EMAS
ELETTROMECCANICA

WITH GREAT MOTORS COMES GREAT RESPONSIBILITY









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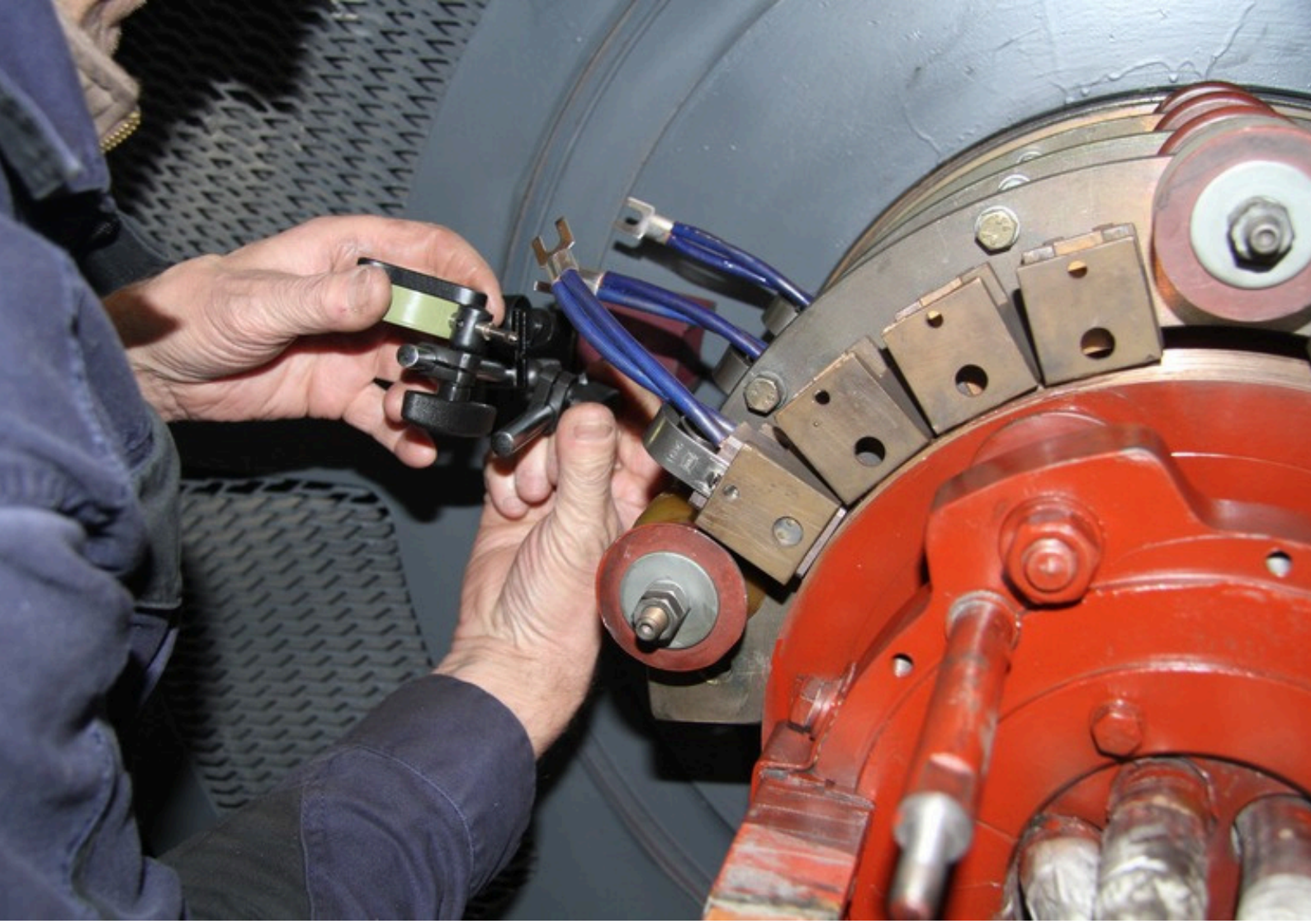
SAFETY IN EXPLOSIVE ATMOSPHERES

Beyond Simple Repair



At EMAS elettromeccanica we know that a large electric machine is the beating heart of a plant.
An unplanned shutdown is not just a technical failure, it is an economic and logistical cost. Here are 5 reasons why you should choose us as your partner:

