

ATAS METSTAR

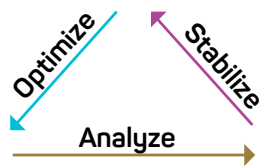
NEXT GENERATION OF METALLURGICAL
PROCESS CONTROL SYSTEMS

A NOVACAST SYSTEMS PRODUCT



ATAS METSTAR

ATAS MetStar is an adaptive tool for analyzing, stabilizing and optimizing the foundry process and helps improving yield and quality of castings. ATAS results in more consistent castings which will reduce your scrap rate, save energy and contribute to a greener planet.



ATAS MetStar is the new generation of metallurgical process systems which enables you to analyze, optimize and stabilize your foundry production. ATAS (Adaptive Thermal Analysis System) is flexible and can easily be adapted to various production layouts and be configured to show exactly those parameters that the production personnel on the foundry floor needs. With this modifying system you can predict micro/macro shrinkage in castings, therefore you can increase production yield, lower the energy consumption and at the same time reduce the environmental footprint. ATAS MetStar is built to inspire foundrymen to take charge of their process by making them in control of the variables. With its innovative features together with our customer guides, we will help you make your castings greener. This tool is called Good Guys' Index and not only does it measure your carbon emission but also your general environmental impact.

Real time process information

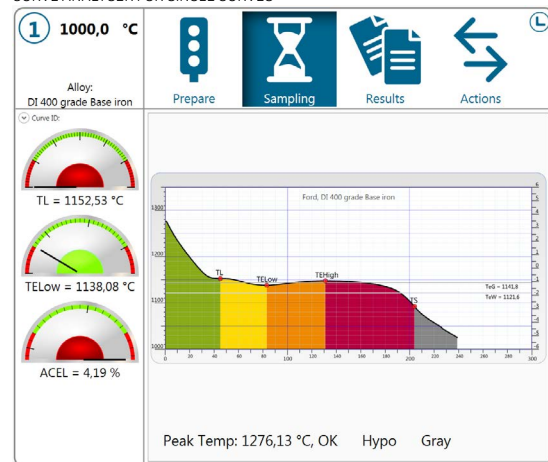
Production management can easily follow variations in the metallurgical process using Process tracker, an online information system that visualizes how metallurgical parameters vary in time, for

example between various treatment batches or different shifts. Process tracker was developed to give production management and staff more information on how metallurgical quality in the process varies with time and it is also a tool for counteracting slow changes in the process and breaking the trend towards declining quality. It is an excellent tool for planning conditioning of the base iron in holding and melting furnaces.

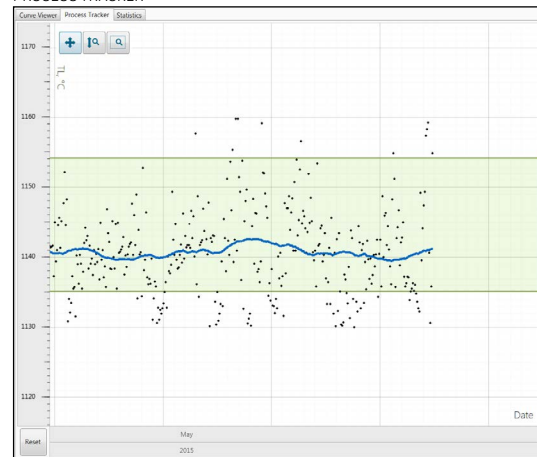
Usability and interactivity

Operators will find ATAS MetStar easy to work with since it follows the production flow in the metallurgical process. The logical interface with distinct symbols and automatic presentation of results adapted to the current production process, make ATAS MetStar the given choice for detailed and correct evaluation of the metallurgical process.

CURVE ANALYSER FOR SINGLE CURVES



PROCESS TRACKER



Alloy database

The alloy database as well as the database for process and production equipment have been increased and now contains fully detailed information about the production process. Several different types of alloying material, furnaces and ladles can be predefined and used later to calculate adjustments and additions.

Curve analyser

The analysing module is fully redesigned, with user friendliness and flexibility in mind. New filtering functions have been added, multicurve view, zoom, automatic picture generation and export of data files directly to Excel format.

Learning function

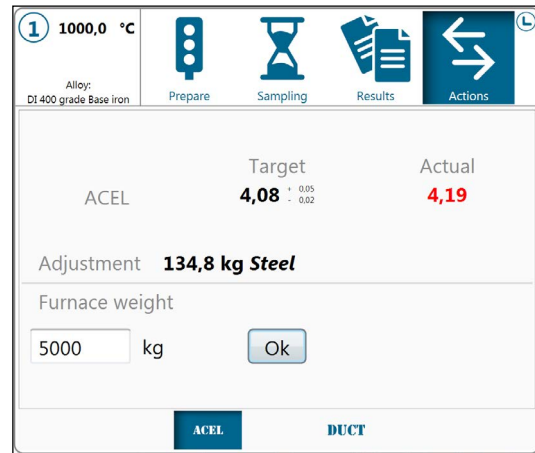
The learning function is now more intuitive and intelligent. The system is adaptive with regards to the metallurgical fingerprint and curves that are incorrect. The system will automatically filter curves that are not good (i.e. to low pouring temperature in sample or interruption during measurement of sample) and therefore curves will not be used in the calibration process. This leads to quicker and more correct definitions of max/min limits for the metallurgical process window.

Modularisation - production and engineering unit

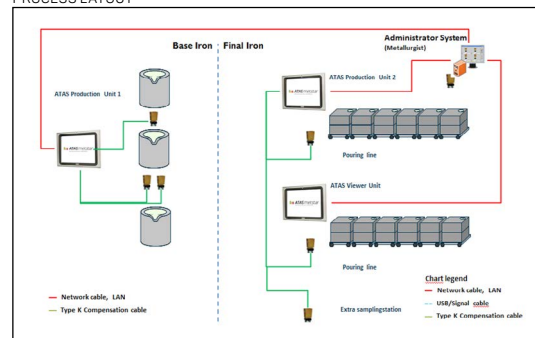
The system is divided into production units and engineering units to facilitate planning of the complete process control system ready for installation in a foundry. The production unit is a clearly defined module for testing and providing information to operators. The system is highly automatic, demanding few functions from the operator and thereby limiting the influence of the "human factor" on results and performance. The engineering unit is serviced and monitored by production management. Changes or replacements in parameters, is only performed by licensed personnel.

Communication with external devices

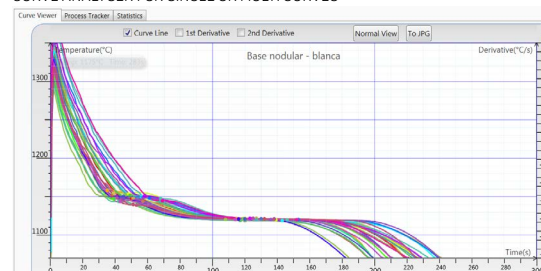
ATAS MetStar is fully equipped to function at the center of a modern foundry. System functionality can communicate with: spectrometer, charge equipment for graphite, FeSi and FeSiMg, inoculation devices, temperature measurement equipment and equipment for mechanical testing.



PROCESS LAYOUT



CURVE ANALYSER FOR SINGLE OR MULTI CURVES



OVERVIEW

