

LOW-VOLTAGE FREQUENCY CONVERTER

Electrics and Automation



FREQUENCY CONVERTER

Specially tailored to our plants

YOUR REQUIREMENTS

You want high availability, precise speed accuracy, high control dynamics, low network repercussion, plus simple operation and maintenance – all built in as the basic qualities of your new drive technology.

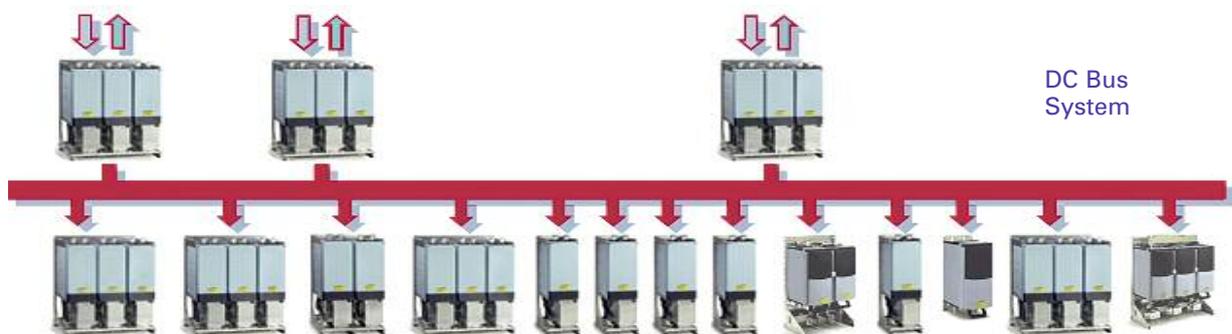
This is where our integrated and holistic solutions come in. Customized for you, they not only simplify drive technology and automation, increasing transparency, but also achieve maximum process-oriented drive performance for top-level production.

Special to our drive technology is its easy and sure adaptability to different plants. That makes for a short, efficient engineering phase and on-time delivery.

The clear-cut cabinet layout ensures fast assembly as well as safe connection of motors and all other components.

Devising integrated yet flexible solutions means we meet the different requirements of both new plants and revamps. Furthermore, reliable, user-friendly, and easy-to-configure drive technology guarantees rapid plant commissioning and run-ups.

What also counts is an effective partnership that passes the test of time above all after installation and commissioning. You can tell you have chosen the right drive technology when you benefit over the long term from spare parts supply at fair conditions plus service tailored to your needs.



OUR SOLUTIONS

SMS Siemag teamed up with its partner VACON, one of the world's leading frequency converter manufacturers, to develop a standardized, modular drive solution for low-voltage applications. It's a system that is specially designed to meet the high demands of the metals industry – from steelmaking plants to rolling mills to strip processing lines.

Paying attention to even the smallest detail, SMS Siemag drew up the effective layout of the high-tech converter cabinets. They come largely pre-configured. You select the power unit, then the peripherals



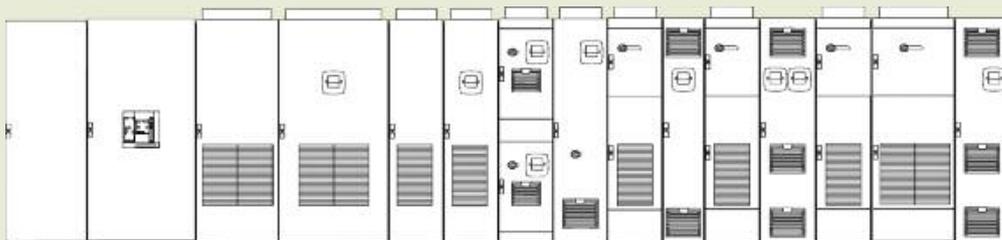
are simply adjusted to the specific drive task. All the inverter cabinets are lined up on a common DC rail and connected to the feed-in unit as well as the central control cabinet for auxiliaries.

We exclusively supply type and field-tested converter technology. This is where you benefit most from VACON's years of experience. As a result, our partner guarantees top component reliability.

SMS Siemag voltage converters set a new benchmark in maintenance-friendliness. All the components, including the larger power elements, can be replaced without special tools or lifting equipment.

