



APB

AIST PROCESS BENCHMARKER[®]



Benefits

AIST Process Benchmarker[®] (APB) is a secure online benchmarking service for tracking key performance indicators (KPIs) between users engaged in the manufacturing of iron, steel and related raw materials

The APB offers the following benefits:

- ◆ Benchmark KPIs for specific technical operations against real-world industry norms.
- ◆ Identify opportunities for process improvement and establish specific performance expectations.
- ◆ Focus research and development in key areas necessary to improve technical processes.
- ◆ Make informed decisions to enhance corporate competitiveness and overall industry sustainability.

The APB unites steel producers in comparative technical benchmarking to improve the long-term sustainability of steel as the engineered material of choice for a diverse array of applications.



Methodology

The APB utilizes modules governed by the AIST Technology Committees. Each module contains process-specific data sets, terminology and definitions derived by user agreement to ensure consistent interpretation.

Licensed companies upload their technical data into the APB, which then permits the comparison of industry-wide performance characteristics for further analysis to identify opportunities for improvement.

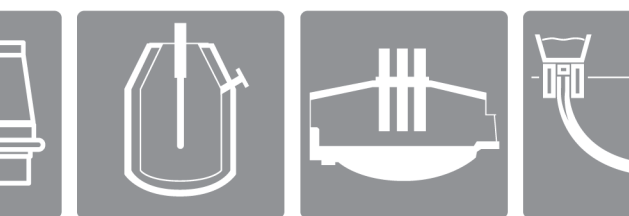
Since data validity is crucial to the evaluation, the APB is programmed for consistent data collection necessary to provide credible and relevant information for all KPIs.

About AIST

The Association for Iron & Steel Technology (AIST) is a non-profit organization serving the steel industry with more than 16,500 individual members from 73 countries. AIST is recognized as a global leader in networking, education, and sustainability programs for advancing iron and steel technology.

AIST has partnered with Management Science Associates Inc. (MSA) to develop the APB, with software based on the Raw Material Data Aggregation Service[™] (RMDAS) platform. For years, RMDAS has been used to securely and confidentially track ferrous scrap data for the steel industry.





Modules

Coke Oven

- ◆ Key performance indicators (KPIs): quality-related data of the coke produced, physical properties, various sizing characteristics, as well as information relating to the coal charged and byproducts.

Blast Furnace

- ◆ KPIs: blast furnace design criteria, reductants/injectants, burdens/fluxes, tuyere configurations, top gas specifications, tapping and slag data, equipment performance, and hot metal chemistry and temperature.

Basic Oxygen Furnace

- ◆ KPIs: hot metal supply, vessel additions, facility and converter information, combustion system and fume treatment, dynamic control systems, fluxes, liquid steel characteristics, thermal aspects, refractories, slag composition and other oxygen steelmaking data.

Electric Arc Furnace

- ◆ KPIs: facility design, heat cycle time, carbon analysis, charge additions/consumptions, flux addition, waste product composition, electrical and chemical energy inputs, consumables and refractories, and related equipment performance.

Slab Caster

- ◆ KPIs: carbon levels of product mix, liquid steel temperatures, mold diagnostics, secondary cooling, product yield, casting dimensions and other machine specifications.





Shape Caster

- ◆ KPIs: carbon levels of product mix, liquid steel temperatures, mold diagnostics, secondary cooling, product yield, casting dimensions and other machine specifications.

Hot Rolling

- ◆ KPIs: roll line availability and reliability, material sourcing data, yield, quality characteristics, upsets, energy consumption, coil characteristics and roll shop data, including roll type and performance.

Galvanizing

- ◆ KPIs: facility characteristics, product sizes, line efficiency, delay frequencies, annealing furnace fuel components, rejection and salvage rates and pot equipment performance.

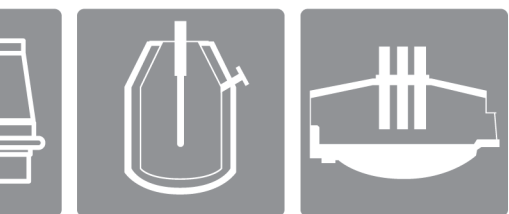
Plate Rolling

- ◆ KPIs: facility equipment and installation data, product grades, sizes and yields, quality performance, cooling profiles, utilization and delay rates, and consumption per finished product.

Rod & Bar Rolling

- ◆ KPIs: facility equipment descriptions and installation data, delay rates, variability in finished sizes, rehear furnace characteristics and efficiencies, and final product quality performance.





How do **you** compare?

Where can **you** improve?