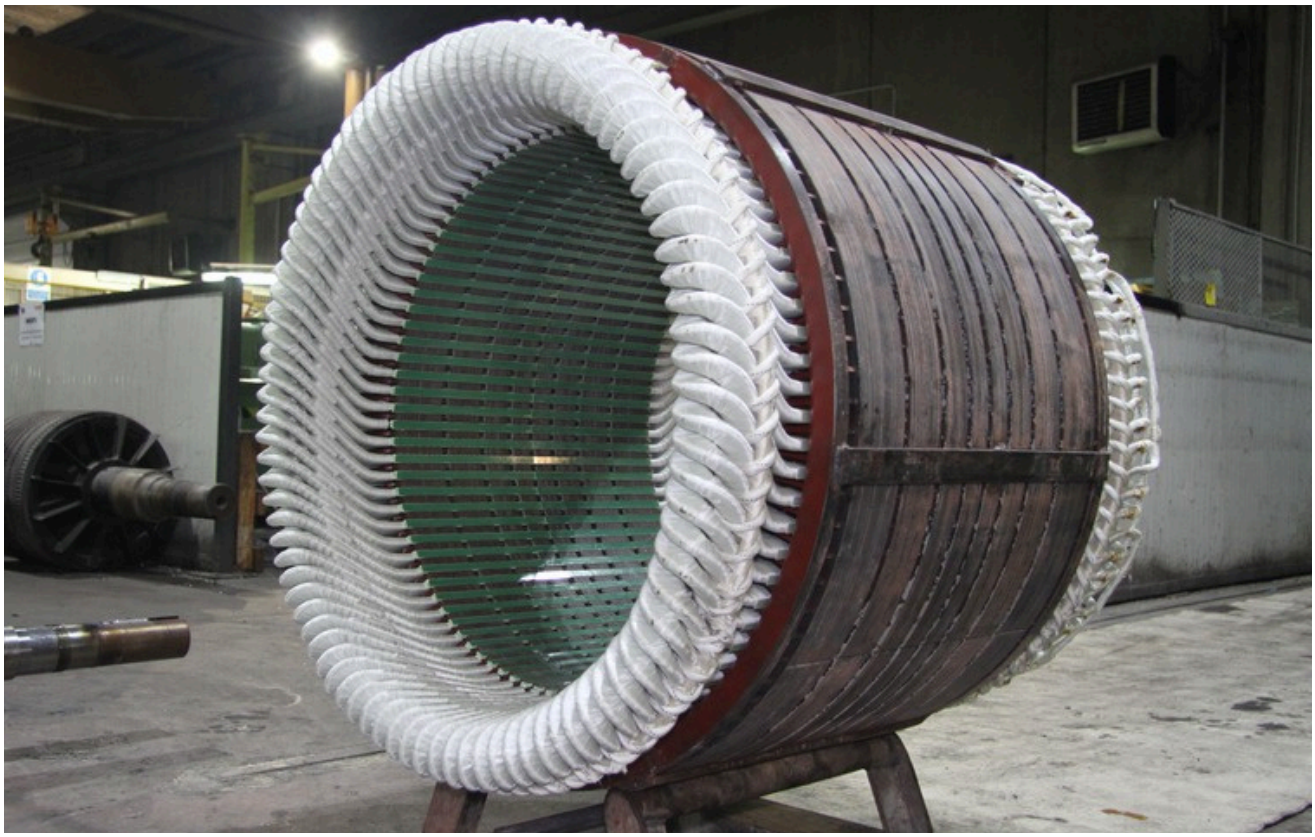
Consolidated Experience: 50+ years of activity in the heavy electromechanical sector.
Tailor-made Approach: Custom solutions for machines out of production or with critical specifications.
Reliability: Traceability of processing phases and fast deliveries in case of emergency.
Quality: Processes certified according to ISO 9001 and EN 60079 (ATEX machine repair).
Testing: Every machine undergoes rigorous testing according to the relevant IEC standards.




CGEE ALSTHOM



Specialized in Medium Voltage and High Power



Managing Medium Voltage requires dedicated infrastructure and specific expertise that EMAS provides to its clients.

Fields of Intervention: Complete overhaul and rewinding of asynchronous motors, synchronous motors and generators up to 12kV.

Heavy Load Handling: Equipped workshop for handling and treating rotors and stators of large dimensions and weights up to 25 tonnes.

