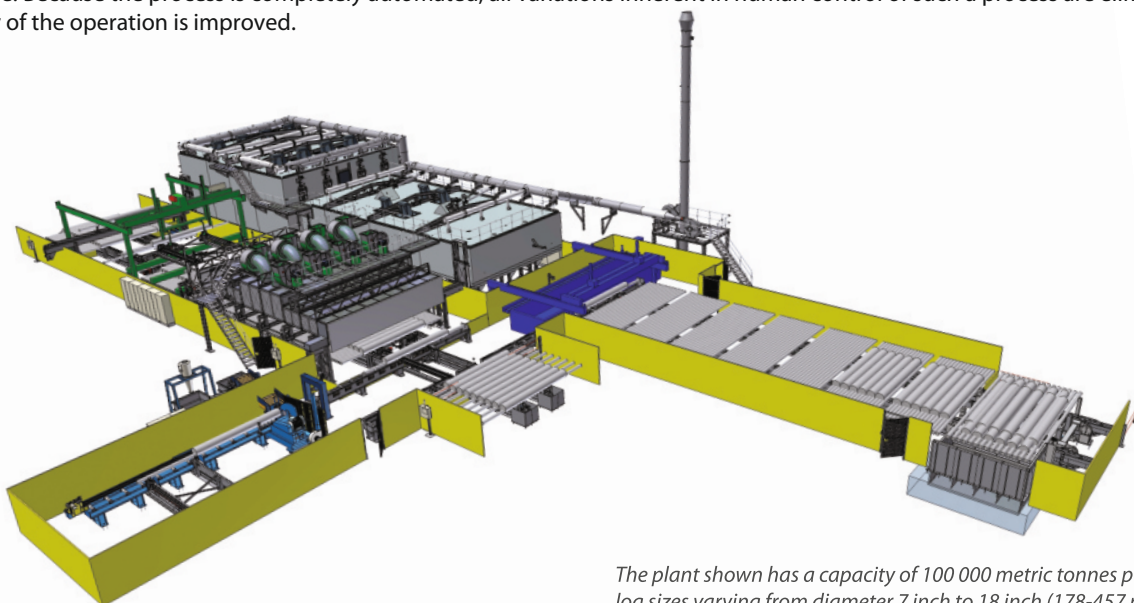
Aluminium
Furnaces

Production Flexibility

Because of its multi-zone design, vertical airflow furnace technology is inherently flexible. The furnace can now process batches of different alloys and diameters without leaving empty saddles.

Automatic handling

The furnace's operation is completely automated by the control system. No user interaction is required during normal operation, when a stoppage occurs, or when the furnace needs to be restarted after a stoppage. Stoppages and restarts usually involve significant risks of product damage. Because the process is completely automated, all variations inherent in human control of such a process are eliminated and the consistency of the operation is improved.



The plant shown has a capacity of 100 000 metric tonnes per year, log sizes varying from diameter 7 inch to 18 inch (178-457 mm) length = 5100-7100 mm.

Product Traceability

The PLC captures detailed historical data (position, temperature, degree of transformation, residence time) for each billet. The system also makes reports on single billets and batches of billet available based on the captured data. The data and reports can be used to improve the process and to respond to customer questions.

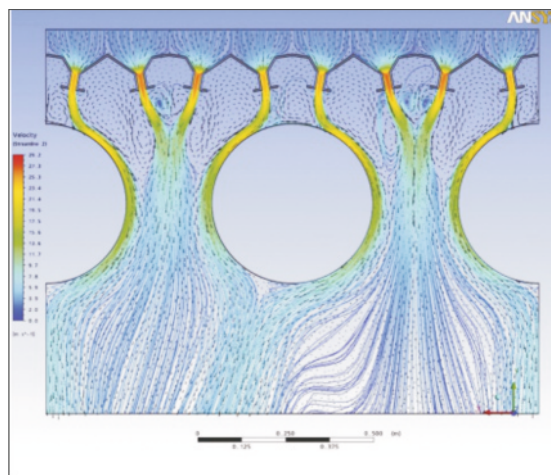
Modular design - one plant

When building the continuous homogenizing plant our design team designs the plant in sections. This means that the plant is delivered to the customer's location in sections, re-assembled and put together. This way of building secures the function of the plant and the installation period is minimized in time to support the production.

Energy Efficiency

The control system constantly optimizes the furnace to perform the highest throughput without empty spaces independent of product mix. A continuous and optimized material flow lead to more efficient energy usage.

The counter flow double-pipe heat exchanger recover a considerable amount of the exhaust energy. High-quality packing's and good insulation keep the wall losses to a minimum.



