

# METAL MASTER

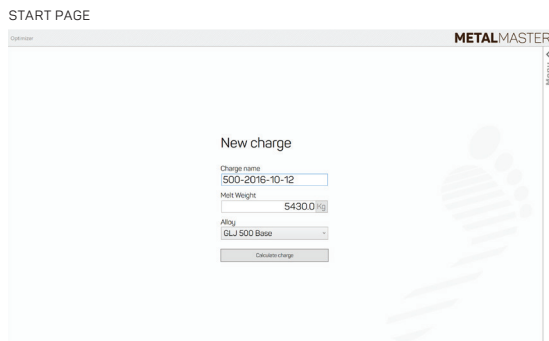
CHARGE OPTIMIZER  
FOR AUTOMATIC CALCULATIONS

A NOVACAST SYSTEMS PRODUCT



# METAL MASTER

MetalMaster is a charge 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.



## 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.

## "Simplex-method"

The optimizing method is based on a modified version of the "Simplex-method". This method gives a charge composition with the required analysis at the lowest possible cost.

## Component database

The database can contain an unlimited number of components. Easy to create and re-use all saved data.

## 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 small modifications in an already optimized charge. The analysis and cost is calculated by

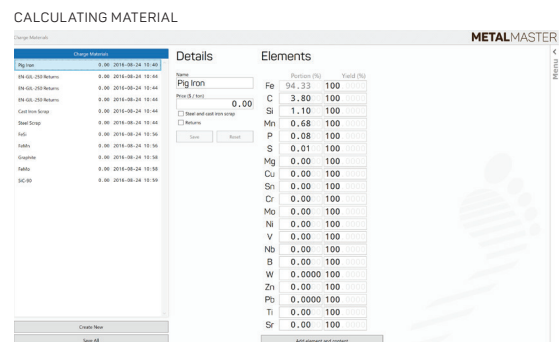
choosing the amount or share of each component. If there are any changes, a new calculation is automatically made, the new analysis is displayed and the charges can be saved.

## 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.

## What do you gain by using MetalMaster?

- Lower costs of melt material, which generate savings in a normal foundry ought to be approximately 2 – 5%. It is practically impossible to achieve the same results using manual calculations.
- The target analysis can be obtained with fewer adjustments.



## Right first time

By using MetalMaster it is possible to increase productivity and improve accuracy in charge calculations. New charges can be composed in a matter of minutes. 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.

## Hardware requirements

- PC - low requirement
- Windows 7 to 10