

# b.data Energy Management

Quality assurance at voestalpine Stahl in Linz / Austria



**voestalpine Stahl GmbH in Linz is one of the leading European companies in the steel industry. Starting with ore and sinter, high quality grade plates are produced in several processing steps.**

Consequently, establishing and embedding the idea of sustainable quality assurance and improvement has long been the main objective of voestalpine.

In order to fulfill these requirements, voestalpine decided to implement the operating information system.

The operating information system b.data, creates a transparent, cross-works information source of current and historical operating data for the

individual technical departments and operating areas of the steel-making facility (LD3) of voestalpine. The scope of the project especially focuses on the preparation of the following converter operation reports:

- Converter report – Nitrogen analysis
- Offgas analysis, dynamic oxygen blowing

In b.data the process, analysis and production data which is stored and archived in the decentral data sources is connected, evaluated and made available in the form of MS Excel reports for viewing, processing and analysis.

## Energy Management

Answers for industry.

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In addition to the actual request and provision of operating data in b.data, a linking of production and process data is now possible for the first time.

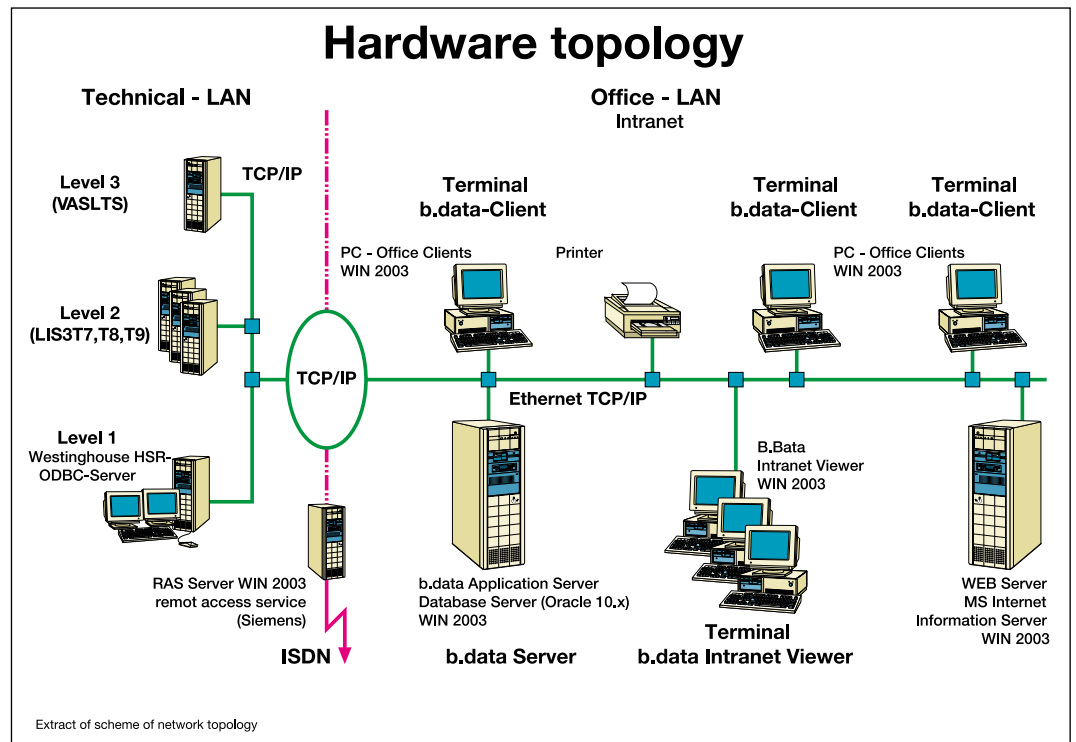
With the fully automatic reporting system, the technical department is supported in performing its routine analysis work and the operating department is provided with a basis for efficient operation.

## System architecture

Special attention was paid to the integration of the existing source systems such as production database VASLTS (Level 3, Oracle), converter databases (Level 2, Oracle) and SCADA systems (Level 1, Westinghouse): The required condition of maintaining the data organization and the data archiving in the existing source systems was fulfilled.

The tailored data channels to the individual cross-works distributed data sources can be defined via the freely configurable b.data ODBC Connector. These data objects can be grouped in the b.data user system and assigned to special analysis and operating reports.

The operating personnel is able to generate and access the current operating values through specific queries on time and products (heats) during runtime.



Simplified system topology

The operating information system b.data was incorporated into the existing system environment of the central plant network (TCP/IP).

## Main activities

The following tasks are fulfilled by b.data for the provision and access of the current and historical operating values via a standardized user system (MMI) by authorized user groups:

- Freely configurable data transfer from the existing production databases (ORACLE) and control systems (Westinghouse) via the b.data ODBC Connector.

- Definition and planning of tailored reports for analysis and operation management.
- Navigation, selection and requests for report results in a comfortable user system, Plant Explorer
- Fully automatic reporting system for the routine query, calculation and worldwide distribution (e-mail, printer) of operating information.
- Additional cross-works provision and access to these reports via standardized Internet browser technology (Netscape, Microsoft)

The users of this system work at a comfortable, modern user system which is installed at the respective office work place. At the same time, internally authorized customers are able to view the relevant values and reports using the b.data Intranet Viewer. Due to the fully automatic reporting system, the technical personnel are supported in performing routine tasks and the operating personnel are informed of the operation at all times.

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