

WORLDWIDE PARTNER OF THE RAILWAY INDUSTRY



ON TRACK FOR YOUR SUCCESS





The global railway network is long enough to travel to the moon and back twice! This impressive length demonstrates how our world is linked together by rail-based vehicles. These dimensions clearly illustrate the demand for advanced, environmentally responsible, safe and comfortable mobility and for fast, efficient transportation of people and cargo.

With our products and services, we ensure that our customers all over the world can meet the increasingly complex requirements in the global railway industry. Based on 120 years of experience, we provide support for your success with outstanding quality, the highest degree of precision and the best service, and by moving into the digitalization of important processes, we are already creating the technologies of the future!



Dr. Hans-Jürgen Mundinger Managing Director (CEO) Dr.-Ing. Martin Niederkrüger Managing Director (CTO)



OUR MISSION

BETTER RAILWAY TRACKS, HIGHER COMFORT, GREATER SAFETY.	PAGE	4/5
YOUR COMPLETE PACKAGE EVERYTHING FOR YOUR TRACKS.	PAGE	6/7
THE FUTURE IS DIGITAL THE DIGITALLY CONNECTED WORK SITE.	PAGE	8/9
BENEFITS AND PORTFOLIO CONSTRUCTION, MODERNIZATION, MAINTENANCE.	PAGE	10/11
GOLDSCHMIDT WORLDWIDE THINK GLOBALLY, ACT LOCALLY.	PAGE	12/13
A FUTURE WITH TRADITION OUR ROOTS, OUR ASPIRATIONS.	PAGE	14/15



The most advanced and future-oriented technologies make it possible: Greater cost-effectiveness and increasing earnings for you and your customers, greater safety and last, but not least, the best traveling comfort possible on rails – these are the parameters and goals that motivate us and our work every day.





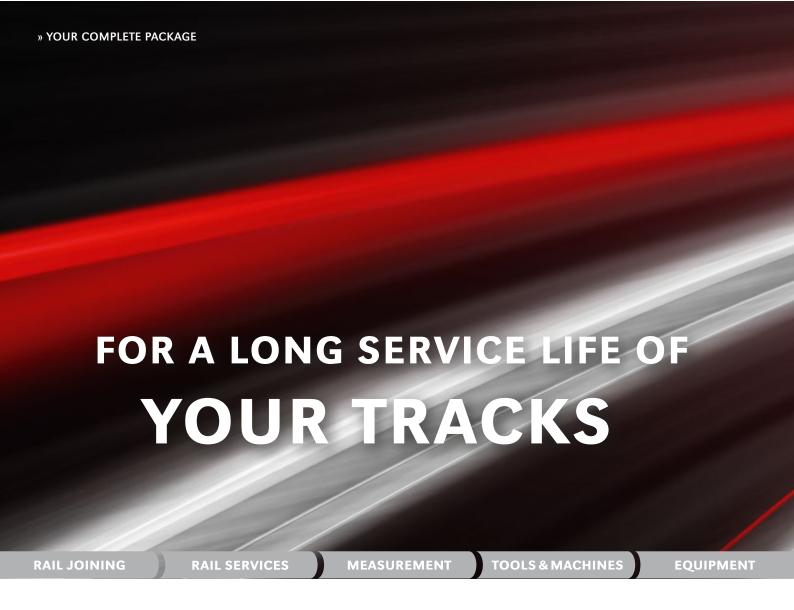


OUR MISSION: YOUR SUCCESS

The invention of the THERMIT® process for continuously welded tracks in 1895 started the success story of our patented technology, which has lasted to this day, and which has driven the development of rail-based transport forward ever since. This advanced experience in the railway sector guarantees you the highest degree of quality and the best service. In addition to this expertise, our complete services for the entire railway industry as well as our innovative, sustainable ideas for advanced technologies with digital interfaces in all key processes make us your number one choice.

For this reason, the Goldschmidt Thermit Group is already developing the digital work site of the future, both together with and for our customers. In doing so, we are again setting impressive and pioneering standards within the history of railway construction.

... WORLDWIDE!

