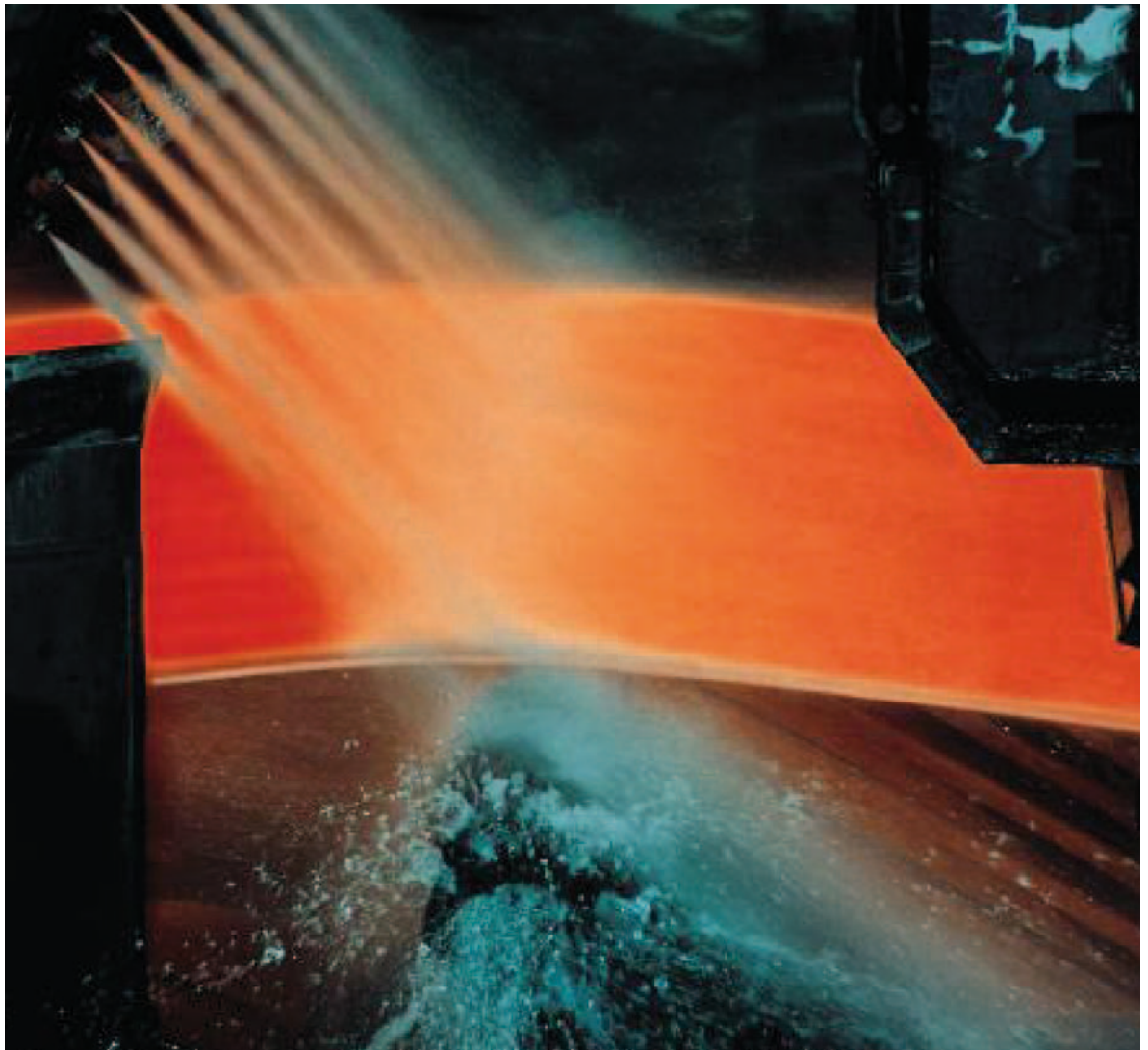




reference



**SIMATIC WinCC & Specialist**

**Customer Benefits**

- Value-preserving and know-how-preserving migration
- Uniform process control
- Expanded functionality

## SIMATIC WinCC and SAM “Hot Iron” safely under Control

Preservation of value thanks to step-by-step migration: At its high-tech Saldanha factory, the steel giant Mittal Steel South Africa Ltd. is benefiting from the advantages of a process visualization with SIMATIC WinCC. For the hot strip production and the rolling mill of the plant, the Human Machine Interface SIMATIC WinCC Specialist SAM implemented two easy to operate and efficient visualization system based on this highly flexible Siemens SCADA software – tailor-made and very economical.



