

With over 110 years of experience in the field of rotating machinery, Converteam offers a full range of services to ensure the sustainability of our equipment. The Service team in Nancy offers our customers support and expertise for spare parts, repairs, field service, training and maintenance.



Converteam Nancy factory has an area totally dedicated to After-sales and Maintenance

Spare Parts

For all the equipment manufactured by Converteam (under various historical brands), we supply **complete spare motors and parts**:

- rotors and stators,
- friction bearings, joints and oil rings,
- heating resistances ,
- water and air cooling towers,

- pressurization units,
- etc.

In Nancy, we have access to **all the designs** of the machines we have manufactured. With the serial number of the relevant machine, we can retrieve the technical documentation and offer you identical spare parts.



The Spare Parts Department covers the supply of both spare parts and complete sub-assembled components

We perform OEM maintenance on the machines of our historic brands...



... including from Rugby and Minneapolis locations.



Repairs

We can repair all our **motors and generators (synchronous and asynchronous technologies)** including **Direct Current machines**. We can also repair equipment from other manufacturers.

Factory repairs benefit from the **manufacturer's added value** including access to the full technical documentation and all the resources (design and construction) from the Engineering department.

- **Quality inspections at every stage of the supply chain**, including at our suppliers' sites, ensure compliance with our procedures and standards. They guarantee the high quality of our works as well as the reliability of the machines repaired in our workshop.
- During repairs in our workshop or on site, we can **incorporate our latest technologies and know-how** ensuring an improvement of the

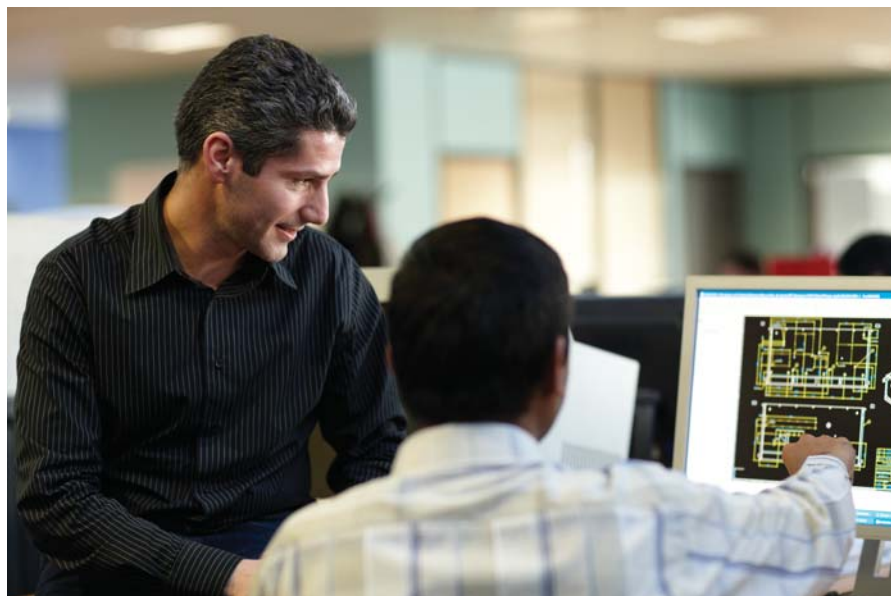


| Stator rewinding

performance and extended lifetime of the machines.

- Our workshop features **an area totally dedicated to Services**, where we can conduct quick expertise. All resources of the factory are also available to perform our works including load testing and balancing operations on balancing

machines or on fully assembled machines.



| Close collaboration between the Services and Engineering Departments means that we can integrate our latest technologies into our after-sales projects

Quality Assurance

The Converteam SAS - Rotating Machines Division's quality assurance system is **certified ISO 9001**. Furthermore, the site has obtained the **quality assurance notification for ATEX and EDF qualification** for nuclear power plants



Our goal is to offer even more efficient, high-performance machines that meet our customers' needs and offer **maximum reliability**.

On-site Interventions and Commissioning

Our teams, who can be assisted by our experts, can travel around the world. Their experience enables them to **optimise field service operations, and thus reduce production downtime to a minimum.**

We cover the following fields of activity:

- supervision of commissioning,
- expertise and on-site assistance (under real operating conditions),
- preventive and corrective maintenance,
- on-site repairs and upgrades.

Our teams are able to perform on-site diagnostic of our equipment including vibration measurement, natural frequency analysis, thermal and electrical measurement, etc.

Training

We can help you **enhance the knowledge of your field staff in charge of the maintenance of**



| Convertteam works at its customers' sites around the world

electric machines. We can perform training in our plant, where they benefit from the experience and skills of our experts from Engineering, Manufacturing and Testing departments.

Practical training on our equipment is a **key component of proper operation and preventive maintenance of rotating machines.**

We can also deliver **training on customers' sites**, as a complementary activity to the commissioning of our rotating machines.

Maintenance Contracts

In order to ensure the sustainability of our equipment and best meet our customers' requirements, we offer a **wide range of maintenance services:**

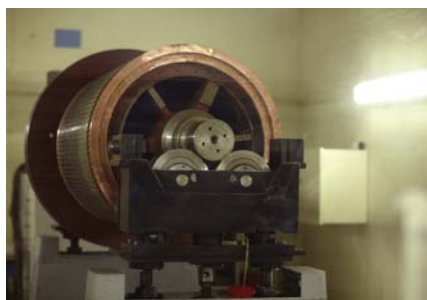
- preventive maintenance (annual, bi-annual or five-year visits),
- hotline and fast intervention,
- corrective maintenance,
- supply and management of spare parts,
- audits, consulting and expertise activities.



| Convertteam offers its customers training to enhance their knowledge of maintenance

Our industrial resources

- **A space dedicated** to after-sales service, with an area of 500m²
- **Lifting: 23 bridge cranes** with a maximum lifting capacity of 200 tons
- **Machining: 2 engine lathes** for the machining of parts up to 2.35 meters in diameter, 7 meters long and 25 tons, from 0.8 to 1,100rpm, and **1 vertical boring mill** for parts 2.25 meters high and 2.55 meters in diameter maximum
- **Balancing: 2 balancing machines** for the balancing of rotors up to 3.30 meters in diameter, 33 tons and 6 meters long, at 4,320rpm maximum
- **Impregnation: 4 autoclaves** for impregnation of parts up to 3.95 meters in diameter, 40 tons and 5.90 meters long. Our insulation system is based on a **VPI process** (Vacuum Pressure Impregnation), and we use **polyesterimide and epoxy resins**
- **Tests: 6 test lines up to 18MW** (2 for synchronous machines up to 60MW, one 1MW line, one 2MW line, one 5.5MW line and one 18MW line) with the possibility of conducting **tests of entire electrical systems** (converter, transformer and motor)



| Balancing of rotors up to 3.30 meters in diameter



| Six test lines, with the possibility of testing complete systems



| Impregnation of parts up to 3.95 meters in diameter and 5.90 meters long



| Lifting capacity up to 200 tons

Converteam SAS
Rotating Machines Division
442 rue de la Rompure
54250 Champigneulle - France
Tel: +33 3 83 38 40 17
Fax: +33 3 83 38 42 93
servicesmotors@converteam.com

France Tel.: +33 1 77 31 20 00
Germany Tel.: +49 30 76 22 0
UK Tel.: +44 (0) 1788 563 563
USA Tel.: +1 412 967 0765
Brazil Tel.: +55 31 3330 5800
China Tel.: +86 21 6414 6080-8000
India Tel.: +91 124 4220 300
Russia Tel.: +7 (499) 270 27 11