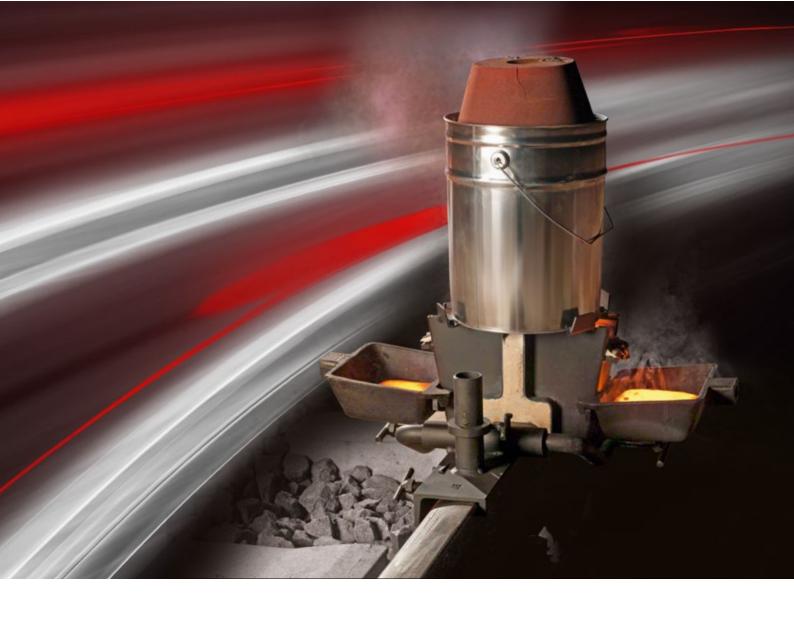


Take advantage of a product portfolio designed to meet your needs exactly! For new construction, maintenance or modernization – you can rely on our experience and successfully extend the lifecycle of your high quality railways.









YOUR SUCCESS IS OUR BUSINESS

Whether for high-speed, cargo, heavy haul, tram or underground: as a worldwide recognized and proven supplier, we offer products and services to meet every railway need in the areas of Rail Joining, Rail Services, Measurement, Tools and Machines, and Equipment. This way you get the best for your tracks from a single supplier and always state of the art. Many patented innovations demonstrate that the continuous development of existing as well as new products and services for railway track systems of all types form the foundation of our shared success.

In this way, taking pioneering steps into the digital work site is the logical consequence of our dedication to research and development. In the future, more and more processes and tools will be connected so that they can communicate intelligently with each other to achieve the highest degree of precision, quality, efficiency and comfort in new construction and maintenance. Take advantage of this expanded, unique product and service portfolio for greater safety, reliability and availability for your tracks and discover new potential for added value together with us by digitalizing work processes in all facets of the railway infrastructure.



THE DIGITAL WORK SITE: MODERN, INTELLIGENT, CONNECTED.

It is no longer possible to imagine modern, networked business without digitalization. New standards in quality, safety, transparency and efficiency have increased requirements for the construction and maintenance of railway tracks. In this area, the Goldschmidt Thermit Group sees itself as a pioneer in the service of our customers, enabling progress and growth through the digitalization of work processes.











The automatic recording and processing of data in real time will enable highly complex sequences at the work site to be monitored with a single finger: Our customers can record, check and create protocols for relevant measurement data for key process parameters directly with smartphones or tablets easily and securely by using an app. In addition, the data can be compared and safely archived. Intelligent control units with digital interfaces allow for sustainable improvement of the quality of the welding processes used for tracks and extend the service life of the rail infrastructure. The implementation of these digital systems in the welding process enables easy, reliable and direct access to databases with reference parameters for many welding processes.

Moreover, in the future digital error analysis will allow to provide for the first predictive, intelligent infrastructure management and a reliable, automated wear forecast. And not only that: the digital networking, control and monitoring of tools, processes and production results at the digital work site means an advancement in quality and productivity that is simply a pleasure!

THE INNOVATION LEADER WELCOMES YOU

Because the companies of our globally operating group are networked, the resulting worldwide strength enables us to offer all of our products everywhere, adjusted precisely to country-specific requirements.

AN OVERVIEW OF YOUR BENEFITS WITH GOLDSCHMIDT

WHAT

- » 120 years of experience and development
- » Guaranteed quality, thanks to certified international standards
- » Our own innovation department with activities in research and development
- » Continuous product optimization and quality inspection
- » Continually expanding product portfolio
- » Our own expertise in digitalization

HOW

- » A strong, global service network
- » Experienced and appreciated internationally
- » Global positioning, regional action
- » Everything from a single source across the entire lifecycle of your tracks
- » Customized training/seminars, highly professional consultation
- » Continual, consistent and respectful cooperation















RAIL JOINING

- » THERMIT® welding processes for flat bottom rails, grooved rails and crane rails including all consumables and equipment
- » Insulated rail joints for all common rail profiles

RAIL SERVICES

- » Joint welding of tracks and switches (THERMIT® welding, arc welding)
- » Intelligent predictive maintenance of rails and switches
 - Maintenance and repair welding
 - Grinding services
 - Measurement services
- » Grinding Technology
- » Weld tempering of new rails
- » Ballast stabilization and sleeper rehabilitation

