



GOLDSCHMIDT

Smart Rail Solutions

MOBILITY WITH VISION



RAIL SOLUTIONS – ADDED VALUE THROUGH EXPERIENCE

In 1895, Hans Goldschmidt invented the Thermit® process providing the basis for safe, comfortable and efficient railway mobility, which continues to define the international standard for the welding of rails. For the past 125 years, Goldschmidt has been defined by the innovative spirit of the inventor and a tireless pursuit to develop new technology and improve existing solutions.



PRODUCTS AND SERVICES – WITH A VIEW TO THE FUTURE.

Building on this important invention and our passion for innovation, a global group was established, which, in partnership with you, will shape the future of mobility through numerous products and services for long-lasting railways. These range from Original Thermit® welding portions to digital solutions for your railway infrastructure: Customers world-wide depend on the quality and reliability of Goldschmidt, from the trams of Europe to the high-speed trains of China, all benefiting from the same know-how.



FIND NEW SOLUTIONS. SET STANDARDS.

Goldschmidt continuously invests in research and development. In the company's Technology Innovation Center and international Center of Competences, work is carried out on forward-looking solutions which are optimised to meet your special requirements. This results in numerous new developments to enable for example, the digital collection, storage, processing and analysis of track related data. Goldschmidt, with its sustainable, world-class products and customer-focused services, is driving the development of rail infrastructure to enable a long service life for modern transportation systems.



ONE NAME. ONE PROMISE. WORLDWIDE.

Goldschmidt, as a family-owned company, remains committed to traditional and sustainable values and has developed from its core expertise in the field of Thermit® to a comprehensive provider of solutions for railway infrastructure. All around the world, customers benefit from this combined expertise. With its internationally proven know-how and visionary thinking, Goldschmidt is a trusted partner and intelligent problem solver. The focus of our daily work is the success of our customers.



PROVEN PROCESSES

TAKEN FURTHER

Passengers want to reach their destination safely and in comfort.
Companies want to transport freight economically and on time.
And network operators require a railway network with a long service life which can be run profitably without operational restrictions.



SAFE JOINING

The railways are the most reliable, comfortable, economic and ecological way to transport people and goods. They are therefore an integral part of all viable and sustainable mobility concepts. But this requires reliable railway tracks with a long service life. Many railway organizations such as Amtrak in the US, the Chinese National Railway and the light rail networks in Europe operate their trains and trams on Goldschmidt expertise. Around the world, high-speed trains, freight trains, heavy haul trains, trams und underground railways glide over continuously welded track. This is made possible by the Thermit® welding process which enables Goldschmidt to make an excellent connection between almost all types of rail.

Goldschmidt also knows no compromises when it comes to maximising safety. With its insulated rail joints, Goldschmidt offers efficient products that are customised for the specific requirements at the place of use in order to divide the rail network into individual, electrically insulated track sections. In this way, the occupancy of track sections can be reliably determined - a fundamental requirement for the safe operation of networks.





SMART SOLUTIONS WITH ADDED VALUE

The high investment necessary for modern railway networks has to ensure the good, long-term condition of the track and continuous availability. This is the only way to fully exploit the potential offered by rail as an alternative form of transport for people and goods.



SMART INSPECTION

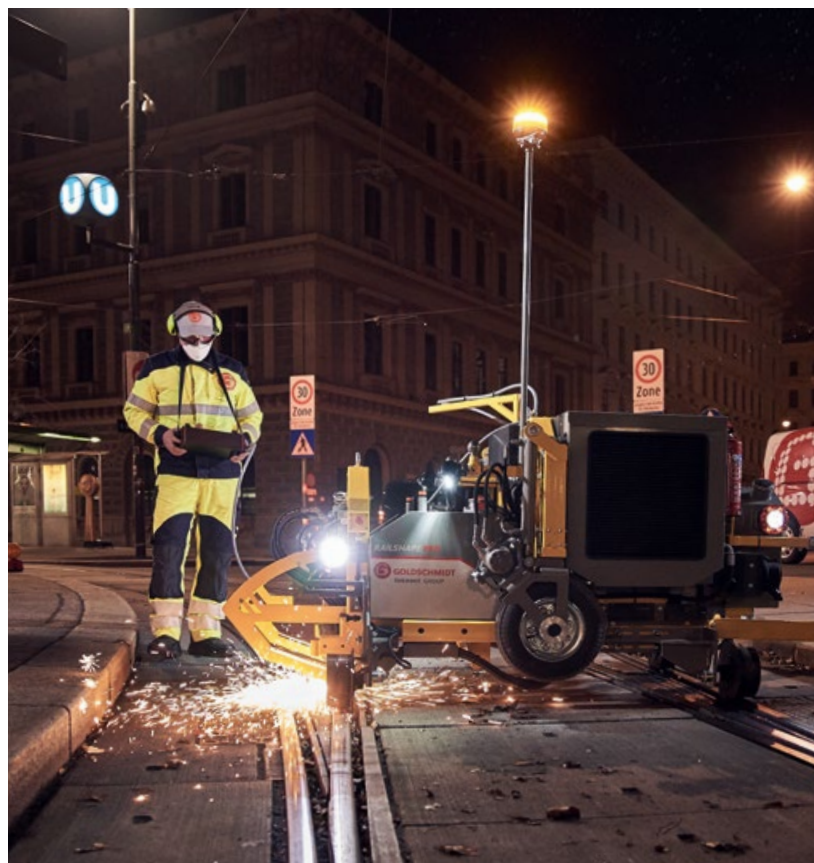
Companies and passengers require reliability and safety. Railways are only able to fulfil their role with regard to the future of mobility if they are and remain stable and available. Consequently, Goldschmidt, with all its expertise, actively promotes intelligent inspection of track conditions. This is the most important preventive measure against heavy wear due to continuous loads and possible rail defects and is the best measure to ensure a long and successful service life of each and every rail.



