

QUALITY & TECHNOLOGY
HEAT EXCHANGER ALUMINUM





TWO EUROPEAN ROLLING SITES

KOBLENZ – Founded in 1964, the site has an area of approximately 31,000 m² (37,080 yd²) and features state-of-the-art processing facilities, including a powerful aluminum hot rolling mill in Europe, enabling complex and flexible heat exchanger materials.

The plant has its own cast houses, recycling facilities and a modern cold rolling mill for the production of coils down to 0.20 mm (0.008”) gauge. Koblenz has the capacity to produce approximately 150,000 tons of semi-finished products per year.

It supplies heat exchanger customers globally and also supplies the aerospace, automotive, defense, marine and commercial industries – these diverse markets provide Koblenz with a broad knowledge of different customer applications and requirements.

DUFFEL – Founded in 1946, the site has an area of approximately 73,000 m² (87,310 yd²) and also features state-of-the-art rolling and extrusion facilities, including a continuous annealing line with pre-treatment (CALP) and the widest aluminum cold rolling mill in Europe, to ensure high surface qualities, weight saving and design freedom for their customer products.

Duffel has the capacity to produce approximately 240,000 tons of aluminum semi-finished products per year and also includes all the relevant support installations for heat exchanger materials, such as casting, annealing, slitting and packaging lines.

CONTINUITY OF SUPPLY
Aleris has two powerful rolling mills in Europe for heat exchanger materials and the opportunity to produce complicated brazing materials at two sites, offering unparalleled support & back-up facilities to its customers.





innovation

ALERIS R&D AND ITS IMPORTANT ROLE

R&D plays a key role in the continuous improvement of our products and processes, and helps maintain Aleris' position at the forefront of technology in terms of customer quality, cost and environmental concerns.

RESOURCES – R&D is a collective exercise based on a close cooperation between our customers, our R&D teams and plants. We operate a two phase R&D system with blue skies internal R&D for long-term developments, combined with plant based application and innovation for customer specific support. Our focus is to provide solutions that add value.

Our central R&D conducts fundamental work in the areas of alloy development, formability, joining, fatigue, corrosion, simulation and modeling. It has access to state-of-the-art experimental facilities including pilot casting, laboratory rolling, mechanical testing, heat treatment and extensive material characterization skills. These highly qualified researchers work closely with customers to respond to their needs and increase customer satisfaction.

To provide direct support for product development, Aleris has a heat exchanger laboratory in Koblenz capable of brazing from small-scale to full-scale components.

KEY EQUIPMENT

- Vacuum brazing furnace; working dimension: 500 x 500 x 500 mm (19.7 x 19.7 x 19.7")
- Controlled Atmosphere Brazing (CAB) furnace; working dimension: 500 x 500 x 500 mm (19.7 x 19.7 x 19.7")
- Glass tube brazing furnace
- Cleaning and fluxing stations
- Corrosion testing facilities including SWAAT and other additional accelerated tests

This dedicated equipment, coupled with the experience within Aleris, provides complete customer technical support service, which can be used to investigate and optimize all key aspects of heat exchanger manufacture.

NON-AUTOMOTIVE HEAT EXCHANGER SUPPORT

– It is a strategic goal to provide all of our customers with comprehensive engineering support. We can provide technical consulting, product and material training and problem solving in the field, all based on Aleris' brazing experience in many different global industries. This support can include the provision of suitable trial materials and lab. support. We can help you develop brazing material solutions, use new technologies and processes to meet your specific product and requirements.

Whatever your level of experience in the brazing of aluminum heat exchangers, we can help advise you on the process itself and alloy development / selection procedures.

We have a range of standard trial materials that can be offered at short lead-times. Please contact us to discuss further.



QUALITY IS OUR BRAND

MATERIAL VALIDATION – Quality is an essential element of our company policy. Our objective is to continuously improve the quality of Aleris' products and services to fulfill all customer requirements. This is supported by documented quality principles implemented across all operations and known at all levels within our company. First established in 1979 based on the requirements of the aerospace industry, our quality systems are always been updated and expanded in scope, taking into account our customer's continuously rising quality standards as well as legislative and regulatory changes.

OUR QUALITY PHILOSOPHY IS "ZERO DEFECTS" – Process controls ensure that our production takes place under controlled conditions. Quality inspections are carried out in all Aleris production facilities. In-house laboratories use state-of-the-art equipment to control the composition of alloys and their mechanical performance. Certified external testing laboratories can also conduct testing on our behalf according to national and international standards, if required.

