TOTALLY FOCUSED ON

WORLD-CLASS INDUSTRIAL ALTERNATORS

The world’s largest independent producer of alternators 1 – 5,000kVA
We only make one kind of product. That’s why we’ve been totally focused on producing high quality alternators since we were established in 1947. Today, we have factories or distribution centres in every continent and we’re the world’s largest independent producer of alternators. Our independence is very important to us… and to our customers because we have complete control over all the final products. Were able to produce and supply every type of alternator, anywhere in the world. Our unique company because the special combination of qualities that set us apart from our competitors means that we’re a totally unique company. We believe that we’re a totally unique company because of the special combination of qualities that set us apart from our competitors. Our people are totally committed to the global support that we offer to our customers… and to ensuring that every single alternator we produce meets the world-class standards that Mecc Alte is renowned for.
Mecc Alte was established in 1947 in Alte, Vicenza, Italy, and has continuously evolved from its humble beginnings into a global brand in the 21st century. Our strategic decision in the early 70s to specialise in only producing alternators has allowed us to attain a leading global position in the electromechanical field. The Carraro family has retained sole ownership and, as an independently-owned private company, has focused on achieving the highest possible levels of specialisation, quality, and service. We concentrate on servicing our customers and, what's more, we never compete with them in the end market. Mecc Alte is in the business of transforming mechanically generated energy into electrical energy – so we only sell alternators. We are proud to be a flexible and fast-acting company and our 100% ownership of our supply and distribution channels gives us complete control in the marketplace.

We have extensive experience. We know what is needed from the industry we serve and we aim to provide it.
MANUFACTURING PROCESS

We are a volume producer with complete control over our factories and have a truly international manufacturing base. All our factories incorporate the latest technologies and manufacturing processes, producing a truly global product that is consistent worldwide. This ensures physical characteristics, technical features, quality and performance are guaranteed wherever in the world it is manufactured.

Our facilities cover over 60,000m². We have over 1,200 employees and over 30 CNC-controlled robots. We continue to invest in our future through increasing global capacity and this ensures that we are able to support the growth of our clients. We can react to any market demands and always ensure that we can instantly maximise any growth opportunities for our customers.

Every alternator we produce is made with highly selected materials and components – all tested in conformity to ISO 9001 quality specification and in conformity to ISO 18001 process qualification for health and safety.

Our production process consists of various stages of advanced manufacturing technologies. Each working phase is carried out using state-of-the-art equipment to ensure high performance, great reliability and precision. Robotic machining and winding operation processes enable the highest degree of precision which ensures maximum results in consistent quality. Operating to an effective environmental management system, we have ISO 14001 which ensures we minimise our impact on the environment.

ITALY – Mecc Alte SpA
Producing alternators from 1 – 5,000kVA

ITALY – Mecc Alte Power Products
Producing alternators from 800 – 5,000kVA

UK – Mecc Alte UK
From 5 – 3,000kVA 4 pole

CHINA – Mecc Alte Haimen
Producing from 7kVA through to 3,000kVA

INDIA – Mecc Alte India
Producing 5 – 420kVA 4 pole and 7.5 – 48kVA 2 pole

ITALY – Mecc Alte Portable
Manufacturing portable alternators 1 – 17kVA 2 pole

ITALY – Zanardi
Producing specialised products and welding alternators

With an integrated supply chain (we also own our own lamination factory) and 100% ownership of our sales and worldwide distributors, we perfectly position ourselves to professionally serve all world markets, and further enhance our reputation as a global leader in alternator manufacturing.

OUR LEADING BRANDS

Industrial and Marine Products
Our main brand – a manufacturer and supplier of synchronous alternators 4 pole from 3.5kVA through to 5,000kVA and 2 pole alternators up to 98.5kVA.

Specialised Power Products
A factory specialising in customised power solutions, making tailor-made specialised alternators and winding generators.

Welders and Specialised Products
A company that specialises in the volume manufacturing of small 2 pole portable units 1.2kVA to 17kVA.

Portable 2 Pole Products 1 – 17kVA
A company that specialises in the volume manufacturing of small 2 pole portable units 1.2kVA to 17kVA.

6 pole alternators
Specialised technologies
Variable speed
Permanent magnet
Permanent sliprings
Wound component parts

Mercurio DC system
and hybrid systems for telecommunication 5kW to 15kW

MECC ALTE
www.meccalte.com

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POWER PRODUCTS RANGE

We focus on MV and HV products for power generation and, in addition, produce synchronous, PMG and asynchronous generators for hydropower applications.

Low (LV), medium (MV) and high voltage (HV) customisable alternators, in double or single bearing, with digital AVR all designed for demanding applications

- 1 – 5 MVA
- LV – voltage up to 690V / MV up to 7,200V / HV up to 13,800V
- > 4, 6, 8 poles
- Separate circuit cooling by air or water is available upon special request

Hydropower alternators

- Synchronous alternators up to 10 MVA, 380 – 13,800V, up to 32 pole, water or air-cooled, horizontal or vertical mounting
- Asynchronous alternators up to 700kW, low speed, water or air-cooled
- D2G – permanent magnet generators, steady speed without inverter up to 500kW
- Permanent magnet generators for wind turbine application 100kW 6 poles

APPLICATIONS AND RANGE

Covering a power range of 1 – 5,000kVA, our alternators are designed to operate in the most demanding of environments and applications.