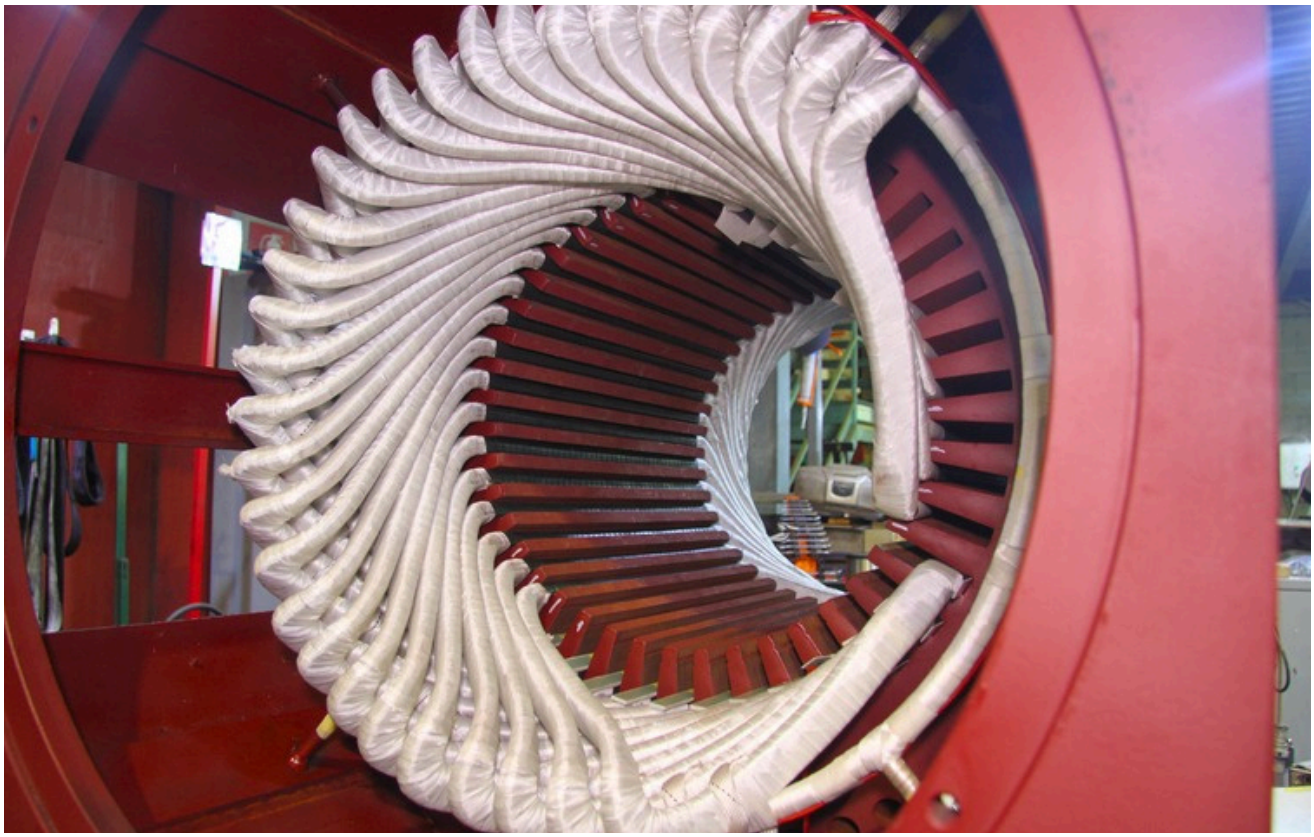
Applications: Power generation, cement plants, steel mills, paper mills, chemical industries, refineries, plastics industries and pumping stations.