APB
AIST PROCESS BENCHMARKER®





Data Security and Confidentiality

APB data is kept secure and confidential with user access authenticated by AIST based on a formal participation agreement. Data security is provided through the use of individual login accounts, the use of secure socket layer (SSL) connections, and other system-wide security settings. All data is aggregated where necessary for confidentiality. Data sets are reviewed by AIST and MSA legal counsel to comply with anti-trust laws.

Licensed Participation Only

APB is a subscription service that is programmed to require users to input sufficient data commensurate with the level of output data. As such, system access is restricted to companies operating a production-scale module, e.g., blast furnace, basic oxygen furnace, etc.

Licensing and Fees Information

For industry value, the APB is sustained through an annual subscriber fee to underwrite system development, maintenance and user support.

Please contact Ken Landau, manager — technology programs, at klandau@aist.org or +1.724.814.3036.

Training and Support

Training and technical support for the AIST Process Benchmarker is available at no additional cost through AIST via online conferencing.

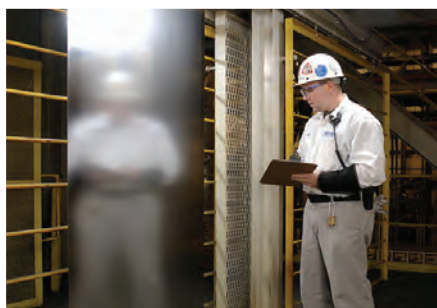
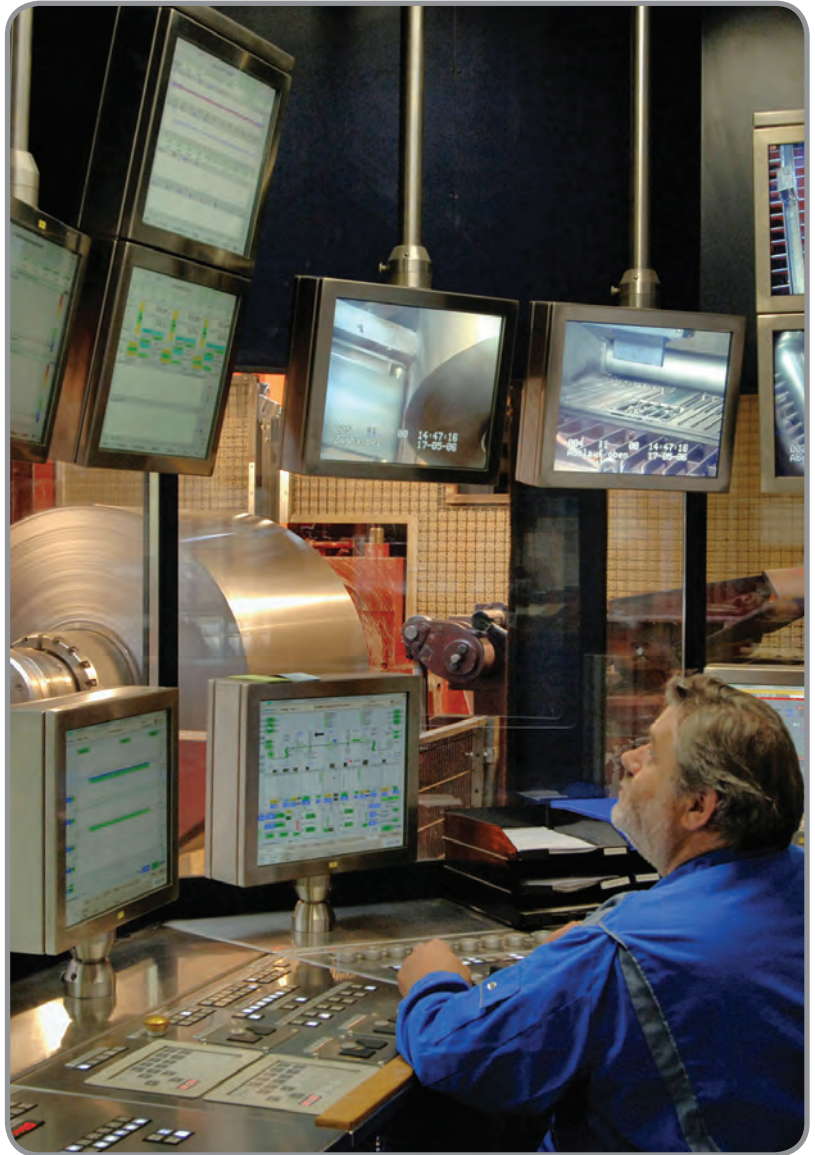
System Demonstration

To learn more about the system functionality and arrange a live demonstration, please contact Ryan Wolfred, AIST staff engineer, at rwolfred@aist.org or +1.724.814.3072.



186 Thorn Hill Road
Warrendale, PA 15086-7528 USA
+1.724.814.3000

AIST.org/apb



Powered By:
MSA
RMDAS™
Technology