

# ATAS METPRO

COLLECT AND ANALYZE PROCESS DATA  
SMARTER AND MORE STRUCTURED

A NOVACAST SYSTEMS PRODUCT

NOVACAST



# ATAS METPRO

**ATAS MetPro is a process management and data collection system. The system guides the foundry staff through the complete charging and melting process.**

ATAS MetPro helps foundries structure their production process by visualizing the collected and saved process data. The system also gives the operator real-time advice based on the current status of the defined process parameters, as well as information about the recently produced batches. This is easily analyzed afterwards for quality assurance and traceability. The outcome is reduced cycle time and less risk for errors, which results in lower scrap rate. It also minimizes energy consumption, which contributes to a greener planet.

ATAS MetPro is an essential hub and communication centre for foundries. The ATAS MetPro system communicates with different devices for measuring and controlling, as well as machines for correction of the process. Examples;

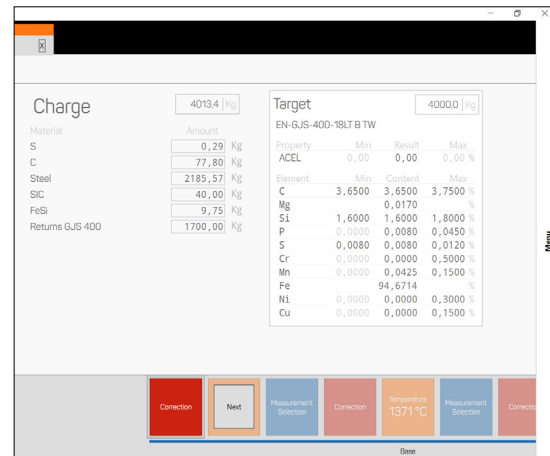
- Temperature control – temperature lance
- Chemical adjustment – spectrometer, LECO or another similar device
- Calculation of additions – for example MetalMaster and ATAS MetStar

The communication set up is individually adapted to different measuring and control devices and ATAS MetPro. When ATAS MetPro is taken into production, it handles the information in real-time, makes analyzes and graphically structures the data before the information is displayed to the operator.

After the process is set and saved in the Melt Plan Editor, the operator starts the process from the

user interface and the system guides the operator through the process according to the set scheme.

A DISPLAY OF THE FIRST CHARGE

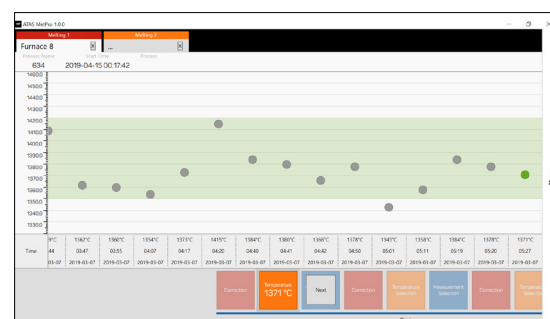


The main functions of ATAS MetPro are:

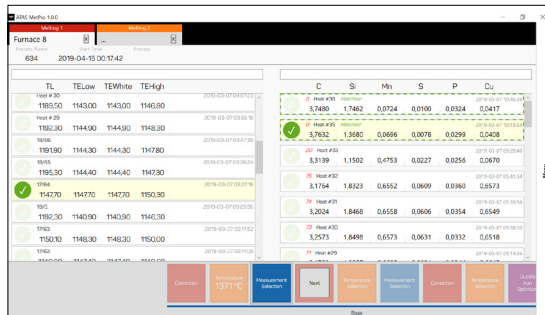
- Supporting and guiding operators through the metallurgical production process
- Visualizing real-time information concerning the current process
- Saving process data in a central database
- Simplifying quality analysis and trouble shooting
- Improving and increasing traceability of details for customer orders or batches

After the charge is set, melted and superheated, the activity steps are measured and evaluated. ATAS MetPro imports the process data from the internal network, displays the results to the operator, who chooses the correct data. The two following pictures show the user interface for the second step in the example.

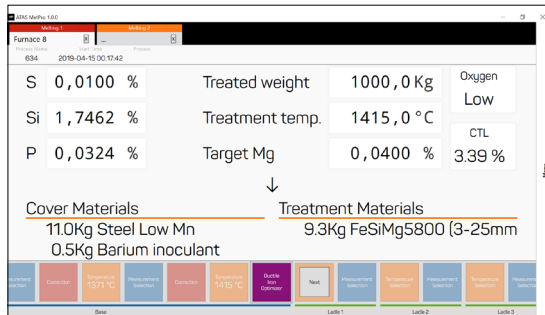
HISTORY OF ALL THERMAL LANCE SAMPLES TAKEN OUT OF FURNACES AND THE SELECTED LIMITS (GREEN AREA)



CHEMICAL ANALYSIS ARE DISPLAYED



RESULTS OF THE OPTIMIZED ADDITION OF CHARGE



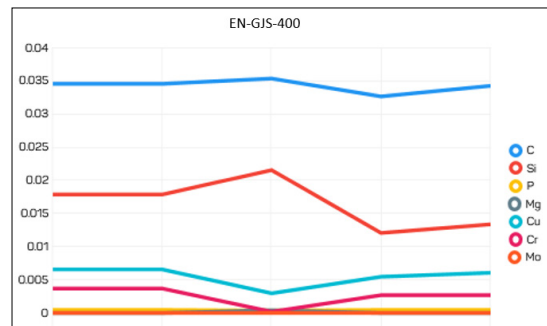
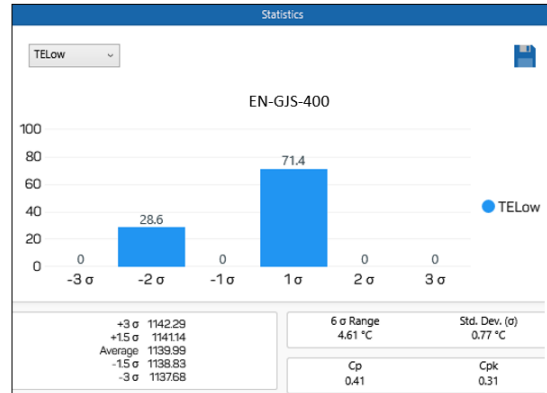
The system automatically loads the information from the chosen samples concerning chemical information and metallurgical parameters. Ladle weight and target magnesium content are imported.

Important information like Oxygen level and the CTL (carbon content evaluated based on the Liquidus temperature) are calculated.

An example would be a furnace of 4 tons with each ladle weighing 1 ton. This makes four ladles treated from one furnace. The last step is temperature control and chemical analysis for each ladle. The system visualizes clearly which ladle is active, has already been set and how many are left before the process is finished.

### Process viewer

The ATAS MetPro system has an evaluation function for quality and traceability control called Process Viewer. In the Process Viewer, the user can make diagrams, statistics and evaluations using regression analysis. The next picture gives examples of how the system can be used for documentation of the process.



ATAS MetPro can be used in all sizes of foundries with different production layouts. The system is developed to control the production of the following alloys; gray iron, compacted graphite iron, ductile iron, white iron, SiMo iron, Ni-resist iron and steel.

### Support

If you experience any issues with ATAS MetPro, or have any questions, click on the "support" button in the main menu and you will be remotely connected to a NovaCast team member who will be more than happy to assist.

NovaCast Systems AB  
Soft Center  
372 25 Ronneby, Sweden  
Tel: +46 457 465 800  
info@novacast.se  
novacast.se