ATTENZIONE
CUSCINETTI SENZA OLIO





Cutting-Edge Insulation Systems

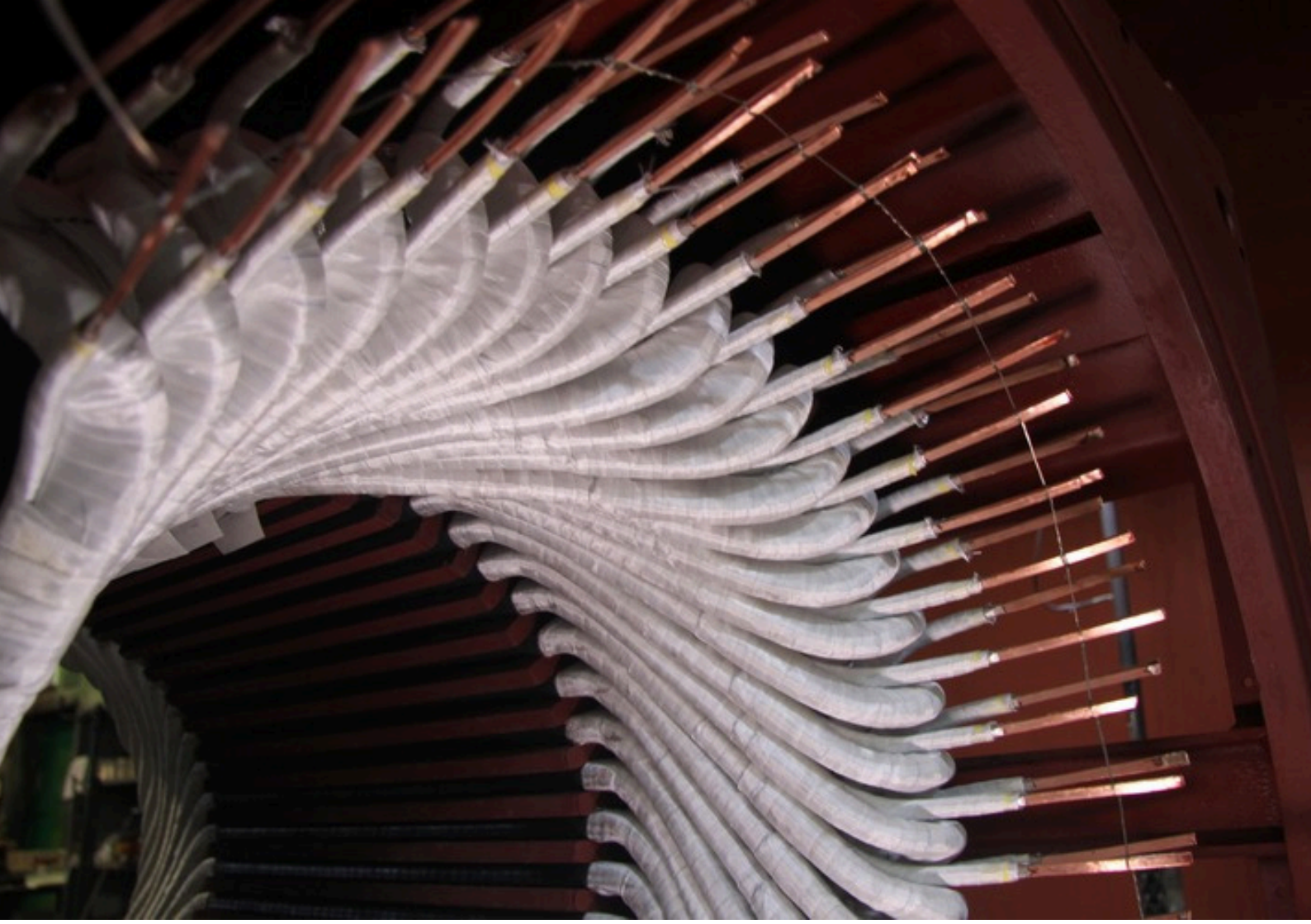


Insulation failure is the main cause of faults in MV machines. At EMAS we regenerate the motor life with superior Class materials.

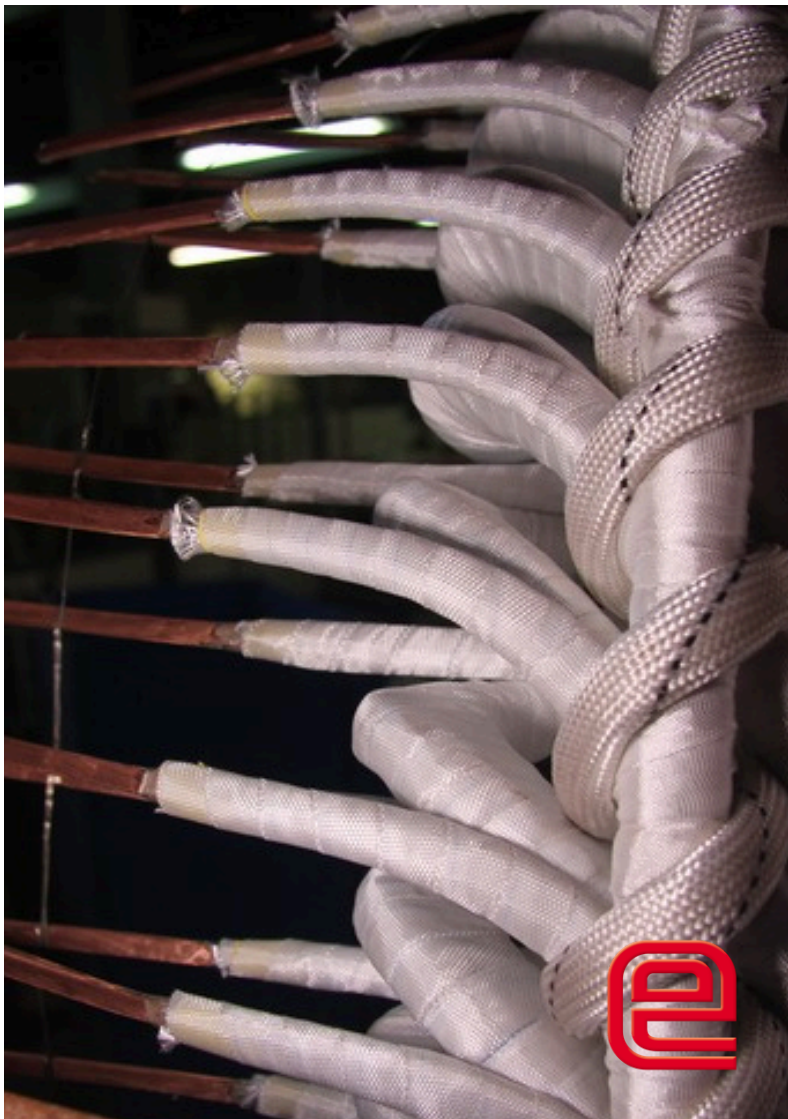
Preformed Coils: Design, manufacturing and installation of windings with VPI technology (Vacuum Pressure Impregnation).

Class H Insulation: Thermal and mechanical resistance guaranteed for heavy-duty work cycles. Suitable for operation of three-phase motors driven by inverters.

