



70 YEARS
PARTZSCH

POWER FOR YOUR VISION



70 YEARS FAMILY BUSINESS CRAFTSMANSHIP TRUST PARTZSCH

1954

... is the starting point of PARTZSCH Group's history: a simple announcement informed the public that Werner Partzsch had founded a »Repair workshop for electrical machines and equipment«, laying the foundations for a company group which can today look back over a history lasting 70 years.

The electrical engineer, installer and machine builder settled the company with manufacturing and storage areas in the centre of the Saxon city of Döbeln.

The repair workshop became famous throughout Saxony over the next decades, performing maintenance of small- and medium-power electric motors and generators.

The business grew continuously even under the challenging conditions of the GDR years with their frequent material shortages. In 1980, it counted seven employees. Already at that time, Werner Partzsch adopted the credo of remaining as independent as possible of external suppliers. The idea to be able to deliver everything to the customers from a single source was born at that time. Today, the extensive in-house manufacturing capabilities are expressed in extensive all-around services. All actions of the enterprise, its management and employees were already at that time characterised by values, such as reliability, honesty, confidence and passion – and have been important pillars of the work of PARTZSCH to date.

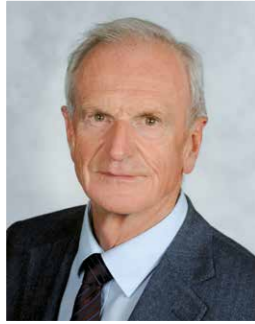
Geschäftseröffnung!

Den Einwohnern von Döbeln und Umgebung gebe ich bekannt, daß ich am 1. Juli ein
**Reparaturwerk
für elektrische Maschinen u. Apparate**
eröffnet habe - Ich werde jederzeit für eine saubere und zuverlässige Arbeit bemüht sein

WERNER PARTZSCH
Elektro-, Installations- und Maschinenbauermeister
Döbeln, Leipziger Straße 1 - Fernruf 23 36



1989



... marked the arrival of the second generation of the Partzsch family at the helm. Thomas Partzsch, the son of Werner Partzsch, born in 1947, had already been working at PARTZSCH under the heading of his father for quite some time – and finally took it over in the year of the political turn in Germany in 1989. Before that, he graduated as an electrical engineer.

1992

In this year, PAMO Reparaturwerk GmbH was founded in Bitterfeld, complimenting the product portfolio with expertise in direct current.

1993



The company's continuous further development with its vision to deliver everything from

a single source also characterised the following years. The new conditions of the Federal Republic of Germany provided further opportunities for growth. In 1993, the company moved to the industrial area of Döbeln-Ost where the first halls were built. A total of 20 halls have been erected to date, giving the industrial area of Döbeln a characteristic appearance.

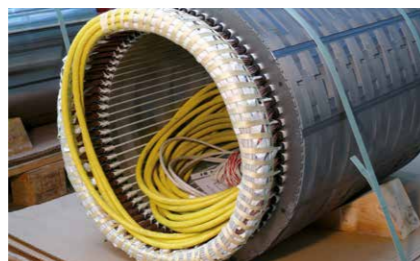
1995



... was the year when the first vacuum-pressure impregnation (VPI) winding was produced – a real milestone. The high-voltage machines produced in the past only used the resin-rich technology. Thanks to the VPI technology, the production has become more flexible, resulting in cost reduction for the customers.

1996

... was the year when the first motor with converter-compatible winding was built.



Also during the 1990s, the manufacturing of special wires was added to our production portfolio. Today, about 10,000 tons of wire per year are manufactured and refined at PARTZSCH.

2000

The service offer in the dynamically expanding sector of wind turbines was completed by PARTZSCH Windgeneratoren Service in the year 2000. Now, this part of the company is specialised in on-site maintenance and repair.

2002



... was the year when the company celebrated the beginning of the Roebel bar and stranded wire production.

2003

The technology advances continued – and so did the development of the PARTZSCH Group. The first laser cutting system and associated qualifier were put into operation in 2003.