### Certificates – SAM

We have proven our competence as Siemens Solution Partner Automation in the following areas:

- Human Machine Interface SIMATIC WinCC – Specialist
- Process Control System SIMATIC PCS 7 Specialist
- Automation System SIMATIC
- Industrial Communication SIMATIC NET

## SIMATIC WinCC and SAM: “Hot Iron” safely under Control

With four plants, the Mittal Steel South Africa Ltd. is the largest steel producer on the African continent. At its Saldanha plant, the company makes ultra-thin, hot-rolled coils of the highest quality. Saldanha Steel is the only steelwork in the world that has successfully integrated the Corex/Midrex process into a continuous production chain. Using this environment-friendly alternative to the conventional blast furnace route for the production of pig iron, the plant is not only among the global leaders in matters of emission control and environmental management, but thanks to the combined process, the production time as well is considerably reduced: From the arrival of the iron ore until the finished rolled product, just 16 hours elapse.

### Migration from COROS to SIMATIC WinCC

Such a highly efficient production process makes corresponding demands on the entire automation technology. The products and systems employed have to be state-of-the-art. This also applies to the operation and monitoring system – the window to the process. At the hot strip production and the rolling mill of the Saldanha plant COROS visualization systems by Siemens were in use until now. But the already discontinued systems hit their limits with re-

gard to function scope and communication possibilities. Mittal Steel therefore decided to migrate to the much more powerful and innovative SIMATIC WinCC. The Siemens SCADA system proved to be the ideal interface to the existing PLC networks of SIMATIC S7-400 systems in the hot strip production, and to the control system SIMADYN D in the rolling mill.

### Partner with Application Know-How

The migration project was planned and implemented by the firm SAM (Systems Automation and Management Ltd.). Founded in 1988, the company has headquarters in the South African province Gauteng specializes in industrial automation and network technology, and is an established system integrator in the field of process automation and visualization. The certified SIMATIC WinCC Specialist developed a custom solution for the requirements of the Saldanha plant – to the utmost satisfaction of the customer.

Step-by-step migration and uniform operating concepts through standardization and retaining of existing operational experience – these requirements needed to be implemented. In coordination with the customer and within the scope of the “Good Engineering Practice” by Siemens South Africa, the experts from SAM first worked out

standards for the faceplates, objects and scripts. These were configured via a central engineering system. Future configuration changes, too, will be centrally entered and can thus be applied quicker and easier. The complete visualization and operation has been based on the preceding system. As a result, the operating personnel required only minimal training.

### Higher Availability has been achieved

For the casting of the slab, the previously separate projects for the roller hearth furnace and the hot strip production were combined. A modern WinCC client-server architecture replaced the two COROS single-user stations. Now, the process can be tracked on eight operator terminals, while all process values and alarms are transferred to the redundantly set up WinCC servers and stored there. In the course of modernizing the rolling mill, the experts of SAM imported the process tags from the SIMADYN D systems to SIMATIC WinCC without the need for further engineering work. For this, they utilized a separate software: Systematic Project Engineering (SPE). Although the customer turned down a redundant server system for the rolling mill, an archive computer does store all important setpoint values and automatically restores them when the PLC is reset.

### Information about the Siemens Solution Partner Program

Under the Siemens Solution Partner Automation and Power Distribution Program, we join forces with our Solution Partner. By merging our product and system expertise with the application and industry knowledge of our partners, we have created a common basis for the fast, smooth and highly efficient implementation of your requirements – customized solutions for your competitive advantage.

[www.siemens.com/automation/solutionpartner](http://www.siemens.com/automation/solutionpartner)

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