Aluminium Continuous Homogenizing Furnaces

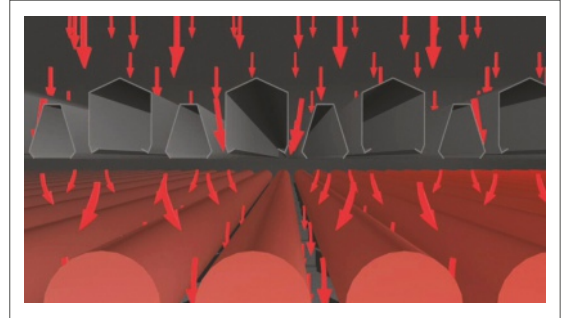
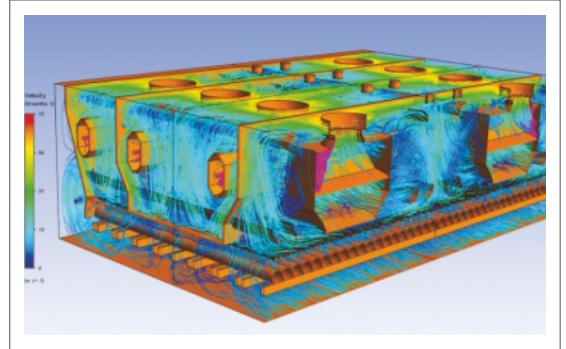
Airflow control

In the mechanical design process engineers optimize the furnace interior to activate the best possible performance to fulfill our customers different needs.

Enhanced Heat Transfer - vertical airflow

The high velocity air jet is directed onto the top of each billet which results in higher heat transfer coefficients. Because the furnace consists of multiple zones, it is possible to apply higher air temperatures in each zone without risking damage to the product.

These higher air temperatures combined with higher heat transfer coefficient enables significantly higher convective heat transfer rates into the billets. Because it is possible to operate the zones at a higher temperature without compromising safety, radiative heat transfer is also enhanced. The improved heat transfer results in shorter heat-up times for small and large diameter billets.



Uniform quality

The temperature heat treatment process can be optimized as the continuous homogenizing furnace has a material flow with one layer of logs. Quality control is possible for each individual billet has the same performance. The cooling process can also be controlled and optimized.



Aluminium Continuous Homogenizing Furnaces

SECO/WARWICK offer industrial furnaces equipped with advanced technology to reduce cycle times, conserve energy and improve cooling rates. Our five basic product groups include coil/foil anne-aling, solution heat treatment & ageing, log/ingot homogenising and melting/holding furnaces. Each system includes control and material handling packages designed to provide optimum performance in each unique production environment.

With over 50 years of experience working with the aluminium industry, we see your production needs and offer equipment with exceptional quality and value.



All equipment is CE certified



SECO/WARWICK Group

POLAND
SECO/WARWICK S.A.
Sobieskiego 8
66-200 Świebodzin, Poland
tel. +48 68 3820 500
fax +48 68 3820 555
info@secowarwick.com.pl
www.secowarwick.com

POLAND
SECO/WARWICK Europe Sp. z o.o.
Świerczewskiego 76
66-200 Świebodzin, Poland
tel. +48 68 3819 800
fax +48 68 3819 805
europe@secowarwick.com.pl
www.secowarwick.com

USA
SECO/WARWICK Corp.
P.O. Box 908
Meadville, PA 16335-6908, USA
tel. +1 814 332 8400
fax +1 814 724 1407
info@secowarwick.com
www.secowarwick.com

USA
RETECH SYSTEMS LLC
100 Henry Station Rd.
Ukiah, CA 95482, USA
tel. +1 707 462 6522
fax +1 707 462 4103
leroy.b.leland@retechsystemsllc.com
www.retechsystemsllc.com

GERMANY
SECO/WARWICK Service GmbH
An der Molkerei 15
D-47551 Bedburg-Hau, Germany
tel. +49 (2821) 713 100
fax +49 (2821) 713 10-29
service@secowarwick.com
www.secowarwick.com

CHINA
SECO/WARWICK RETECH
Thermal Equipment Manufacturing
(Tianjin) Co., Ltd.
7B Second Xeda Road
Tianjin, China 300385
tel. +86 22 238 28 300
fax +86 22 238 28 305
d.rabenda@secowarwick.com.pl
www.swretech.com.cn

INDIA
SECO WARWICK Allied Pvt. Ltd.
5th Floor, Amfotech It Park
Road No. 8, Wagle Estate
Thane (W) - 400 604, India
tel. +91 22 6730 1400
fax +91 22 6730 1488
allied@alliedfurnaces.com
www.alliedfurnaces.com

BRAZIL
SECO/WARWICK do Brasil Industria
de Fornos Ltda.
Parque Industrial II
Jundiá, SP - Brasil
CEP: 13213-170
tel. +55 (11) 3109-5900
fax +55 11 4525-1047
engefor@engefor.com.br
www.secowarwick.com

RUSSIA
SECO/WARWICK Rus
Pyzhevskiy pereulok, bld 5/1,
office № 400
119017 Moscow, Russia
tel. +7 499 788 9721
moscow@secowarwick.com.pl
www.secowarwick.com

BELARUS
SECO/WARWICK OOO Minsk Office
8 Mielnikajte str., office 26
220004 Mińsk, Belarus
tel./fax: + 375 17306 23 71
secom@infonet.by
www.secowarwick.com