MEASUREMENT

- » Measurement devices and services for
 - Longitudinal rail profiles, rail cross-section profiles, track geometry
 - Rail temperature, rail stress, rail defects

TOOLS & MACHINES

- » Machines for track construction and maintenance
- » Special tools for THERMIT® welding
- » Power units (petrol, diesel, electric)
- » Road-rail vehicles for installation, inspection and maintenance of overhead lines, inspection of bridges and tunnels, heavy duty cranes and flash butt-welding machines

EQUIPMENT

- » Rail lubrication
- » Magnetic barrier
- » Switch heating
- » and many more



A STRONG PRESENCE ON EVERY CONTINENT





: EUROPE

Elektro-Thermit GmbH & Co. KG Germany, Halle (Saale)

Form-Thermit spol s.r.o. Czech Republic, Brno

Goldschmidt Thermit GmbH Oficina Ibérica Spanien, Madrid

Goldschmidt Thermit Polska Sp. z o.o. Poland, Toruń Goldschmidt Thermit Railservice GmbH

Germany, Leipzig/Essen

Goldschmidt Thermit Railservice (France) Sarl France, Saint-Ouen-l'Aumône

Goldschmidt Thermit Railservice (Österreich) GmbH Austria, Vienna

Goldschmidt Thermit Railservice (Switzerland) GmbH Switzerland, Zürich **GRAW Sp. z o.o.** Poland, Gliwice

GT-ATS OOO

Russia, St. Petersburg

MÁV-Thermit Kft. Hungary, Erd

SRS Sjölanders AB Sweden, Osby

Thermit Italiana s.r.l. Italy, Rho Milano

Thermit Welding (GB) Ltd. Great Britain, Rainham/Derby





















As a reliable, innovative, global partner of railway operators and the rail industry, we work together with our customers to master all of the challenges of a modern and networked rail based transportation infrastructure. You benefit from our global presence and the efficient cooperation of our group companies.

We have just about 1,000 employees at over 20 locations who ensure that your rail operations are safe, reliable and cost-effective. With the Goldschmidt Thermit Group on your side you will experience our 120 years of expertise and the knowledge of a strong group that takes action both locally and globally.

The rail industry is undergoing change, markets are developing and merging together, and everything is happening at a breathtaking pace – these are the challenges of globalization. Our response is cooperation between dynamic companies: The companies of the Goldschmidt Thermit Group are market leaders in their respective regions – and they make this continuously growing group to your number one choice.

Think globally, act locally.

: AMERICA

Orgo-Thermit, Inc.
USA, Manchester

PortaCo,Inc.
USA, Moorhead

Thermit do Brasil Ind. e Com. Ltda. Brazil, Rio de Janeiro

: AFRICA

Thermitrex (Pty) Ltd. South Africa, Boksburg East

: ASIA

Goldschmidt-Thermit Japan Co., Ltd. Japan, Tokyo

Thermit China Co. Ltd. China, Kunshan

AUSTRALIA, OCEANIA, SOUTH EAST ASIA

Thermit Australia Pty. Ltd. Australia, Somersby/Clontarf

Thermit New Zealand Ltd. New Zealand, Wanganui

Worldwide partners

















FROM CONTINUOUSLY WELDED TRACK TO CONTINUOUS **DOCUMENTATION**

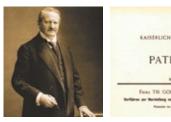
THE FUTURE IS OUR TRADITION

The imperial patent of 1895 and the THERMIT® process for continuously welded tracks was the foundation stone laid by the Th. Goldschmidt AG at the time for the success story of our company, which continues today and which we have been rewriting every day since then with continually new ideas and innovative products and technologies.

In the future, the Goldschmidt Thermit Group will continue to see itself as a driver of innovation in the industry. Building on the experience and successes of the past, we are creating the future of track construction sites, and along with this, the future of all rail related construction, modernization and maintenance processes. With our products and services, our transformational ideas, our continuing curiosity regarding anything new, and the absolute will to provide expert support for our customers, we remain completely in the spirit of our tradition: Goldschmidt Thermit Group - worldwide partner of the railway industry.

1895 **TODAY**

Prof. Hans Goldschmidt Imperial patent no. 96317







THERMIT® welding in Graz, before 1914

Precision measuring device with digital interface







THERMIT® welding in 2016

Digital work site





 $\label{eq:hugo-Licht-Str. 3, 04109 Leipzig, Germany} Phone +49 (0) 341 3559 18-0, Fax +49 (0) 341 3559 18-99 \\ info@goldschmidt-thermit.com, www.goldschmidt-thermit.com\\$