

Experience in maintenance services

Increased Customer Proximity

Siemens VAI is creating new manufacturing and service centers to support its move to become a local supplier of plants and process solutions for iron and steel production. The newest facility within Siemens VAI Services is in Columbus, Mississippi, where a mechanical maintenance facility is embedded within the Severstal Columbus plant.



Siemens VAI employs around 3,000 specialists in over 50 different countries. They have unique experience in the maintenance and modernization of mechanical and electrical installations as well as in all aspects of process automation. Thanks to service solutions that are tailored to the customer's plants, Siemens VAI upholds its customers' competitiveness and increases the productivity of their installations. This regionalization of the business is one response to ongoing consolidation among steel manufacturers and to the need for a change in production conditions due to the ever-rising costs in steel production.

Since 1984, Siemens VAI Services has been providing maintenance services to metals customers in North America. Currently, Siemens VAI holds 12 maintenance and manufacturing facilities strategically located in key metal-producing locations throughout the U.S. to enable optimal customer focus.

The newest facility within Siemens VAI Services is

in Columbus, Mississippi, where a mechanical maintenance facility is embedded within the Severstal Columbus plant. The 40,000-square-foot facility (3,700 m²), designed to be self-sufficient, can also expand with Severstal's future growth in production and mill-equipment maintenance needs. Severstal Columbus – America's newest steel company – will produce 1.5 million tons of high-quality steel a year for use in the automotive, building, agricultural, pipe & tube, and appliance industries. A unique feature of the company is its 1400-acre megasite, which has been designed to accommodate production partners and related manufacturers onsite.

Maintenance services

The embedded location at Severstal Columbus allows the facility to eliminate nearly all of the material-handling costs and transit time that are common with many offline maintenance approaches. It also allows



- 1 Siemens VAI offers an entire spectrum of services, perfectly coordinated for the optimization of the plant.
- 2 Five-strand bloom caster: Siemens VAI is equipped to maintain each of the major units of the casting machine.
- 3 Out of a global network of 250 Siemens locations in more than 190 countries over 40 are at disposal for metallurgical services.

for rapid response to operating needs, a higher frequency of preventive maintenance, and an immediate and effective exchange of critical information that drives maintenance-related production planning, troubleshooting and overall maintenance optimization.

The Siemens VAI facility in Columbus is primarily focused on the maintenance of the continuous-casting machine. The facility is equipped to maintain each of the major units of the casting machine, molds and strand-guide segments, as well as other components such as individual roll assemblies. The facility's machining and fabrication capabilities enable Siemens VAI to refurbish even individual components such as roll shells, copper mold liners, bearings and spray headers.

Spare-parts management and supply

The continuous-casting facility at Severstal Columbus operates 24/7, requiring a fast turnaround of

many of the major units under any operating circumstance. In order to support the turnaround times, it is necessary to have on hand an optimal quantity of critical spare parts.

Siemens VAI inventories a blend of refurbished and new critical spares to support Severstal's operating needs. Most of the spare-part components in this type of application can be refurbished multiple times before having to be replaced. Once the major unit is disassembled to the individual component level, the components are refurbished in the Siemens VAI Services Columbus facility, or in one of the 12 facilities in the U.S. that specialize in specific technological repairs.

When a spare component does require replacement, Siemens VAI Services uses its global sourcing capabilities and OEM purchasing status for critical spares. This approach ensures that purchases are timely and efficient and allows Siemens flexibility to meet the cost needs of our customers. Frame contracts that combine global quantities for similar spare-part products also aid in further cost control and fast delivery for items with a long lead time.

Machine alignment

Being at the customer's site allows rapid analysis, modification and application of machine-alignment standards tailored to the operating and unique product-quality requirements of each casting machine. A very high level of strand and equipment integration is crucial in high-speed casting applications. Maintenance of existing tolerances while exploring ways to further improve quality are clear customer expectations.

Maintenance contracts structured to work

With the Siemens VAI maintenance-support model combining facilities specializing in specific component refurbishment, strategically located site-specific facilities, and global procurement resources, structuring a contract that addresses customer needs is simplified. The robust business model allows implementation of most any conceivable contract structure, whether the customer desires a contract based purely on production output, unit-menu pricing, investment or any combination thereof. ■

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