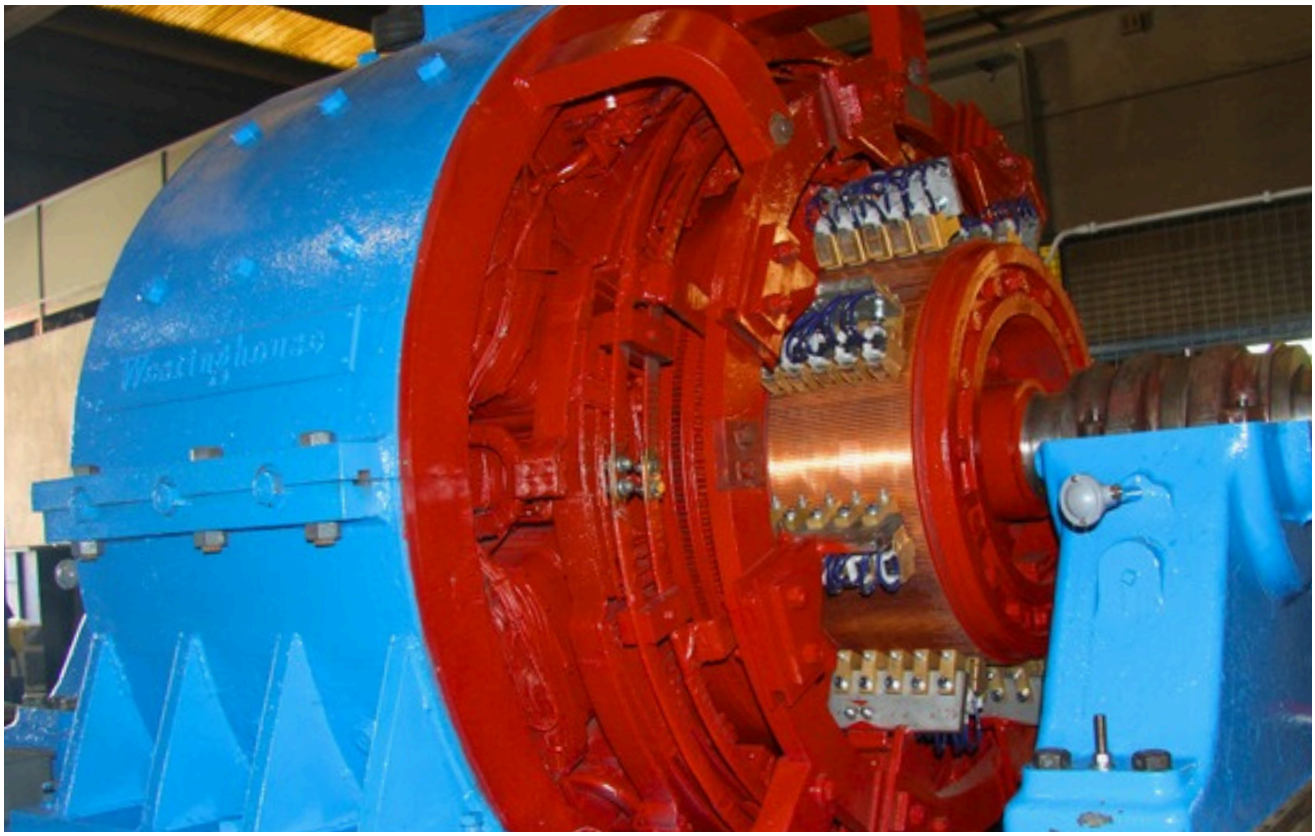
Protection: Application of superior quality insulating varnishes and tapes for managing surface electrical stress.







DC Motors



Specific technical expertise for managing critical machines (rolling mills, wire drawing machines, extruders).

Commutator: Turning, mica undercutting and dynamic balancing. Possible reconstruction carried out at our facility.

