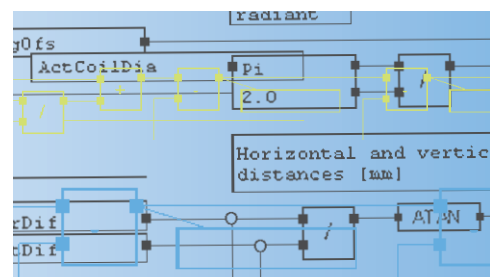
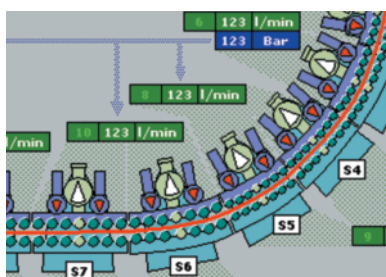
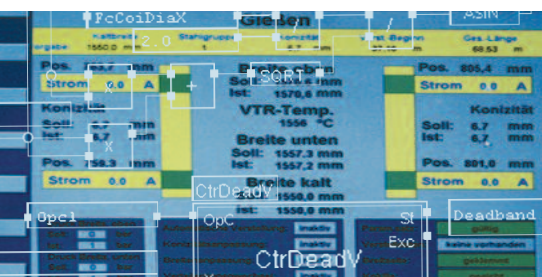


SMS SIEMAG

SMS group

ProBAS

The automation platform for
the steel and nonferrous metals industry





ProBAS is the industry-specific basis for control and automation of metallurgical plants and rolling mills.

Market demands develop in a highly dynamic fashion, constantly throwing up new challenges. This is where ProBAS guarantees you the maximum independence so you can rapidly upgrade the components you use, especially the hardware. Outstanding here is the performance you get from the ProBAS components that are globally available as standard elements and configured to suit your particular requirements.

X-Pact and ProBAS: Synergies as a system

The ProBAS automation platform consists of hardware, operating system, system layer and application software for Level 1 systems. It forms an integral part of the X-Pact automation pyramid that covers

the entire range of electrical and automation systems for metallurgical plants and rolling mills – from Level 0 right up to Level 3.

X-Pact stands for efficient processes in all processing stages of steel, copper and aluminum. Modular in structure, it comes with advanced components so you are highly versatile in designing your product range. You also benefit from short adjustment times and high plant availability geared to ensuring the maximum competitiveness of your plants.

BAS

ProBAS

UNCOMPROMISING, INDEPENDENT and INTEGRATIVE

Integrated process automation, stable production

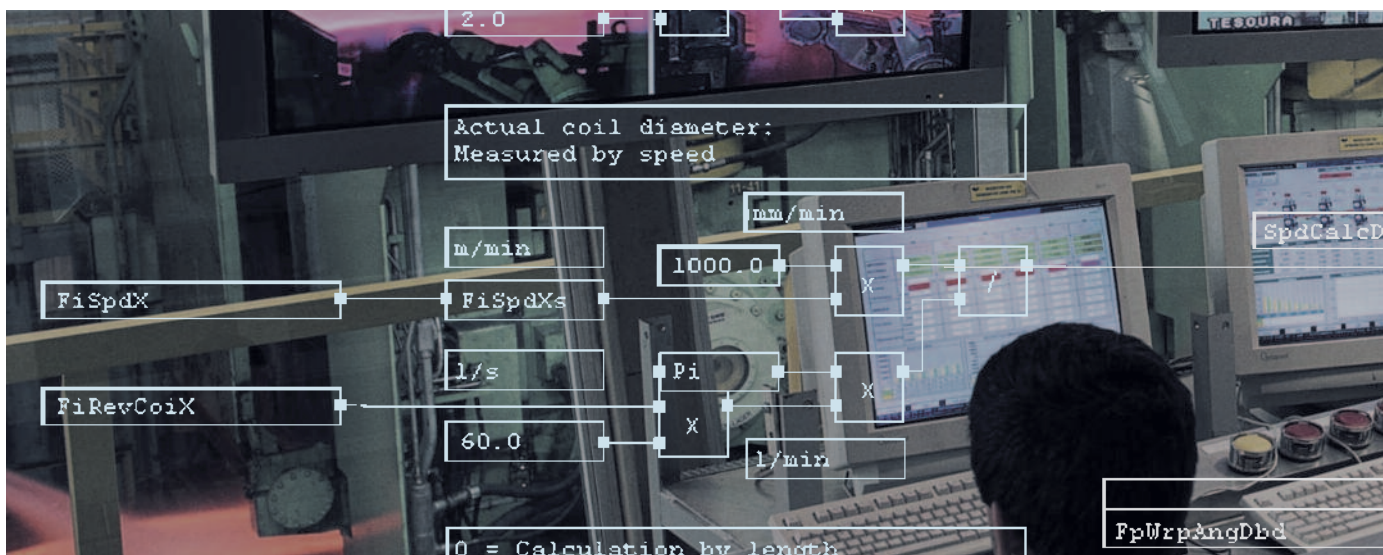
Stable and secure production processes are basic requirements the ProBAS automation platform meets with a high proportion of integrated process automation. It supports both large centralized and decentralized automation solutions equally efficiently.