2011



... was the year when the balancing and overspeed test system for rotors up to a weight of 32 tons was completed. Today, it is one of the central systems of the PARTZSCH Group.

2015

... was the year when the replica of a 7.8 MW motor was produced. To this end, the dimensions of the original machine were recorded. This machine has been the largest replica of a complete machine ever in the company history.

2016



... was the year of the first generator ever to be manufactured entirely in-house: a major success achieved solely with our own resources.

2020

The growth in the field of engineering is constantly growing: the first generator was designed and manufactured wholly in-house in 2020.



2021

Thomas Partzsch hands over the management of the enterprise under the roof of the PARTZSCH Group to an accomplished management team, including his son Christian Partzsch.



2024

Thanks to the consistent development of our services and products of now 70 years, we have become Europe's largest manufacturer-independent repair centre for electrical machines up to 250 MVA. As a family-run full-service provider, we are excited for the future.



YOUR FULL-RANGE SERVICE PROVIDER

ALL AROUND
ROTATING
ELECTRICAL
MACHINES



Your contact persons in the PARTZSCH Group



Christian Partzsch

Management of PAMO Reparaturwerk GmbH



Graduate engineer Thomas Götze

Management of PARTZSCH Elektromotoren GmbH



Remo Nitschmann

Management of PARTZSCH Spezialdrähte GmbH



Graduate engineer Holger Klotsche

Management of PARTZSCH Windgeneratoren Service GmbH

The PARTZSCH Group is not only Europe's largest manufacturer-independent repair workshop for electrical machines up to a power of 250 MVA and a weight of max. 120 t. The engineering and manufacturing of components are also part of our production portfolio. The secret behind our success is the network of strong and independent specialised company units under the common roof of the PARTZSCH Group.

More than 550 employees, an extensive range of equipment on an area of 40,000 square metres of production space and extensive manufacturing capabilities are guaranty for excellent full service and even allow for individual wishes to come true. Our customers always benefit from outstanding quality and short delivery times – everything from a single source.

SATISFIED CUSTOMERS ARE OUR DRIVE

A good relationship with our customers at eye level – many of them have already been connected to the PARTZSCH Group for decades – is a central module of successful cooperation. High-quality customised solutions carefully targeted at the budget and timescale contribute to utmost customer satisfaction. Our customers benefit from our extensive manufacturing capabilities and the expertise gathered over many years.

As a full-service provider for electrically rotating machines in the range between 100 kW and 250,000 kVA and up to a weight of 120 t, in addition to manufacturer-independent and fast repair service, we also offer numerous products ranging from special wire via core assemblies, stator and rotor windings to reverse engineering and customised synchronous generators. In the background, we are continuously working on the improvement of all products and services as well as on the development of new solutions.

Especially high demands are placed on electrical machines for use in explosive atmospheres. We support our customers with long-term expertise and careful maintenance of motors up to 15 MW both in potentially gas- and dust-explosive atmospheres.





QUALITY AND INNOVATION

FOR MORE THAN 70 YEARS



Quality is paramount at PARTZSCH

Whether as regards to engineering, manufacturing of wires, motors and generators or on-site service: the complete value chain is characterised by maximum possible precision and reliability. We offer our customers everything from checking via repair to commissioning – complete all-around service they can rely on – even in potentially explosive atmospheres.

Our state-of-the-art machinery base

The production of the PARTZSCH Group possesses pyrolysis furnaces, impregnation systems, a high-speed balancing and overspeed test system, laser and waterjet cutting systems, as well as an extensive test bay. Excellent quality in the complete process chain is top priority for our employees. To this end, they regularly take part in internal and external training measures.



We hold official proof of our quality aspirations

The entire PARTZSCH Group is certified in accordance with the international DIN EN ISO 9001 standard. Accredited certificates and internal monitoring and inspection processes document the continuous monitoring, certification and further development of the PARTZSCH Group.

Innovation is our motor

Together with our strong partners, our engineering department develops new and customised solutions to meet the fast-changing requirements of the market and of the customers – and even surpass them.

