METAL MASTER

CHARGE OPTIMIZER FOR AUTOMATIC CALCULATIONS

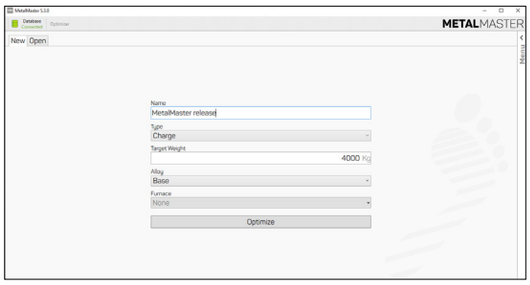
A NOVACAST SYSTEMS PRODUCT

NOVACAST

METAL MASTER

MetalMaster is a charge and correction optimizing tool based on the foundry's internal quality requirements. The aim is to reach the targeted chemical composition for a specific quality to the lowest possible cost. MetalMaster can easily be used as a support system to ATAS MetStar.

START PAGE



Cost-effective

MetalMaster is a cost-effective tool that enables advanced optimized calculations on your PC. It is combined with a manually controlled calculation facility, which means that you can take special limitations into consideration.

Database

The database can contain an unlimited number of components. All charges and corrections made by MetalMaster are automatically saved to the database (PostgreSQL) giving the user full traceability of the material additions.

Manually controlled charge

The manually controlled program makes use of the component database. It allows the user to compose any type of charge. It is also useful for making corrections in an already optimized charge. The analysis and cost are calculated by choosing the amount or share of each component. If there are any changes, a new calculation is automatically made, the new analysis is displayed and the charges are saved.

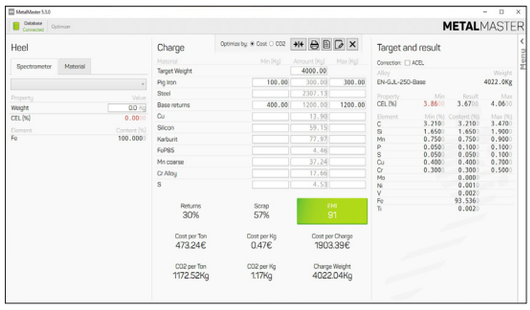
Adjustment of furnace analysis

MetalMaster enables rapid calculations of additions needed for the final adjustment of the melt. It automatically optimizes additions to minimize the charge costs.

Benefits of using MetalMaster:

- Lower costs of melt material will generate savings in a normal foundry between 2 – 5%. It is practically impossible to achieve the same results using manual calculations.
- The target analysis can be obtained with fewer adjustments.
- Charge optimization selection between CO2 and cost calculation.
- EMI score based on CO2 emission

CALCULATING MATERIAL ADDITIONS



Right the first time

By using MetalMaster it is possible to increase productivity and improve accuracy in charge and correction calculations. New charges can be composed in a matter of seconds. The calculated charge will always be within pre-defined restrictions and at the lowest possible cost. The consequences of using a different type of e.g. pig iron can easily be simulated. MetalMaster can be used as a tool for choosing the best raw materials for each alloy.

It is quite possible that a certain raw material, although cheaper per ton, might be less advantageous than a more expensive one in the final base iron. This information would be very difficult to obtain without using MetalMaster.