You can easily apply transparent and task-specific processes on the basis of globally binding standards such as the IEC 61131 international norm. ProBAS features a development system that works with intuitive graphic tools. That also goes for the programming, supplemented for procedural tasks with a 'C'. I/O project planning is completely integrated into the graphic development system.

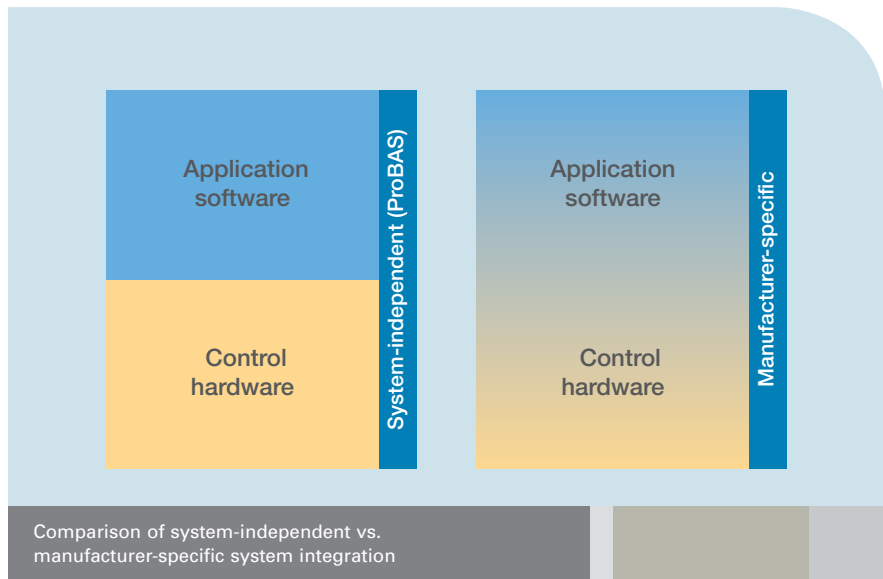
Worldwide references for ProBAS

Today there are more than 400 automation systems in the metallurgical and rolling mill industry around the world operating on the basis of ProBAS. It covers 4 fields of application: continuous casting, hot and cold rolling as well as strip processing. This strictly industry-specific approach guarantees the reliability and future compatibility of ProBAS.

Compared to the equipment used in other industries, plants in the metallurgical and rolling mill sector are designed for much longer periods of use, and often operate for many decades. This is where the ProBAS automation platform fully benefits from the know-how, service and forward-thinking of the world leading SMS metallurgy.



ProBAS coordinates reliably, independently and with an eye to the future.