The use of the latest technologies and machines underpins the innovative strength of the entire PARTZSCH Group. Therefore, specially developed, patent-pending products are created. In short: solutions that meet our customers' individual requirements.



OUR EXPERIENCE – YOUR ADVANTAGES

Already more than 1,500 enterprises from various branches trust the PARTZSCH Group and its decades of experience, expertise and extensive manufacturing capabilities. We accompany you

with our branch competence from planning of the first project to the commissioning and maintenance of your machines and systems – even far across the borders of Germany.



Industry



**Naval technology
and ship engineering**



**Rail
transportation**



**Municipal utilities
and power stations**



**Hydroelectric and
wind power**



Lift drives



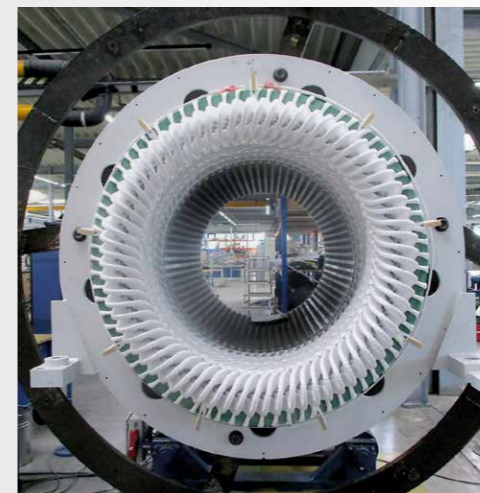
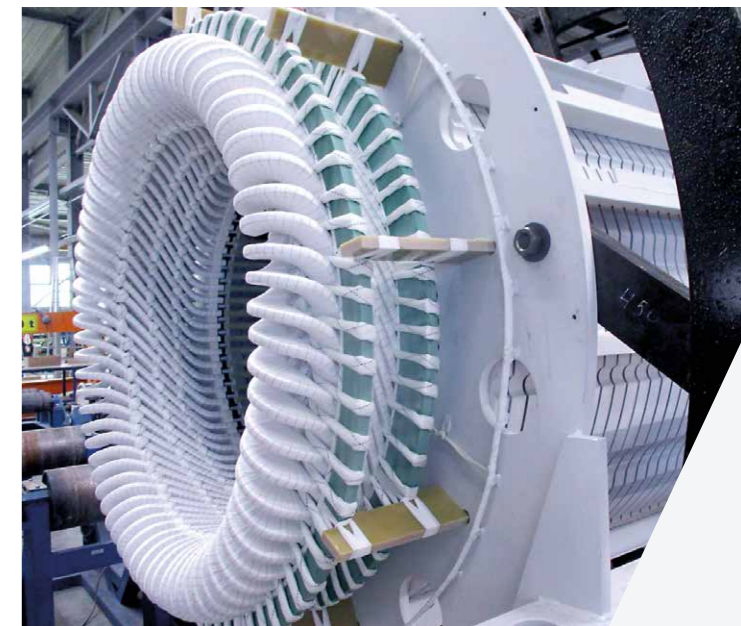
**Accelerator
magnet technology**

Selected references from various branches

A few projects stick in memory more than others, thanks to their complexity, the required team power and expertise. In the following, we would like to introduce a few selected references of our customised solutions.

Repair of an asynchronous motor

In 2022, a customer from the Norwegian steel industry commissioned us with the repair of an asynchronous motor with a power of 12,500 kVA at a voltage of 10,000 V and a speed of 1,500 rpm. The diagnosis revealed that the sleeve bearing, converter, anti-condensation heatings and further parts were defective. The challenges in procuring spare parts were great. Nevertheless, after a successful no-load test, we were able to deliver the 27t engine back to the customer only six months later.



Repair of a black-start capable synchronous generator for a chemical site

Chemical sites are home to a broad diversity of advanced technology enterprises – from manufacturers to research facilities and service providers. CURRENTA GmbH & Co. OHG manages and operates several chemical sites in Europe and supplies the settled production plants with the required types of energy all around the clock – in addition to the required infrastructure. Primarily for critical applications, safe operation and reliable energy supply are imperative.