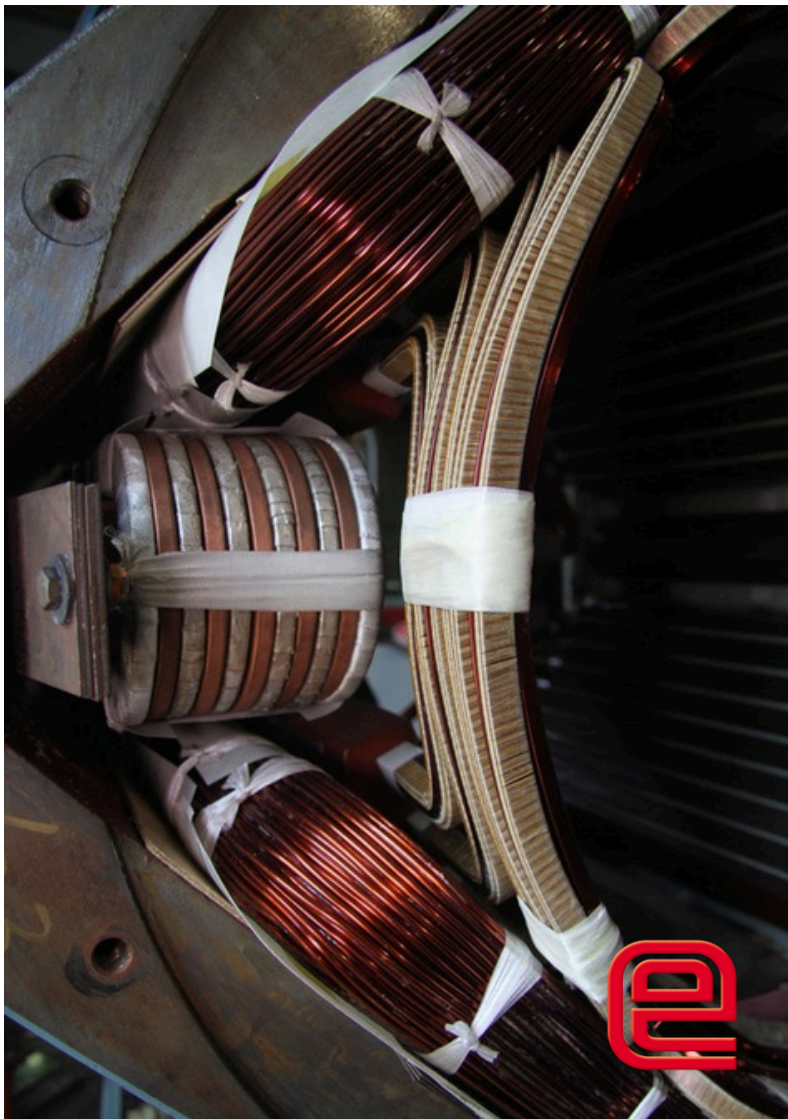
Rewinding and Insulation: Complete reconstruction of armatures and pole assemblies (main and auxiliary). Rewinding of motors up to 1200V armature.

Electrical Calibration: Neutral Zone adjustment for commutation optimization. Brush holder system overhaul and supply of specific compound brushes.

Reverse Engineering: Reconstruction of parts mechanical and electrical out of production.







Manufacturing New DC Motors: "Plug & Play" Solutions



We design and manufacture new TEMAX-branded DC motors, engineered to integrate perfectly into existing plants without structural modifications.

Total Interchangeability: Exact replication of shaft dimensions, overall dimensions and mechanical interfaces of obsolete motors.
Reverse Engineering: Analysis of original performance to optimize torque and speed for current process requirements.
Cutting-Edge Materials: Use of Class H insulation, high-quality copper and magnetic lamination.
Rigorous Testing: Every machine is supplied with a complete test certificate from our test facility.




TEMAX



Testing and Dynamic Trials



We don't just repair; we certify that the machine returns to service with parameters equal to or better than new.

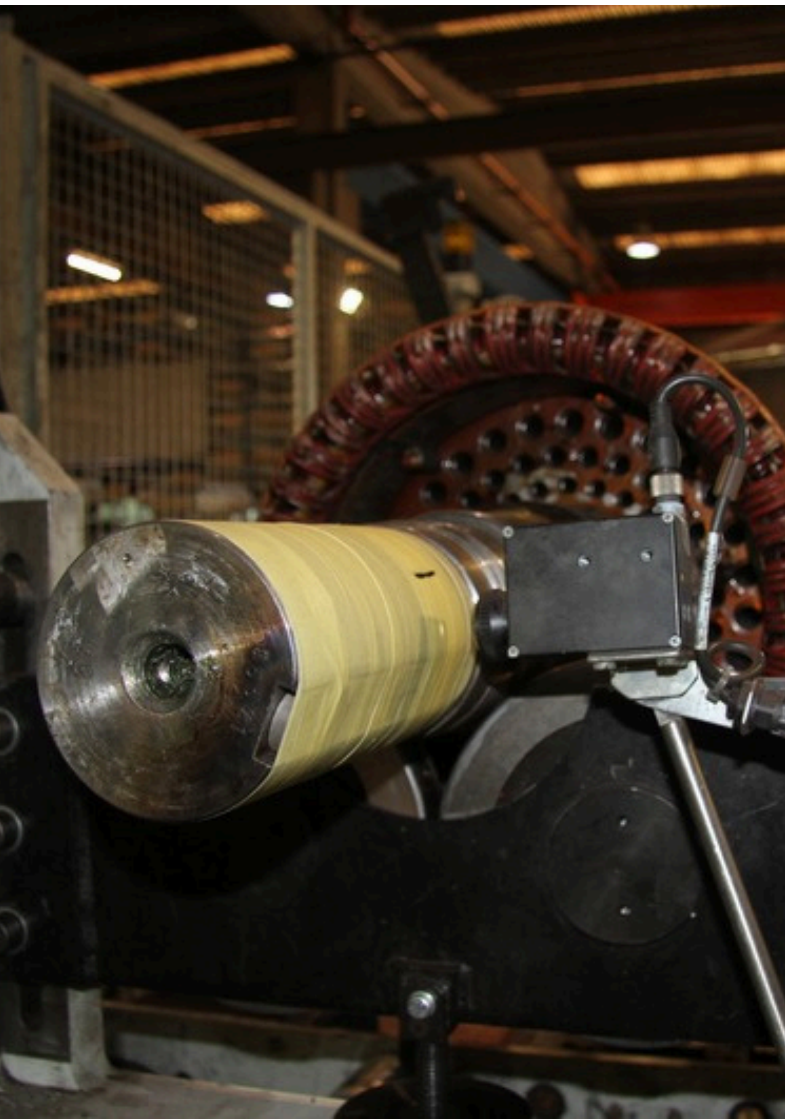
Dielectric Analysis: Polarization Index (PI) measurement and phase resistance and inductance survey.