This strong corporate group, owner-run for generations, offers you all the support you need to succeed so that you are more than satisfied over the entire life cycle of your ProBAS-automated systems.

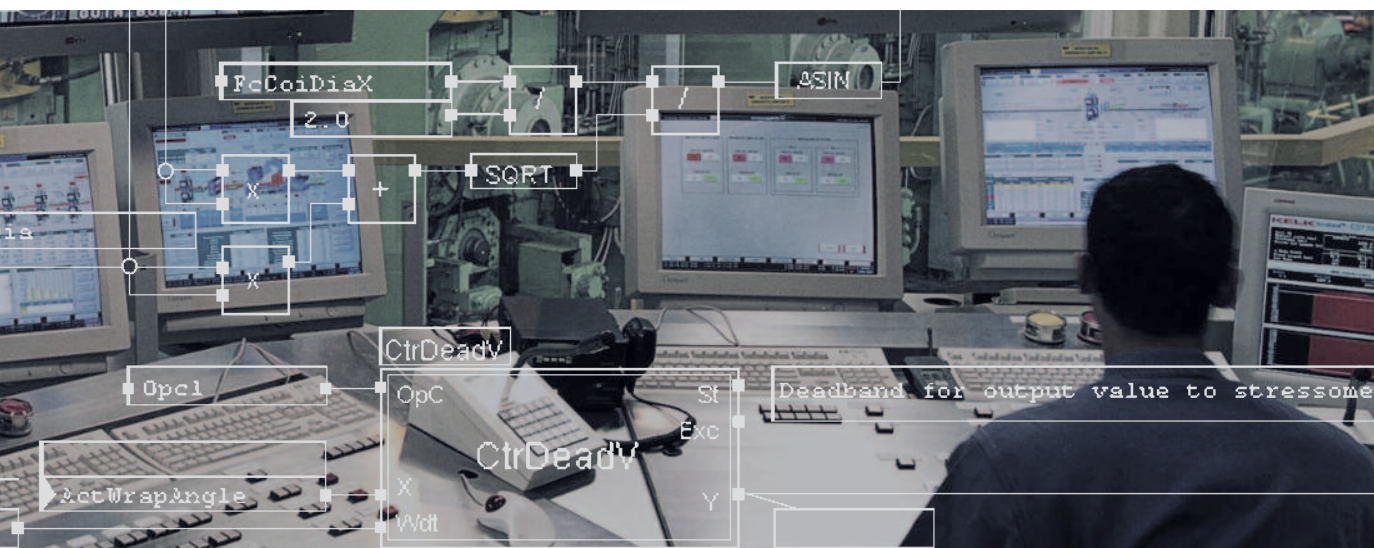
You also gain because ProBAS is versatile when it comes to adapting to your own developments. It helps investment-driven companies operate their plants independently to achieve a reliable return-on-investment.

Functional system architecture, rapid data communication

The ProBAS Level 1 system accomplishes its tasks giving absolute priority to the speed of the processes and the quality of the products. Included here is a wide range of functions:

- user-oriented functions
- highly dynamic technological controls
- sequence controls
- communication tasks
- data management tasks.

Your independence on the hardware side is guaranteed by the open ProBAS system.



ProBAS DESIGNED for PARTNERSHIP

Being independent of control hardware and application software pays off. Why? Because improvements in one of the two components do not force you to completely replace the other side of the system.

Instead, ProBAS supports synchronous development of product quality and market response.