In case of power failure, the power supply has to be recovered as quickly as possible to ensure safe operations of chemical plants. The energy required to start up a power supply station and guarantee normal operation can be provided by black-start capable industrial generators.

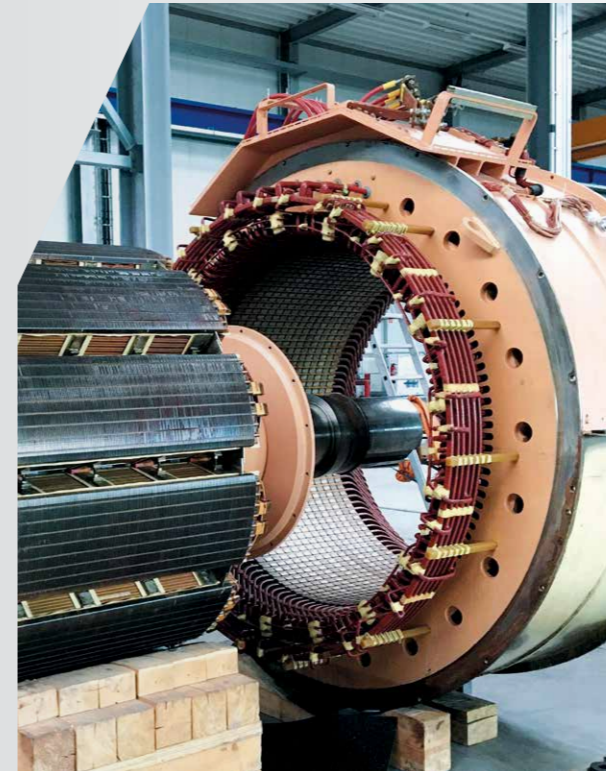


In 2022, CURRENTA commissioned us with the general overhaul of a black-start capable synchronous generator. The nominal power of the generator was 32,000 kVA at a voltage of 10,500 V and a speed of 3,000 rpm. In addition to the general overhaul, including rotor balancing, we performed the re-resination of the feather-keys and coated the winding with protective varnish. We reworked all spacers on the rotor and also coated them with protective varnish. Furthermore, we installed new spacers, new silicone toroidal seals and fitted bandages. Subsequently, we delivered the repaired synchronous generator with a weight of 51 tons to the customer and performed the assembly and final test on the site.



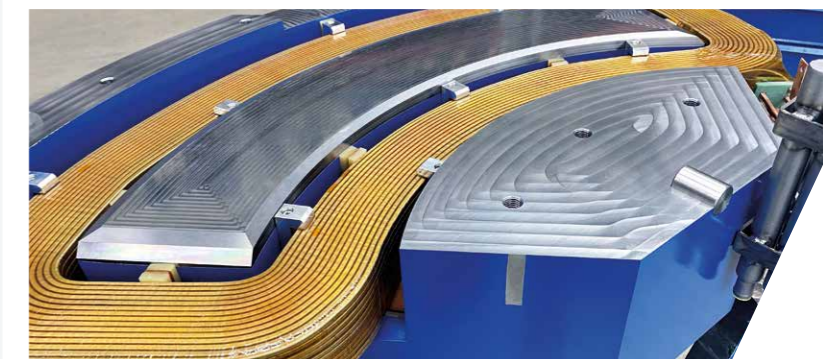
Express repair after a generator fire

After a generator fire on a ferry, the repair of the synchronous motor had to be completed as quickly as possible. We transported up the generator with a weight of 34 tons from the shipyard in Denmark to our works in Döbeln. In addition to the special transport, we performed the disassembly, cleaning and drying of the main components, electrical and mechanical checks of the bearing components (bearing shells, shaft ends), reassembly and test run. Despite the tight time schedule, everything went according to plan, and the generator could be returned after one week.



