



"Thanks to the integrated exchange of production data, SILTRONIC can quickly and reliably respond to the special demands and customer-specific needs in the semiconductor market." **Heinrich Klapper**, BI-IS-ES, Information Systems – SAP CM, SILTRONIC

Business Challenges

"Global is normal" is the company philosophy of SILTRONIC – one of the top global suppliers of hyper-pure silicon for the semiconductor industry. As a supplier of semiconductor products in various forms, the company strives to deliver on a just-in-time basis and to exact customer requirements. Electronic component manufacturers and telecommunication companies in the computer and consumer electronics industries as well as in automotive, aeronautical and aerospace engineering industries use the products.

SILTRONIC responds to the market demands of the wildly fluctuating and cyclical semiconductor business with a manufacturing strategy that is based on a global presence and flexible production capacities – 'Product to Customer'.

SILTRONIC is one of the few companies worldwide with a comprehensive and fully integrated manufacturing base for hyper-pure silicon products at sites in Europe, the US, Asia and Japan. To manage demand, delivery logistics and service, SILTRONIC needs reliable and fail-safe data exchange between the company headquarters and its production sites.

Solution Overview

Since early 2000, SILTRONIC has used SeeBeyond as the integration solution for connecting all the SAP systems of its headquarters and subsidiaries. Since then, SAP systems in four out of five production sites have been connected to the company's headquarters.

eGate has the task of collecting control, production and raw data from the central system, transmitting it to the company's internal VFEI (Virtual Factory Equipment Interface) and transferring it via the data bus to the local manufacturing sites. On the return route, eGate handles the corresponding responses and queries.

An error-free transmission and correct mapping time sequence are essential for ensuring that manufacturing runs to plan. SILTRONIC has 35 different mapping services. The integration platform processes 1,000 transactions per day.

Business Benefits

A major advantage offered by the SeeBeyond solution is its cluster-capability. With this feature, SILTRONIC was able to operate both SeeBeyond and SAP on the same machine in parallel.

Security, stability and uptime are critical to the fully integrated manufacture of hyper-pure silicon products - as the costs of downtime are extremely high and potentially fatal to business. SILTRONIC thoroughly tested the security and availability of SeeBeyond and now, in production, achieves a fail-safe rate of 99.9%.

The integrated exchange of production data allows SILTRONIC to quickly and reliably respond to the special demands and customer-specific needs in the semiconductor market.

Plans For The Future

The company has used Version 4.5.2 of the SeeBeyond solution since May 2003. In the course of further SAP integration at its production sites, SILTRONIC will achieve 100 per cent connection at both manufacturing plants in the US and Japan, where connection levels currently stand at 50 and 60 per cent respectively.

"We supply our customers with products specifically designed to meet their needs. And most of our customers require just-in-time delivery. SILTRONIC has really benefited from the reliability and near 100 per cent failure safety rate of the SeeBeyond solution. An unplanned standstill would be fatal for us."

Heinrich Klapper, BI-IS-ES, Information Systems
– SAP CM, SILTRONIC

Solution Overview

- Collection and transmission of control, production and raw data from central system to Virtual Factory Equipment Interface
- Error-free transmission, with correct event linking and sequencing across 35 mappings
- 1,000 transactions per day

Business Benefits

- Parallel operation of SeeBeyond and SAP (cluster)
- Fail-safe rate of 99.9%
- Flexible time-to-demand
- Improvement of service and delivery logistics

Technology Profile

- SeeBeyond Components
- eGate™ Integrator 4.5.2

Integrations

- Fully integrated production of hyper-pure silicon products and flexible manufacturing connecting their SAP systems in five production sites

Company Details

SILTRONIC AG, Burghausen is one of the top suppliers of hyper-pure silicon products for the semiconductor industry

Revenue (02): 1,000 million Euro
Employees: 6,500

Location

- Germany

Industry

- Manufacturing: Semiconductors

Business Challenges

- Fluctuating, cyclic demand
- Just-in-Time delivery of products unique to a customer
- Fully integrated production process
- Near 100% uptime
- Correct event sequencing

