PROCESS CONTROL & AUTOMATION

State-of-the-art Control and Automation Solutions
Based on its leading position in engineering blast furnace plant and equipment, Paul Wurth is offering electrical and automation solutions to the iron- & steel industry and affiliated sectors.

Highly skilled and experienced engineers, technologists and designers provide design and engineering for quality electrical control systems, from stand-alone solutions up to complete turnkey packages, applicable to new installations and existing ones.

Paul Wurth provides complete Electrics, Instrumentation and Control (EIC) packages, including highly integrated automation solutions as integral part of Paul Wurth projects.

Paul Wurth solutions are modular and respond to customer requirements and standards.

Our scope of supply includes:

- Engineering, Supply, Services and Expertise
- Complete EIC package:
  - Level-0 electrics & instrumentation
  - Level-1 process control
  - Level-2 process models & expert system
  - Condition monitoring

Paul Wurth has a solid global presence in all the major iron and steelmaking markets and worldwide references in Automation.
Paul Wurth provides automation solutions focused on maximizing the benefits to plant operators through useful and relevant features thus meeting their automation challenges.

Paul Wurth automation system is a PLC/DCS based solution delivered on the platform preferred by the customer and best suited for the application.

**Paul Wurth automation system advantages**

The Level-1 process control includes the work with various PLC & DCS platforms as well as multiple HMI systems.
- Development of object-oriented software
- Automation solutions based on customer’s needs
- Full system test and simulation before shipping to site

**Diagnostics**

Very extensive diagnostic is built into Paul Wurth automation solutions, resulting in plant equipment that is easy to operate.

HMI screens tell the operator when any device is ready to be operated, a sequence is ready to be started or a mode of operation can be selected. The HMI walks you through running the plant.

**Simulator**

Paul Wurth offers a very effective hands-on training using the plant/equipment simulator installed at customer plant, training prior to commissioning and available 24/7.

During the design specifications the simulator allows the customer to “see and feel” the automation system they can expect.

During commissioning the simulator is used to run the plant/equipment in automatic mode without material, resulting in reduced start-up cost and risk.

**Proven libraries**

Automation built on proven libraries and modules guarantees high performance, robust design and allows for faster delivery.

**Proven methodology**

“Design what the customer needs and deliver what was promised”, thanks to Paul Wurth methodology. Deep understanding of customer needs and delivery of what promised is ensured by full system test and simulation on every project.
Paul Wurth Level-2 solutions cover all iron making relevant topics from the arrival of raw material at the harbour to the handling of hot metal. This includes the following fields of application:

- Stock Yard & Material handling
- Coke Plant – SUPRACOK™
- Blast Furnace – BFXpert® including SACHEM®
- Hot Metal Treatment
- Hot Metal Charging into EAF

Paul Wurth’s worldwide presence helps to understand the needs of iron and steel manufactures around the globe and to design adequate Level-2 solutions.

The main aim of each Level-2 system is to take full advantage of the equipment and installations by improving processes and workflow.

Paul Wurth Level-2 solutions are compliant with ergonomic standards. Process know-how and conscientious design maximize the usability of the system and by this they help to avoid process failures.

Based on its process know-how Paul Wurth can offer training not only on the software but as well on the related processes.
Scope of services
- Modular, customizable solutions
- Software adaptation to process and existing installations
- General software engineering
- Linking with Level-1 process control solutions
- Linking with Level-3 and laboratory management
- Training

State-of-the-art electrical and automation solutions for highest plant performance, cost optimized operation and best product quality

Level-3

Paul Wurth expertise in iron and steelmaking processes offers the possibility to impart integrated Level-3 functions related to energy management, plant management and cost optimization.
**General services**

In iron and steel industry and affiliated sectors Paul Wurth is your partner for Electrics, Instrumentation and Control.

Throughout all levels of installation Paul Wurth offers its General services:

- Engineering
- Site erection supervision
- Software testing and simulation
- Commissioning
- Training: technical, process, production
- On-site and remote assistance: technical and on the process
- Impartation of Level-3 systems for plant, energy and cost management
Paul Wurth’s Engineering, Supply, Services and Expertise cover the complete implementation progress and include:

- Thorough analysis of processes and specific requirements
- Complete data analysis
- Calibration
- On-site user training
- Support and Maintenance
The Paul Wurth Group is today one of the world leaders in the design and supply of complete plants, systems and processes as well as specialised mechanical equipment for:

**The iron & steel industry:**
- Blast Furnaces & Auxiliary Plants
- Coke Making Plants
- Agglomeration Plants
- Direct Reduction Plants
- Environmental Protection, Recycling & Energy-Saving Technologies

**Other industries:**
- Systems & Equipment for Non-Ferrous Pyrometallurgy, Electrometallurgy & Residue Treatment
- Intralogistics Solutions for Heavy Loads
- Engineering & Project Management for Civil Construction and Infrastructure Projects