The core DNA of every machine has been evolved from over 65 years of technical experience and knowledge. And, from this proven core, our modular design system means that our products can be adapted to rise to any challenge – anywhere.

The speed of rotation (187rpm to 1,800rpm) is individually matched to the application and to various drive systems, such as hydro turbines. In addition, core design elements can be added to match extreme environmental conditions, with unique features that can be installed to prevent damage from corrosion and humidity.

In extreme applications, our power range alternators can be built with totally enclosed frames, where the severity of environment demands a lot more than a standard product.

Typical Data

<table>
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<tr>
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All of our Power Products are designed to meet the applications they serve and the core design structure allows simple and full customisation to match exact customer needs. With a reinforced mechanical structure giving superior mechanical resistance, oversized terminal boxes, market-matched power nodes using new innovation, the latest materials and a fresh commercial approach in a market that has always been highly traditional in nature.

01 REGULATION

Digital regulators allow custom settings for site applications
Capable of regulation and APR for all design parameters
Load monitoring, fault recording
Commissioned and calibrated through P & I

02 TERMINAL BOX

Large box design to accommodate multiple cables or bus bars
Nominally 6 wire with ease of customer connection
Separate low voltage connection area on HV machines
Factory-fitted current transformers are available

03 ACCESSORIES/MONITORING

Anti-condensation heaters
Bearing temperature monitors
Winding temperature monitors
Environment protection systems

04 BEARINGS

Ball, roller or sleeve bearings are available
Customer-specific bearings are request such as:
• Sleeve bearings
• Insulated bearings
• Specialist for high force or vertical application

05 EXCITATION AND OPTIONS

Auxiliary winding
PMG (Permanent Magnet Generator)
Over excitation protection

06 INSULATION SYSTEM

Class H insulation is standard on our LV range and for our LV and MV this is used for MV and HV, impregnated with VPI

07 CONSTRUCTION

Rugged design
Single or double bearing
Winding grade C, B or A to reduce harmonic distortion and enhance voltage waveform

08 COOLING/PROTECTION

IP-rated from IP23 as standard to IP56 (CACA/CACW)

09 BEARING LUBRICATION

All ball bearings are re-greasable

010 SPECIAL OPTIONS

Our Power Products are manufactured in a new 5,000m² site located in Vincenza, Italy, close to the Mecc Alte Group’s head office. In a purpose-built, state-of-the-art factory, its 2,500m² assembly area incorporates the latest production methods and technologies to ensure product quality remains in the forefront. With a customer-focused approach, the factory is designed to allow flexible production to cope with the ever-changing demands of the market it serves. This allows capacity flex as required and supports rapid delivery times alongside customer-specific requests.

This is all supported through dedicated technicians in its 800m² research and design centre.
We have reached the highest possible quality standards in every area of design, production and sales. With us, the pursuit of quality begins long before actual production, with checks on semi-processed parts and sample tests on electronic components.

These tests are performed with rapid aging methods by means of alternating exposure to extreme temperatures. Our quality is enhanced during the production process with computerised equipment making checks on electronic and electrical circuits. The high quality of our finished products is due to a perfect combination – high performance and maximum reliability.

Every quality mark is a guarantee of the rigorous assessment of prototypes and a commitment to continuous quality improvement by external inspectors to ensure product consistency – and product quality.

This quality assurance allows us to be proud of our products. Our products are now globally recognised. This high market acceptance has originated from a combination of effective marketing through our sales and distribution network, established training plans for our many customers, and consistently great aftersales service.

We are a professional and responsible company and understand that a good reputation breeds success. We recognise that our reputation depends on continually delivering high standards of support – whenever and wherever it is required. With an extensive global service and aftersales network, you can be assured that your product will be supported everywhere in the world.

Our quality is certified by international bodies and a quality standard, ISO 9001 accreditation across the whole group. Ask factories for individual certifications. The quality assurance allows us to be proud of our products and give you peace of mind knowing our alternators are built with the highest possible quality standards.
We are proud of the relationship that we have with each and every one of our customers. Effective communications with them are an integral part of our operations.

We appreciate the importance of developments in electronic communication and recognise the World Wide Web as a continually evolving global communication tool. Our website holds up to date product and commercial documents and downloads for support 24 hours a day, 7 days a week. Visit www.meccalte.com

SUPPORT

Through our global companies, we offer worldwide support. In addition, our dedicated support website provides latest model information, spare parts listings, test report data and useful pre and post sales tools.

We have a dedicated and flexible download centre where drawings and technical information is readily available in a dedicated user friendly area. Visit www.meccalte.support.com for further info.
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<td>+39 0444 396166</td>
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