PREDICTIVE MAINTENANCE

Predictive maintenance sustainably extends the service life of rails and switches for underground networks, tram networks, light and mainline rail networks and reduces long-term operating costs. Goldschmidt takes these tasks particularly seriously, with state-of-the-art, continuously developed and digital technology. The invaluable experience gained from a wide range of projects around the world helps to maintain all types of rail networks in good condition and therefore safeguard your valuable investment.





PRODUCTS AND SERVICES

FOR YOUR TRACK

Goldschmidt offers a comprehensive range of products and services worldwide for the joining of rails, modern construction of railway track, and inspection and maintenance of your track infrastructure. Using our products and services combined with our intelligent digital solutions, we are pushing for the digital future of track.

ORIGINAL THERMIT®

As the inventor and global market and technological leader in the field of Thermit® welding for over 125 years, Goldschmidt has set standards for continuously welded track. We develop, produce and supply all of the associated equipment, machines and materials.

INSULATED RAIL JOINTS

Goldschmidt offers a wide range of insulated rail joints that meet the requirements of regional railways in all countries. These high-quality products contribute towards the safety and reliability of railway networks worldwide.

WELDING

All over the world, rails are welded using Goldschmidt expertise. In addition, Goldschmidt offers a number of processes for the repair and maintenance of rails and switches: for a longer service life and to ensure that all types of trains and trams run quietly and safely and are environmentally friendly.

GRINDING

Using manual and semi-automatic grinding, reprofiling and deburring machines as well as road-rail grinding vehicles, Goldschmidt maintains the quality of your tracks – quickly, efficiently and with precision. Highly trained grinding teams act flexibly and adeptly.



INSPECTION

Goldschmidt offers a comprehensive portfolio for the identification of rail defects, for the evaluation of track geometry, track condition or rail profile. Whether as a hand-held measuring device, integrated into trolleys, road-rail vehicles or inspection trains – Goldschmidt enables you to ensure the safety of your tracks.

ROAD-RAIL VEHICLES

From overhead line installation vehicles and inspection vehicles for public transport companies, to special vehicles for the inspection of mainline bridges – Goldschmidt supplies the right road-rail vehicle for the application.

TOOLS & EQUIPMENT

Goldschmidt offers proven tools and machines for the professional execution of work on railway tracks. The products work efficiently, precisely and offer a high level of operating comfort. Special equipment ensures more safety, availability and comfort during operation.

DIGITAL SOLUTIONS

The digital tools, measurement systems, software solutions, cloud databases, services and interfaces within Dari® enable railway infrastructure operators to manage their tracks in a smarter, more effective and sustainable way.

THE DIGITAL FUTURE –

DATA OPTIMIZING

OPERATIONAL PROCESSES

Since the invention of the Thermit® welding process and continuously welded track, Goldschmidt has driven the development of railbound traffic. Today, this means that track related data is collected, stored, processed and analysed to continuously improve the operation of railways. With its digitalization initiative Dari®, Goldschmidt is pushing for the digital future of track.



A DIGITAL PRODUCT PORTFOLIO

Goldschmidt was the first company to provide digital tools and software solutions to support the execution of the Thermit® welding process, thereby setting new standards in process quality and transparency. Its track inspection tools and systems portfolio is the broadest in the industry not only in terms of technical functionality. Our capability extends from simple manual rail geometry measurement to fully automated high speed rail flaw detection. For the best measurement results, Goldschmidt uses a wide variety of technologies including video inspection, laser-based detection as well as ultrasonic or eddy current measurement systems. These technologies are made available in hand-held devices, as trolleys, or as complex onboard systems in trains.