ROLLING MILLS IN EUROPE

GENERAL

- DIN EN ISO 9001
- ISO/TS 16949

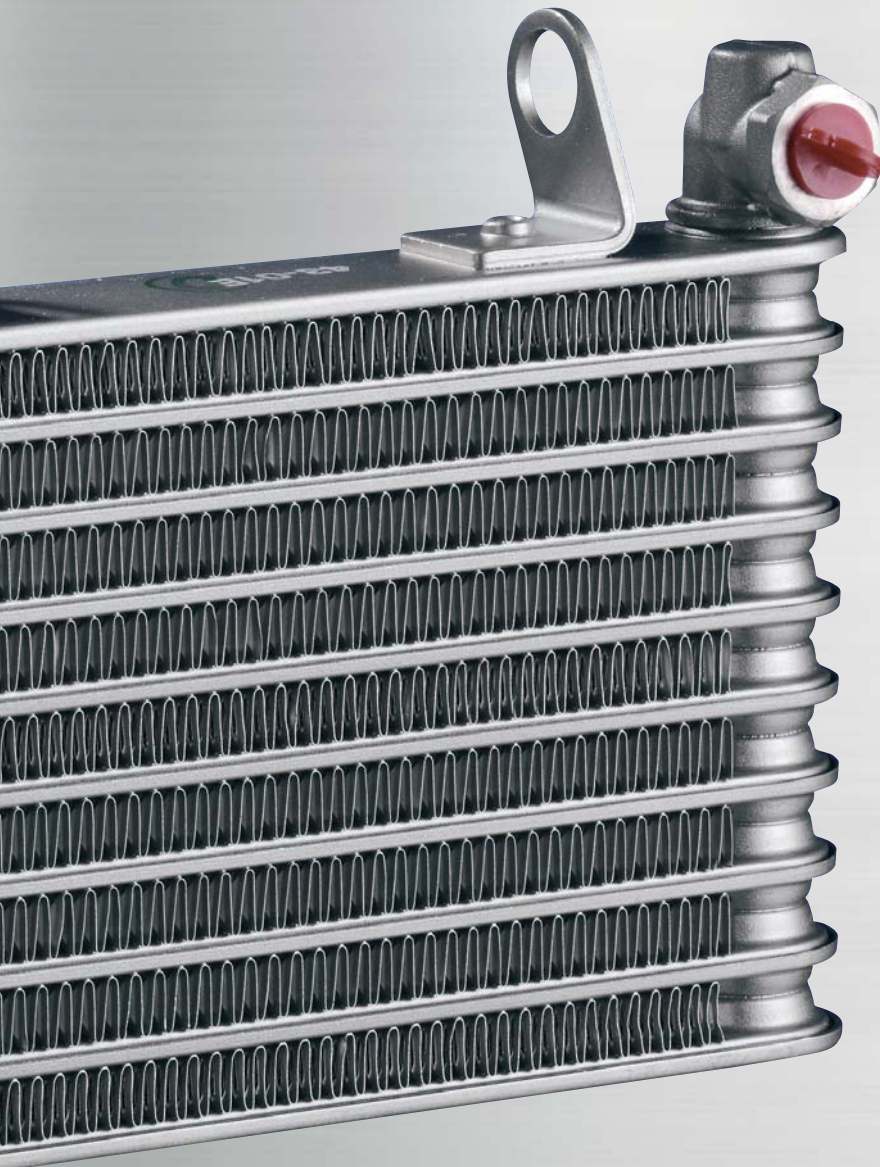
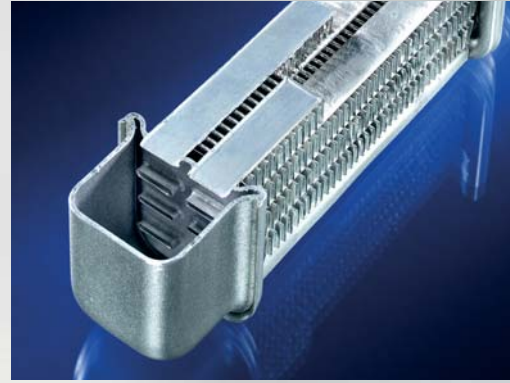
ENVIRONMENT