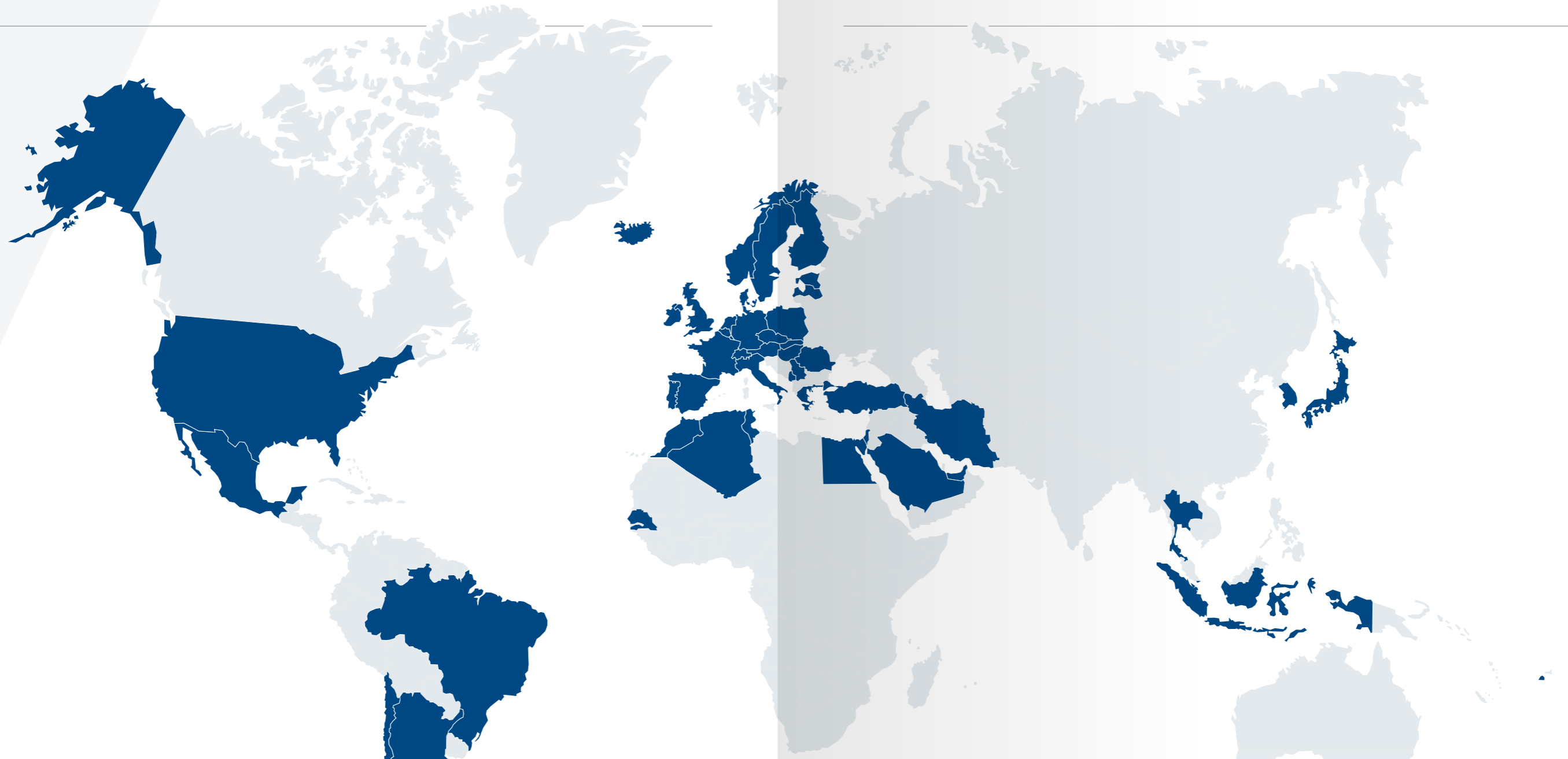
Replica of a dipole magnet

It was a key challenge to reproduce a complete dipole magnet with a weight of 4,200 kg. Due to the missing construction drawings, all dimensions were recorded on site and on the original magnet.



Complete repair of a railway generator

We performed a complete repair of a railway generator BR223 (single-bearing machine) with a power of 2,072 kW and a speed of 1,800 rpm within two weeks. This included the replacement of the stator and field winding and of the laminated core, repair of the exciter stator and exciter rotor, as well as the test run.