CONNECTED AS NEEDED

Data collected from digital tools or measurement systems only realises its optimisation potential when analysed and used to improve track quality or track operation. For this, Goldschmidt has developed a variety of tailored software solutions. These include easy to use mobile apps that allow collected data to be quickly visualised and checked against requirements, but also expert systems for big data analysis of captured video using machine learning algorithms. In addition, there are cloud databases for special applications and of course, data collected by Goldschmidt tools or measurement systems can be made available through interfaces for any kind of customer specific IT solution.



DARi[®]

VISIONARY IDEAS NEED POWERFUL SOLUTIONS:
DARI[®] BY GOLDSCHMIDT.

With the diverse elements of our global digitalisation initiative Dari[®] – Data acquisition for rail infrastructure – railway infrastructure operators can manage their tracks in a **smarter, more effective and sustainable** way. Based on a thorough understanding of track construction and maintenance processes, Goldschmidt's **digital tools, measurement systems, software solutions, cloud databases, services and interfaces** are designed to provide optimal support for the relevant technical applications.

Experience new dimensions in track operations. **With Dari[®] by Goldschmidt.**

GOLDSCHMIDT

FACTS AND FIGURES

The Goldschmidt success story began in 1895. Since then the evolution of the company has been characterized by a commitment to quality, a pioneering spirit and innovative strength. The development of forward-looking technologies, holistic expertise and tailor-made products and services enable Goldschmidt to make rails fit for the future.

8,000 customers

Numerous customers around the world trust the technical expertise of our network of experts, the first-class products and services and the global presence of Goldschmidt.

80 countries

Our welding processes are approved in more than 80 countries and homologated with all large rail networks.

Number

Our full service offering for all your track requirements, combined with innovative, forward-looking products and ideas for modern technologies with digital interfaces for all important processes, make Goldschmidt your number 1 supplier.



11,000 = 6,835 mi
km

The length of track welded annually with Original Thermit® corresponds to roughly the distance from the North Cape to the Cape of Good Hope.

125 years

Since the introduction of the Thermit® process for continuously welded track in 1895, our innovative spirit and courage to take the initiative has been part of our company DNA.

> 1,100 employees

The international Goldschmidt brand combines a large number of railway track experts whose common aim is to successfully guide your rail infrastructure into the future.

6 continents

The tailor-made, innovative Goldschmidt portfolio is available on all continents with proven quality.

90 million portions

Continuously welded track is the key to efficient mobility and the guarantor of sustainable, safe and comfortable rail transport. With more than 90 million Original Thermit® portions sold since 1895, Goldschmidt has established itself as the global market leader.



DARi

Various digital tools, measurement systems, software solutions, cloud databases, services and interfaces make our range of products and services more intelligent and more efficient – for a safer and more efficient network operation. A leading innovation that pays off for you!

PROVEN WORLDWIDE –

LOCALLY AVAILABLE

All around the world, Goldschmidt develops mobility solutions for the future together with its customers. The unique global network of experts gives you access to the international range of products and services of Goldschmidt – right where you are, via your local contact person, backed by the power of the entire group.



QUALITY. INTERNATIONAL CONSTANT.

Goldschmidt combines the expertise of its companies to ensure that you have everything you need for the construction, maintenance, inspection and monitoring of your railway network. This unique network of highly qualified experts is the answer to the many varied requirements of rail infrastructure projects. Special expertise, excellent technical equipment and highly qualified personnel allow Goldschmidt to comprehensively carry out a wide variety of tasks with a high level of quality, worldwide.



SYNCHRONIZED WORLDWIDE FOR YOU.

The networked knowledge, global presence, wide range of expertise and vision enables Goldschmidt to plan ahead for you, to adapt solutions to national requirements and provide local support. Goldschmidt stands for excellent quality, first class engineering, visionary decision making and a focus on high standards for durability, safety and efficiency on the railways.



YOUR PARTNER WITH LOCAL EXPERTISE.

Goldschmidt always offers you a personal, competent contact person in your own country. This contact person enables you to benefit from global synergies, local knowledge and from the fact that Goldschmidt is a global company, holding the necessary national certifications to comply with country-specific laws and regulations. Goldschmidt therefore ensures the best, tailor-made solution for your smart and sustainable railway infrastructure.



SMART RAIL SOLUTIONS

Together with you, Goldschmidt masters the challenges of modern, railbound mobility – for safe, sustainable and long-lasting railways of premium quality. As with Thermit®, Goldschmidt is also a pioneer in maintenance, inspection and digitalization and continues to improve processes and extend the lifecycle of railway infrastructure. Goldschmidt benefits from its global expertise and cross-disciplinary thinking to create tailor-made local solutions for you. The global presence of Goldschmidt gives you access to its whole portfolio – with one goal: to lead your railway infrastructure into the future.