A premium product for initial equipment

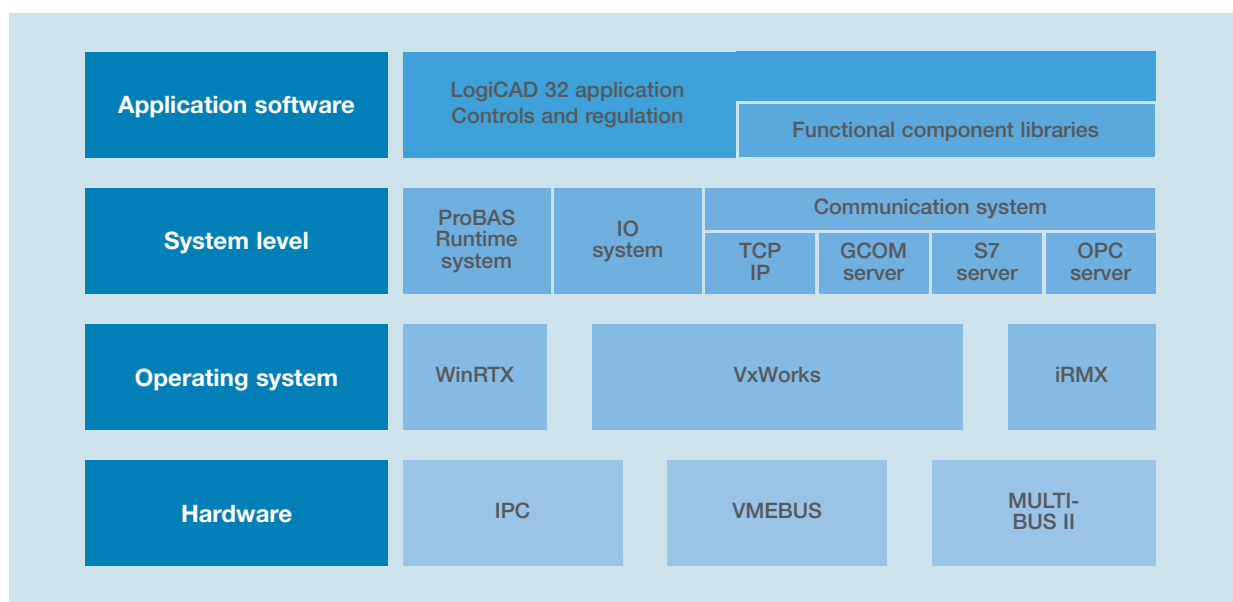
It's an added advantage that, with ProBAS, your plant operation as well as the associated automation are efficiently geared to each other throughout the lifetime of your plant. The automation platform is part of this process.

Also, due to the fine adjustment of mechanics and electronics, you can implement any improvements

in process technology directly in new product grades such as multi-phase steels. This represents the best possible protection of your investment for the entire operating cycle.

Crucial here is the fact that all the ProBAS functions are designed to support consistently high product quality.

The system architecture and the extremely fast data communication via optical fiber cable network with up to 2 Gbit/s provide ideal conditions for permanently influencing all processes. You can modify software, perform tests and download data during ongoing operations without any system shut-down. That contributes to high productivity.



The ProBAS system architecture



Sustained cooperation is the basis for the success of ProBAS.

Flexible as secondary equipment

Today's trend toward complex production and refining processes in the steel and nonferrous metal industry makes ProBAS the preferred solution for subsequently installed equipment.

That's only logical because the system architecture and functions respond exactly to current demands for quality and speed.

Reasonable system costs and easy operation ensure you achieve high performance despite low investment costs. Furthermore, due to easy maintenance, the entire Level 1 system also wins hands down when it comes to the cost of upkeep.

Service packages

The ProBAS service range is equally suited to complex automation solutions and to distinctive, diverse peripheries.

You can contact SMS Siemag's X-Pact hotline 24/7 from anywhere in the world. It gives you access to a knowledge database that analyzes faults and provides information without delay.

Alternatively, if you use the X-Pact Automation Support Portal, you can call on the services of specialists who know your configuration inside out and directly log in to your system via secure online connections. That ensures immediate and forward-looking troubleshooting as well as optimum plant availability.

ProBAS provides you with system and technology updates to suit your situation. We can also configure our spare parts service depending on your plant life cycle.

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MEETING your **EXPECTATIONS**