STRONG AT HOME IN GERMANY

*RELIABLE SERVICE
THROUGHOUT
THE WORLD*

Our engineers solve any problem on your motor or generator directly on your own premises – whether in Germany, Europe or elsewhere. State-of-the-art test and measuring equipment in mobile use is taken for granted by us to be able to diagnose and, where necessary, gauge your machines completely.

We perform on-site overhauls, assemblies and disassemblies on generators in air-cooled design up to 250 MVA. When performing general overhauls or repairs, our engineers coordinate the service teams. This includes all on-site erection work, crane arrangements, and transport of

the machines for repairs, as well as subsequent reassembly and adjustment of all overhauled system parts. The all-around on-site service of PARTZSCH allows complete maintenance, repair and commissioning – everything from a single source.

In addition to our own manufacturing in Germany, we also rely on a comprehensive network of partners in many countries all over the world.



OUR ROOTS, OUR RESPONSIBILITY

Founded in Döbeln, and still at home here, the PARTZSCH Group is deeply rooted in its native Saxony.

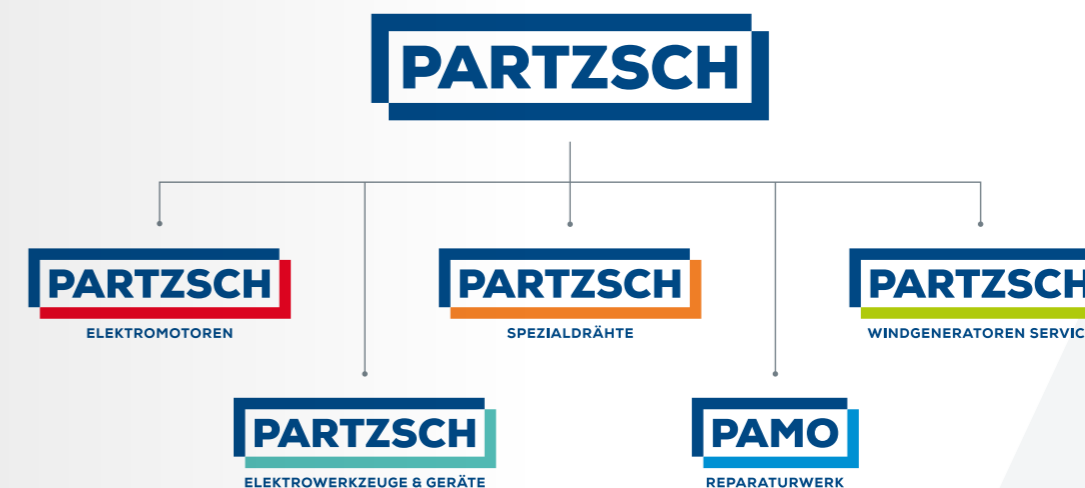
The satisfaction of our employees is paramount to us. We see it as a primary task of the PARTZSCH Group to encourage the development of our employees, to foster their health and safety and to integrate them into decision processes.

The majority of our employees live in the surrounding region. Also, we have been maintaining close partnerships with many regional enterprises for some years. Reflecting this attachment to Döbeln and its people, we are active in numerous societies and associations. As a third-generation family-run business, we acknowledge our responsibility not only towards our employees, but also towards our local region, and do all we can to help shape its positive future.

AN OVERVIEW OF THE PARTZSCH GROUP

Five strong specialised companies under a common roof – that is the secret behind the PARTZSCH Group. Once founded as a repair workshop, we now offer complete service for rotating electrical machines. Our customers benefit from the extensive manufacturing capabilities and comprehensive expertise of our more than 550 employees.

From the single component to the complete drive: we also let your most complex wishes come true. To this end, the individual units of the PARTZSCH Group work hand in hand to guaranty seamless and smooth manufacturing and assembly processes. Tailored solutions for our customers are a matter of course for us thanks to flexible capacity utilisation in the production.





PARTZSCH Group

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