Tangent Delta and Partial Discharges: Predictive analysis to assess the integrity of the insulation system.

Static and Dynamic Balancing: Vibration reduction to preserve bearings and supports on rotors up to 6m / 10t and impellers up to 2m long.

Internal Test Facility: No-load tests to verify electrical and mechanical performance.







We Bring Our Workshop to You

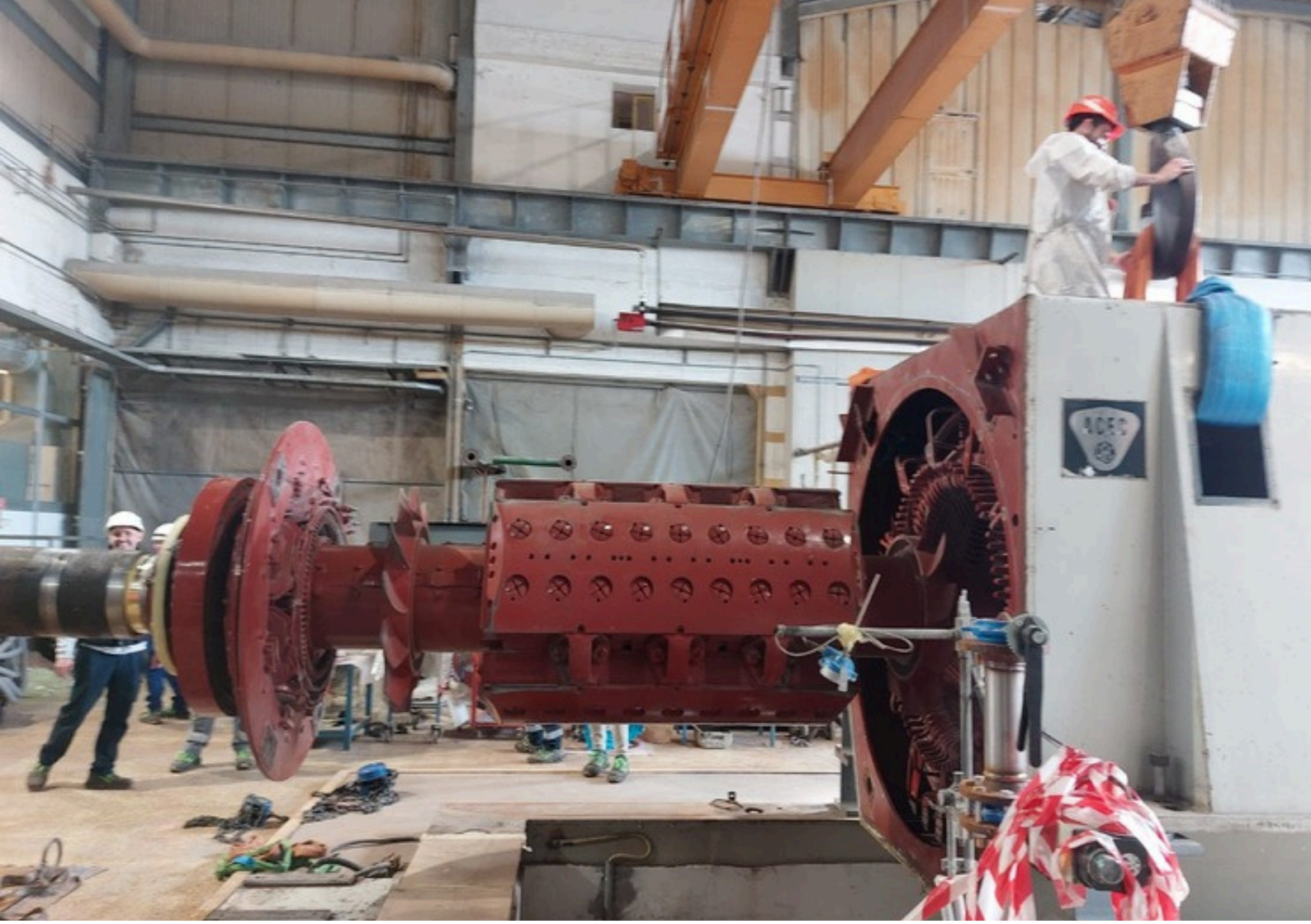


When logistics is an obstacle, we intervene directly on-site to minimize downtime.

