Tailor made electrical and automation service – for better plant performance

Your challenge:

Increasing competitive pressures along with fluctuating demand create a serious impact on the price of all types of steel products. Continuously rising costs for energy, raw materials, and transport make it essential to cut both operating and maintenance costs.

Your customers’ fast-changing requirements in areas like product variety demand high flexibility from your production and a powerful and well-trained maintenance team. Your electrical and automation crew play a major role in achieving these goals.

The challenge is to maintain high plant performance, which can only be achieved if an expert team is on hand with excellent skills in using the latest technologies.

A central factor in ensuring the required plant availability is to implement small changes – migrations as well as upgrades – in a timely manner and with minimized risks.

State-of-the-art automation technology and access to comprehensive experts’ skills and support in electrical and automation systems is mandatory for flexibly adapting the cost structure, avoiding cost-intensive downtimes, and improving the quality and performance of the plant.

Our solution:

When it comes to outstanding services in automation and electrical systems, leading steel companies around the world trust in Siemens VAI’s expertise. With experience from numerous successfully completed projects worldwide, we provide our customers with the latest software, proven technology, and customized service to assist them in ensuring maximum performance and product quality over the entire life-cycle of the plant.

With experience from numerous successfully completed projects worldwide, we provide our customers with software updates, operational support from tailor-made training up to maintenance contracting, hardware migrations and modernization packages as well as spare parts acting as a single source supplier. Innovative service concepts enable smooth production and maintenance of electrical and automation systems at high performance levels while securing the optimal availability of both plant and equipment.

Siemens VAI’s electrical and automation services provide our customers with the security they need to operate under continuously stable conditions – and make us one of the world’s leading partners to the metals industry.
Advantages of Siemens VAI electrical and automation service:

- Global presence – 1,600 service specialists supporting you worldwide
- Improved system availability – planned maintenance helps you identify potential failures early and reliably prevents them
- Reduction of downtime and shutdown costs – our on-call service is always standing by to intervene with precision and speed
- Access to the Siemens VAI expert pool – available to assist you whenever needed
- Cost control through tailor-made services – designed for your specific needs – with guaranteed response times
- Reliable infrastructure for fast services – multi-layer communication paths (hotline, help desk, remote diagnosis, and web-based plant documentation) ensure a fast, accurate retrieval of all plant-relevant information
- Spare part expertise – genuine spare parts and components from a single source of contact
Service contracts
Matched to your needs

Siemens VAI offers a wide spectrum of contract options – adapted precisely to your needs. Our goal is to work in close cooperation with our customers to jointly achieve a competitive edge.

The global Siemens VAI network is a unique advantage. It ensures in more than 40 countries that a first contact can be established with local Siemens personnel. In addition, experts are available around the clock in our metals and mining service and support centers, where customer requests are registered, correctly distributed, and resolved.

In addition to providing phone support for operations and maintenance, a pool of qualified staff is available on short notice to support you in optimizing your systems.

Troubleshooting
In the case of an unexpected shutdown, Siemens VAI customers can rely on prompt and experienced support from experts. For plant operators, it is important that troubleshooting and debugging is closely coordinated with operations and that repair services are executed quickly and reliably. This is exactly what electrical and automation service from Siemens VAI offers: smooth execution, involvement of local personnel, and reliable solutions using the latest technology.

Remote data analysis
To supplement operator inspections, at regular intervals Siemens VAI experts analyze dedicated data sources like measurement logs and application logs using an encrypted connection. If the data show irregularities that require countermeasures or that indicate potential operational disturbances, Siemens VAI experts inform you immediately and make recommendations for solving the problem.

Remote service capability
Remote Access (cRSP = common Remote Service Platform) is a prerequisite for services like remote diagnosis and remote data analysis. It allows the Siemens VAI service specialists to provide expert support from anywhere in the world. A reliable and secure connection through the internet provides the basis for remote services.

Security has priority
Remote sessions can only be initiated from the customer’s end. This provides a reliable means of preventing unauthorized access to the customer’s plant. Comprehensive logging of all activities provides additional security.
Changes, add-ons, modifications
The need to improve existing functions or even add new ones normally arises in the course of operating any automation system. This ongoing process ensures that the system continues to fulfill your requirements, and usually extends its lifespan.

