

qontrol **m**aps

Raw material management software for meltshops



ontrol



reduce your OPEX and CO₂ emissions

qontrol maps is an advanced raw material optimization software designed to reduce your OPEX along the complete steelmaking value chain.

- Are your suppliers delivering the correct raw materials?
- What are the current properties of your raw materials?
- What is the ideal furnace charge mix?
- What is the ideal alloying strategy from melting to casting?
- How should you arrange your production orders to reduce cost?
- What are the raw material requirements for the next campaign?
- How to deal with changing scrap availabilities and energy prices?
- How can you reduce overall costs and CO₂ emissions?

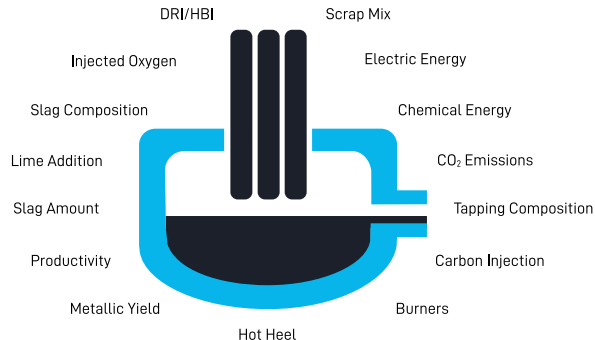
” The best system on the market to ...

Our Software Modules

1 Material Characterization

This module automatically determines the scrap quality of each scrap on the scrap yard in real-time without the need for any additional sensors or physical equipment to be installed.

- Chemical Composition [wt.-%]
- Energy Consumption [kWh/t]
- Metallic Yield [%]



2 Charge Optimization

This module automatically determines the ideal charge mix for a melting furnace considering all relevant production parameters and cost drivers.

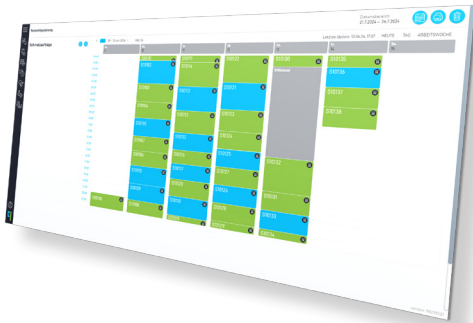
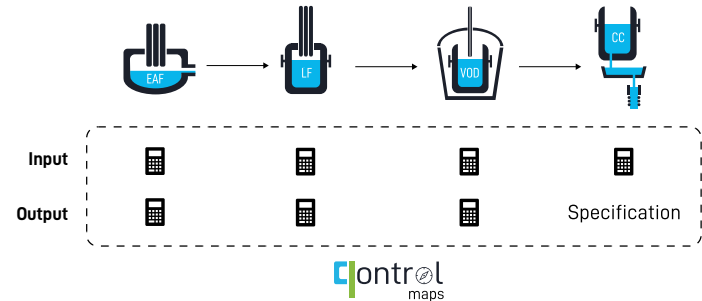
1 determine your scrap quality,

2 optimize your melting performance,

Tailored to your Requirements

3 Heat Optimization

This module automatically determines the ideal charge and alloying strategy along the complete steelmaking route from melting to casting.



4 Campaign Optimization

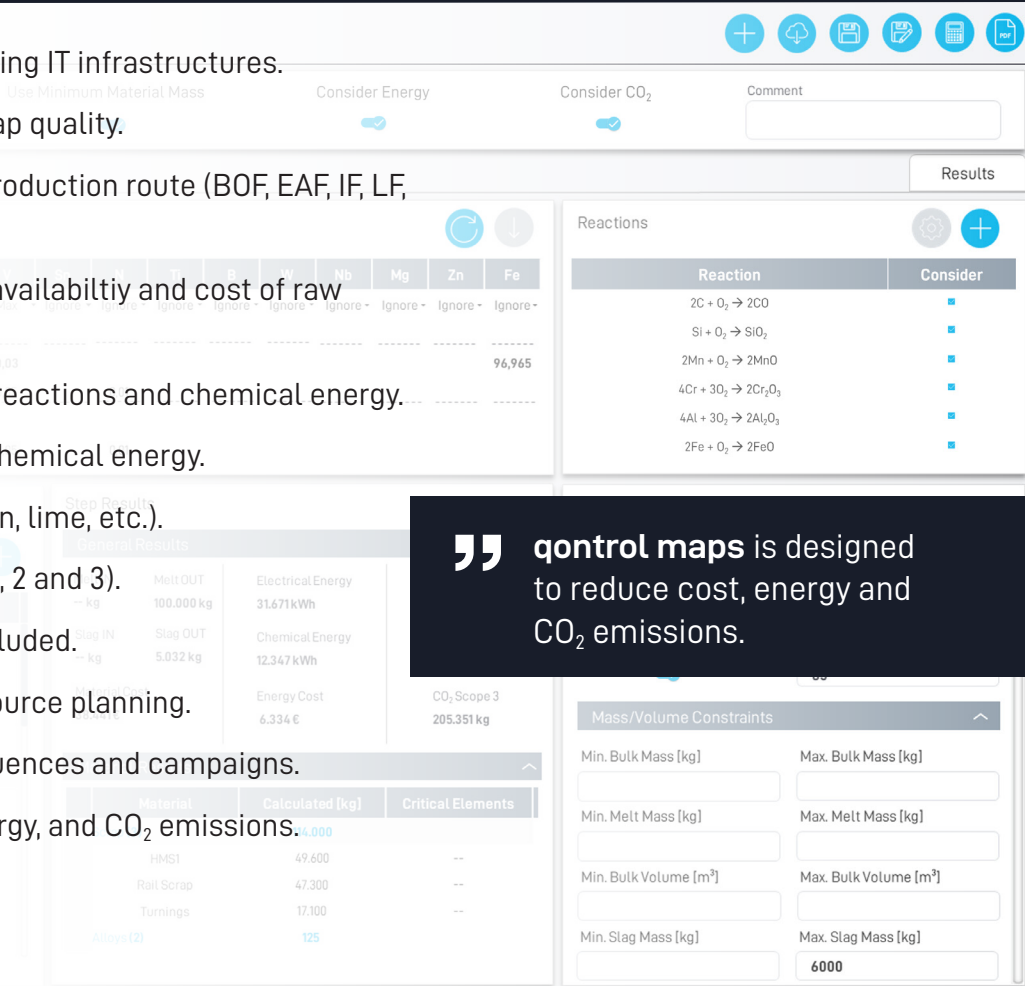
This module automatically optimizes entire production campaigns (consisting of a sequence of multiple heats) based on variable energy prices, raw material availabilities, and other parameters.

3 improve your secondary metallurgy

4 and reduce your production cost.

System Highlights

- Easy system integration in existing IT infrastructures.
- Real-time determination of scrap quality.
- Optimization of the complete production route (BOF, EAF, IF, LF, AOD, V(O)D, etc.).
- Optimization based on current availability and cost of raw materials and energy.
- Consideration of metallurgical reactions and chemical energy.
- Optimization of electrical and chemical energy.
- Consideration of utilities (oxygen, lime, etc.).
- Full CO₂ emission audit (scope 1, 2 and 3).
- DRI/HBI and hot heel model included.
- Facilitation of raw material resource planning.
- Optimization of production sequences and campaigns.
- Substantial savings in cost, energy, and CO₂ emissions.



“control maps is designed to reduce cost, energy and CO₂ emissions.”



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