On-Site Diagnostics: Vibration analysis and thermography to detect anomalies before failure.

Laser Alignment: Hundredth-of-a-millimeter precision for flawless motor-load couplings.

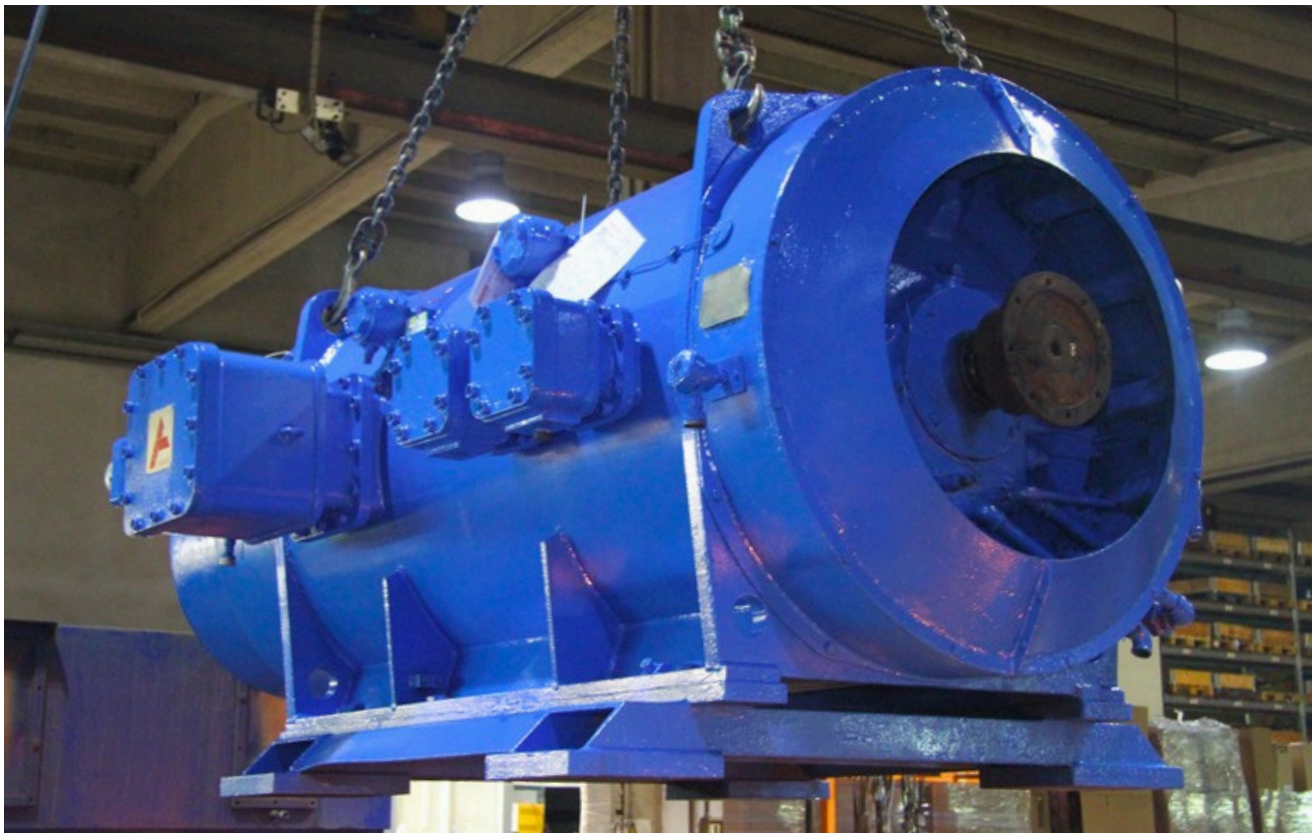
Scheduled Maintenance: Service contracts to monitor the health of your machine fleet.







Safety in Explosive Atmospheres



Complete management of motors destined for zones with explosion hazard (Gas and Dust), in full compliance with international regulations.

Regulatory Compliance: Interventions performed according to EN 60079-19 standard for maintenance and restoration of Ex machines.

Protection Types: Expertise on flameproof motors (Ex d), increased safety (Ex e) and non-sparking (Ex n).

Flameproof Joints: Hundredth-of-a-millimeter control of air gaps and coupling surfaces (Flame-paths).

Certified Repair: Issuance of post-repair certificate and test sheets.




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THE ENERGY THAT NEVER STOPS



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