Typical examples of these kinds of changes are:
- Modification of existing reports or creation of new ones
- Modified or additional HMI (Human Machine Interface) screens
- Modified communications with external systems
- Modifications to functionality

Depending on their complexity, the changes are executed either via the remote connection or on-site. Highly qualified specialists in the relevant application areas perform the changes in close cooperation with the customer.

On-call service/corrective maintenance
Our on-call service guarantees preferred access to Siemens VAI specialists through the metals and mining service and support centers, where problems can be tracked through help-desk support and remote diagnosis. We can also send a specialist delegation to your site in line with the contractually agreed service, response, and ready-to-travel times.

On-call service is carried out utilizing:
- Help-desk support/hotline
- Remote diagnosis
- On-site fault elimination

For the following possible areas:
- Drive systems
- Basic automation solutions
- Process optimization solutions
- Technological packages

Planned maintenance
A crucial element in cost- and quality-efficient plant operation is the best possible utilization of planned maintenance shutdowns. Well-organized plant shutdowns ensure that high performance levels will be maintained. Siemens VAI electrical and automation engineers are always ready to assist you in planned maintenance shutdowns.

Main benefits:
- Increased plant availability
- Secure expert’s knowledge regarding complex functions and components
- Access to global Siemens VAI service network with the integration of local expertise
- Contractually agreed response times
Operational support
Expertise at your service

Siemens VAI provides a full range of operational support to ensure that your electrical and automation systems operate at a consistently high performance level over the entire lifespan of your plant.

We offer our experience, our technical expertise, and our global network of workshops in the fields of:
- Training, consulting, and technical assistance
- Maintenance contracting
- System upgrade, modernization, and migration packages

Training
The capacity of your human resources to maintain and extend their expertise determines the successful operation of your plant. Continuously maintaining and improving this capacity is a major management issue that requires ongoing attention.

Siemens VAI's services may include the design of concepts for initial, basic, and continued training, effective programs for classroom training, on-the-job training, and the provision of the training itself. Training in automation systems lays the foundation for your personnel to enhance their expert use of these systems.

Main benefits:
- Tailor-made training packages
- Improved overall performance due to skilled personnel

Consulting
Changing market requirements and competition force all steel producers to continuously evaluate, maintain, and improve their sales position. Funds for investments are not unlimited, and priorities must be defined. Managers need to know the plant areas where investments are most urgently needed, will yield the shortest return on investment, and contribute most to a sustainable and competitive operation. The bottlenecks in production lines must be identified and decisions made on whether upgrading or replacement of electrical equipment or automation systems will be most effective.

To help resolve these issues, Siemens VAI offers a full range of consulting services for the entire industry that includes audits of the technological and economic performance of operations and maintenance and recommendations for improvements.

Main benefits:
- Provision of facts and figures for efficient management decisions
- Identification of equipment deficiencies, bottlenecks, and investment priorities
- Definition of performance improvement potentials
- Special focus on energy-efficient solutions
Technical assistance
Siemens VAI’s experienced specialists can provide technical assistance and comprehensive support in the efficient and sustainable introduction of metallurgical and production processes for both improved product quality yields and new steel grades. As your partner, we help you implement more effective operation and maintenance procedures for the optimized use of your installed capacities as well as for the start-up of new facilities.

Dedicated engineers are available to assist company personnel in detecting, analyzing, and solving all electrical and automation-related problems.

Main benefits:
- Assistance of highly skilled engineers
- Fast support by utilizing local Siemens VAI resources with the backup of Siemens VAI headquarters
- Secure, expert knowledge of complex functions and components

Maintenance contracting
When outsourcing secondary processes is part of your business strategy, and maintenance of production equipment is viewed as a secondary process, Siemens VAI has the capabilities necessary to establish a long-lasting and reliable partnership – with the goal of creating a win-win situation.

Range of services:
- Preparation and organization of maintenance database
- Management of entire maintenance program
- Performance of mechanical, electrical and automation maintenance
- Management and supervision of service subcontractors
- Spare parts management

Main benefits:
- Maintenance needs less attention from management
- Savings on learning costs
- Fast achievement of rated capacity
- Lower specific maintenance costs
- Maintenance engineering included
Life-cycle support
Extending the life-time of your electrical and automation systems

Siemens VAI — where the most modern production technology meets the increased demand for product quality. Our worldwide experience in the area of electrical and automation systems provides our clients with innovative technological upgrades for their manufacturing equipment.