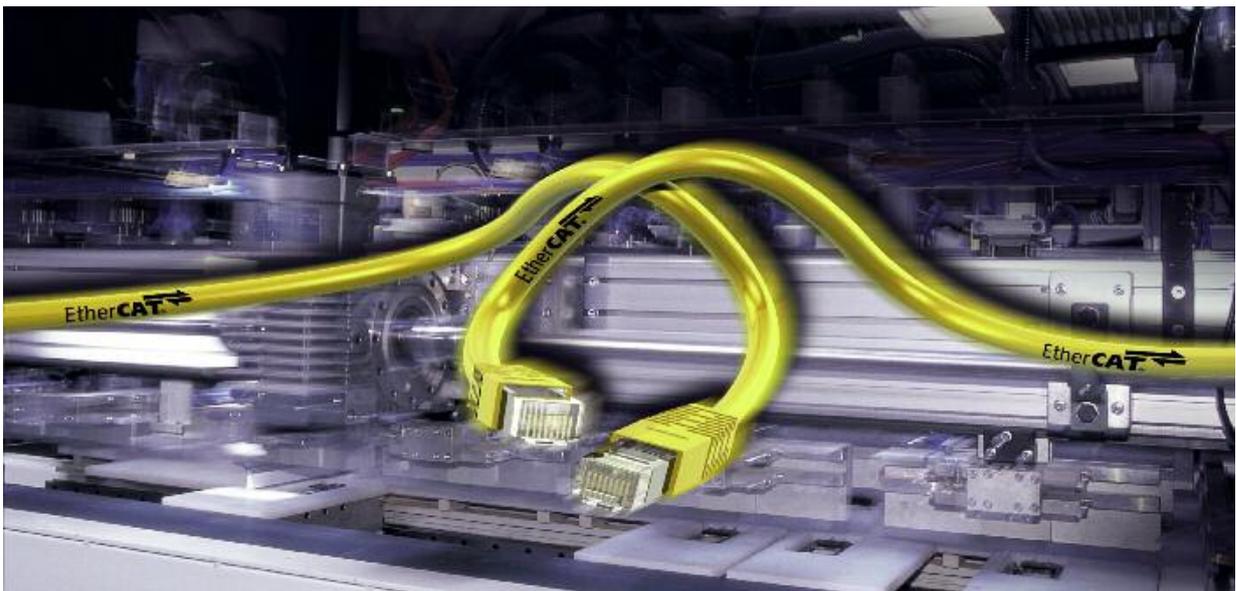
There was a strong emphasis on minimizing the component variety. To give you an example, we used the same power parts for both the feed-in units and the inverters.

SMS Siemag drive technology is an integral part of our X-Pact® Electrics and Automation, so you benefit from a whole range of technology highlights.



TECHNOLOGY HIGHLIGHTS

- Real-time interface to the superimposed X-Pact® automation system via EtherCAT for ultra-reliable, ultrafast communication.
- Fully integrated drive control functions in our X-Pact® Technological Control System for maximum plant performance and top product quality.
- Full access to the drive control functions through our open X-Pact® system guarantees easy maintenance.
- Plant-wide high-resolution process data acquisition of all process data in a single system gives you total process transparency.
- Multiple drive signals are collected at a high sampling rate and perfectly synchronized with all other process data for simple optimization and troubleshooting.
- Super-robust drive design withstands the harsh environment of metals applications.
- Wheeled power modules for larger drives enable easy maintenance and speedy replacement without special tools or lifting devices.
- Interchangeable power modules usable in both AFE and inverter units minimize the variation of components and reduce spare part stock.
- Individual control of fans and brakes on each drive controller.



- Individual monitoring of temperature and other feedback signals on each drive controller.
- Centralized interfacing and interconnection of all Safe Torque Off signals plus grouping according to plant danger zone layout.
- Single common entry point for the drive LAN.
- Common supply of auxiliary power and control voltage.
- Pre-engineered drive cabinets feature proven technology in top-quality volume production.





YOUR BENEFITS AT A GLANCE

- Drive systems are an integral part of our X-Pact® electrics and automation system for metals applications. They ensure you maximum plant performance and outstanding product quality.
- Cost-effective production resulting from optimal utilization of fully integrated drive components.
- Pre-tested drive cabinets and the control unit included in the SMS Siemag "Plug and Work" solution ensure easy installation, rapid plant start-up, and early return on investment.
- Perfect coordination of all supplies and services from one source by a professional project management team. Integrated ePLAN P8 documentation is included in X-Pact® documentation for direct and easy analysis of any hardware issue.
- Key documentation is available at a very early project stage due to the pre-engineered design.



OUR SERVICES

- Supervision of erection and commissioning by our highly experienced staff.
- Spare parts delivered rapidly from stocks around the world.
- Instant troubleshooting because remote access gives us full access to your integrated drive systems.
- The SMS worldwide service network provides experienced drive technicians close to your production plant.
- Choice between classroom or hands-on training for customers training.



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MEETING your **EXPECTATIONS**