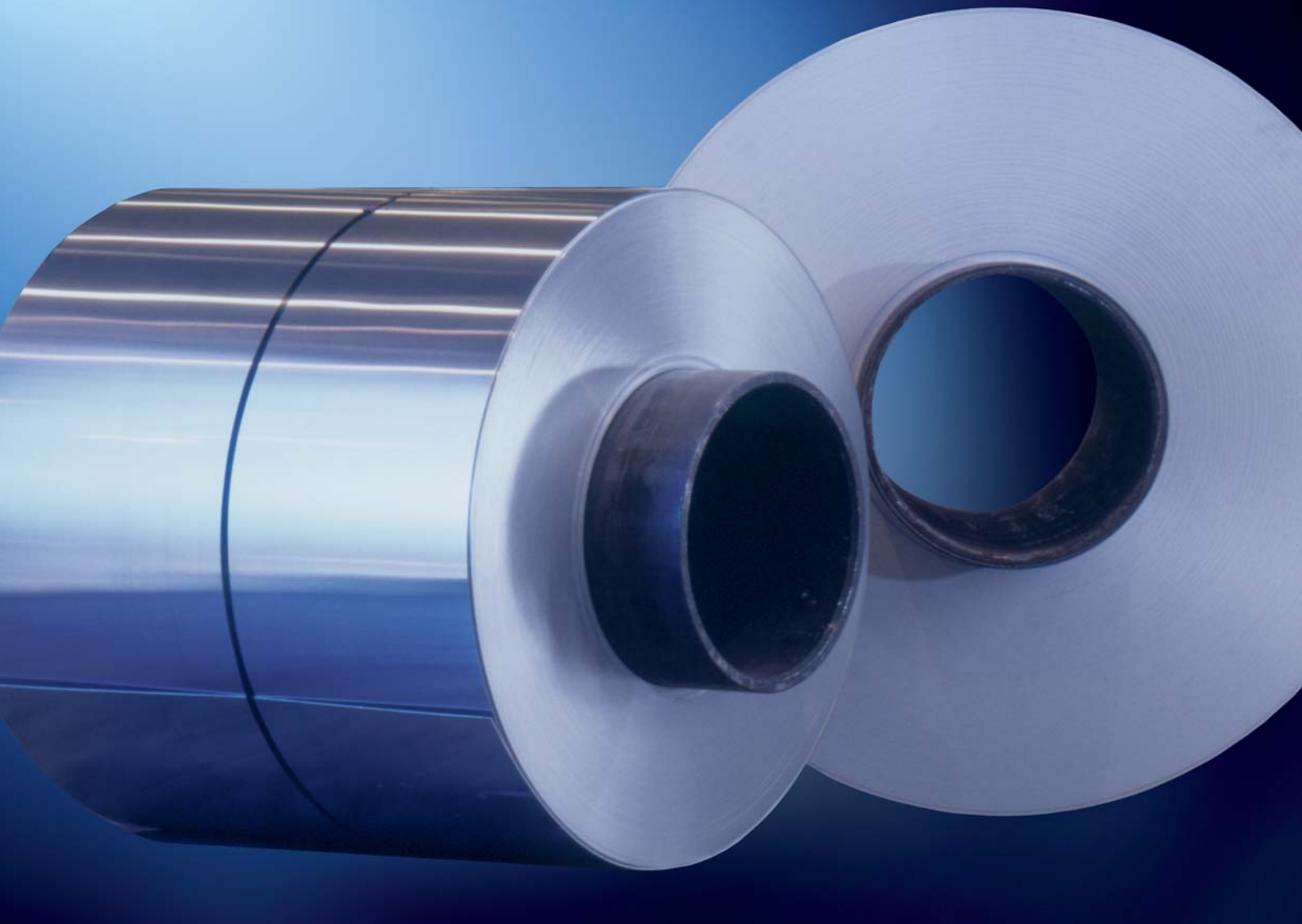
- DIN EN ISO 14001
- EMAS

PRESSURE EQUIPMENT

- AD - 2000
- EN 12392
- Pressure Equipment Directive 97/23 EC





**Global Headquarters**

Aleris International, Inc.
25825 Science Park Drive
Cleveland, Ohio 44122 · USA
T +1 216 910 3400
info@aleric.com

European Head office

Aleris Switzerland GmbH
Balz Zimmermann-Straße 7
8058 Zürich Airport · Switzerland
T +41 44 828 1400
info.europe@aleric.com

www.aleric.com

Plant Koblenz

Aleris Rolled Products Germany GmbH
Carl-Spaeter-Straße 10
56070 Koblenz · Germany
T +49 261 891 7479

Plant Duffel

Aleris Aluminum Duffel BVBA
A. Stocletlaan 87
2570 Duffel · Belgium
T +32 15 30 2111



Download any QR reader and scan.
Charges may apply.

Pictures used by courtesy of
Behr GmbH & Co. KG, Haugg Kühlerfabrik GmbH
and Modine Manufacturing Company.

© 2014, Aleris Corporation
Issue 5/14 · 1st release