Modernizing your plant extends its working life. Technological updates not only increase availability and productivity, they also lower operating and maintenance expenditures and thus ensure a rapid return on investment.

System upgrades
To maintain your plant at its maximum performance level and to ensure that the latest technology is available for installed automation systems, Siemens VAI offers economic upgrading and optimization packages reflecting state-of-the-art solutions.

Small upgrades are the right way to extend the lifespan of your automation system. By making small, cost-effective upgrades or replacements, you can bring your components in line with the latest technology. These types of improvements typically require minimal plant downtime, or none at all — and your plant will remain competitive in the marketplace.

Modernization
Siemens VAI offers you modernization solutions tailored to your needs. Updates and migrations of your existing plant automation system not only increase availability and productivity but also lower operating and maintenance expenditures, safeguarding your investment and making your plant ready for future production requirements.

Siemens VAI has a long tradition of providing the metallurgical industry with both integrated systems as well as individual technological and automation packages. Based on the modular design of the SIMETAL/SIROLL solutions, it is possible to install these packages as stand-alone versions or embedded into existing environments. Their easy integration into existing software configurations eliminates the need to replace the entire automation system and enables major performance improvements with small investments. In-house experience in software and hardware engineering is the key to achieving the fastest project implementation and start-ups.

Having Siemens VAI upgrade your automation system gives you access to a number of new functions and technological features that can boost the performance of your process. Our comprehensive capability as a single-source provider minimizes downtime and risks during the upgrade process.
Migration from SIMATIC S5 to S7
The overall process of migrating existing S5 configurations to the new S7 platform is a complex procedure that requires in-depth system expertise as well as extensive technological knowledge of the processes involved. In most cases, a simple cross-compilation of Step5 to Step7 software is not feasible. When replacing the hardware, in many cases specialized knowledge is a prerequisite for achieving minimum downtimes and optimal operational reliability of the new system.

Siemens VAI offers a full scope of services, from a simple assessment of the existing system through the development of upgrade concepts to the full implementation of upgrade projects. Their extensive expertise in diverse automation platforms together with the technological know-how acquired in numerous modernization projects guarantees an optimal changeover strategy and project success.

Main benefits:
- Enhanced life-time of the automation system and the overall installation thanks to ongoing improvements
- Seamless integration of new technologies and standards
- Improved product quality at optimized maintenance costs due to service over the entire life-cycle
- Ensured and extended maintainability (spare parts, resources)
- Improved plant control performance, availability, diagnosis, and system reliability

SIMATIC PCS 7 version upgrade
Siemens VAI provides packages for upgrading any existing system based on SIMATIC PCS 7 to the latest version, comprising:
- Upgrade of engineering station
- Upgrade of operator stations (server and clients)
- Upgrade of Siemens VAI software libraries
Spare parts and components
Efficient supply of electrical and automation spare parts

The Siemens VAI spare part service ranges from supplying individual parts to acting as a single source for your entire spare parts management system – and all Siemens VAI spare parts are of the highest quality.

Being able to count on having spare and wear parts available is extremely important to plant operators. Thanks to the global Siemens VAI network, we can ensure that the right spare parts are delivered at the right time. This means that we can significantly reduce your plant’s start-up times as well as downtimes.

Especially in cases of emergency, we are able to realize the shortest possible delivery times. For selected critical spare parts, Siemens VAI will provide advice and support to our customers on a 24-7 basis, and our worldwide support centers ensure that the right experts are on hand to deal with every concern.

Siemens VAI delivers either original manufacturer components or, if these are no longer available, appropriate replacement parts. Spare part monitoring can be offered in combination with a cost-efficient migration strategy developed together with the plant operators.

Specific Siemens VAI spares & component lists are available for each process unit.

Main benefits:
- Comprehensive knowledge of installed equipment from the original supplier
- Reduced purchasing administration by using a single point of contact
- Proven replacement strategies
- Reliable spare part quality and logistics

LOMAS® gas sample probe with cooling jacket
Mold level sensor
Mold Expert connection cable
Thermocouple type K
Find out more about our service packages.
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