Products and services for intelligent and sustainable steel production.

OUR FIELDS OF ACTIVITIES

software & hardware

Efficient steelmaking by transforming metallurgical processes into tailor-made software.

Read More →

equipment & devices

Reliable and sustainable products and solutions that make work easier and safer.

Read More →

consulting & studies

We help our customers optimize metallurgical processes, evaluate and develop business models, and integrate industrial software.

Read More →

OUR VISION

make the
intelligent production
a reality.

We understand intelligent production to be

sustainable   efficient   safe   optimized

Our customers are our inspiration, hard work our key to customer satisfaction.

OUR WORK

Let us share our passion for the metals industry as we have done in our previous projects.

software & hardware

Level 2 Software for Stainless Steelmaking

" In order to achieve the planned decarbonization of the industry, the CO_2 balance of steel production plays an essential role. With the help of qontrol, we can map our production process completely digitally, and optimize the CO_2 balance sustainably on the basis of the integrated metallurgical models.

Julian Franek
Breitenfeld Edelstahl AG
Deputy Production Manager Melt Shop

Digitalization of a Foundry's Melt Shop

" With qoncept's software, we have finally found a solution that makes our daily work in the melting shop much easier. Thanks to the integration of our own experience into the software, the intuitive usability and the automated processes, we can now fully concentrate on our core tasks.

Johannes Ladinger
voestalpine Gießerei Traisen
Hauptprozessleiter Gussherstellung

Brief description of reference examples:

- **voestalpine Gießerei Traisen GmbH:** Level 2/3 software system to control and optimize the production processes in the melt shop. The functionalities include cost-optimized charge calculation, order dressing and planning, as well as metallurgical process management of EAF, AOD, Mg-treatment and casting.

- **Austrian rebar producer:** Software system in combination with our cameras for fully automated tracking of crane/scrap movements and determination of wagon unloading, scrap storage, and the layering in the scrap basket.

- **Breitenfeld Edelstahl AG:** qontrol software system for the optimization of the value chain from scrap to the cast ingot including order planning, raw material optimization and process control for EAF, LF, VD/VOD and ingot casting.

- **Italian manufacturer of reinforcing steel and wire rod:** Software solution qontrol maps to optimize the use of raw materials, to minimize the EAF energy consumption and CO_2 emissions from day one.

- **Customer from Austria:** qontrol software system for the management of the various processes of the finishing line, including the management of production-relevant data, the planning of operations, the tracking of individual bars, the control of manufacturing processes and reporting.

- **Stainless steel sheet manufacturer:** Seamless integration of the qontrol software system - for monitoring and controlling the production steps for the final processing of flat steel - into the customer's IT system landscape.

equipment & devices

References

Coupler

- Automatic & safe ladle coupler for hydraulic slide gate (Beltrame Group, Italy
- Engineering and supply of the system for a ladle transfer car (Brazil).
- Engineering and supply of the automatic coupling system for a Belgium steel producer.
- Engineering and supply of the next generation gas coupler system for an Italian steel producer.

Other Engineering Solution References

- Engineering and supply of mechanical auxiliary machines (global).
- Engineering, supply and commissioning of a new preheating station (Austria).
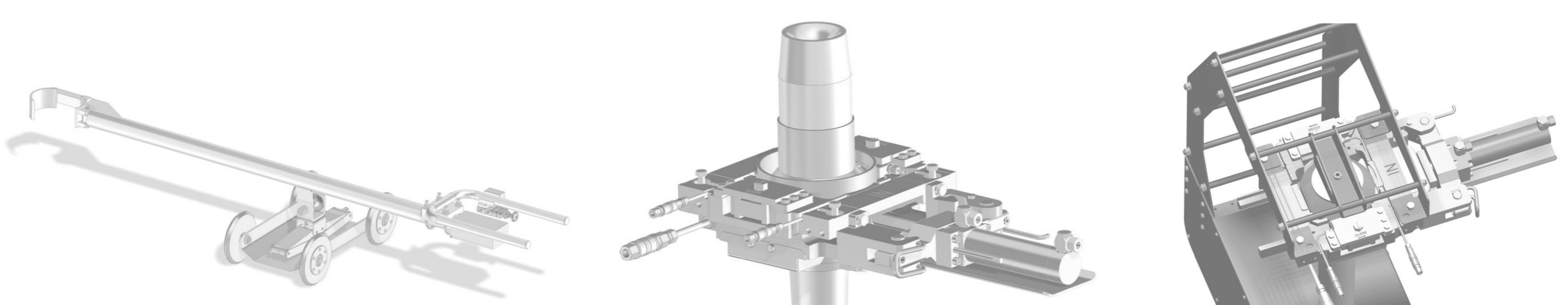
# consulting & studies

Metallurgical Process Optimization

- Technological consulting services for ingot casting
- Evaluation of potential steel plant improvements
- Improving the meltshop's productivity
- Solidification analysis for continuous casting
- Evaluation of potential optimizations for ingot casting
- Evaluation of the concept of a newly planned steel plant
- Optimization of the ingot casting quality

Requirement & Software Engineering

- Conceptual software design for product life cycle tracking
- Several software requirement projects
- Creation of a roadmap for the digitization of a manufacturing plant
- Conceptual design of software to optimize ferro-alloy production
- Requirement engineering for a software in a foundry
- Development of a software enterprise architecture

Feasibility & Business Strategy Studies

- Conceptual mechanical engineering study
- Comparative metallurgical studies of raw material use in EAF and IF
- Technological basic data and tender evaluation support of new CCM
- Evaluation of savings potential in ladle management
- Feasibility study on different blowing processes and development of a business model for the utilization of metallurgical slag

oncept
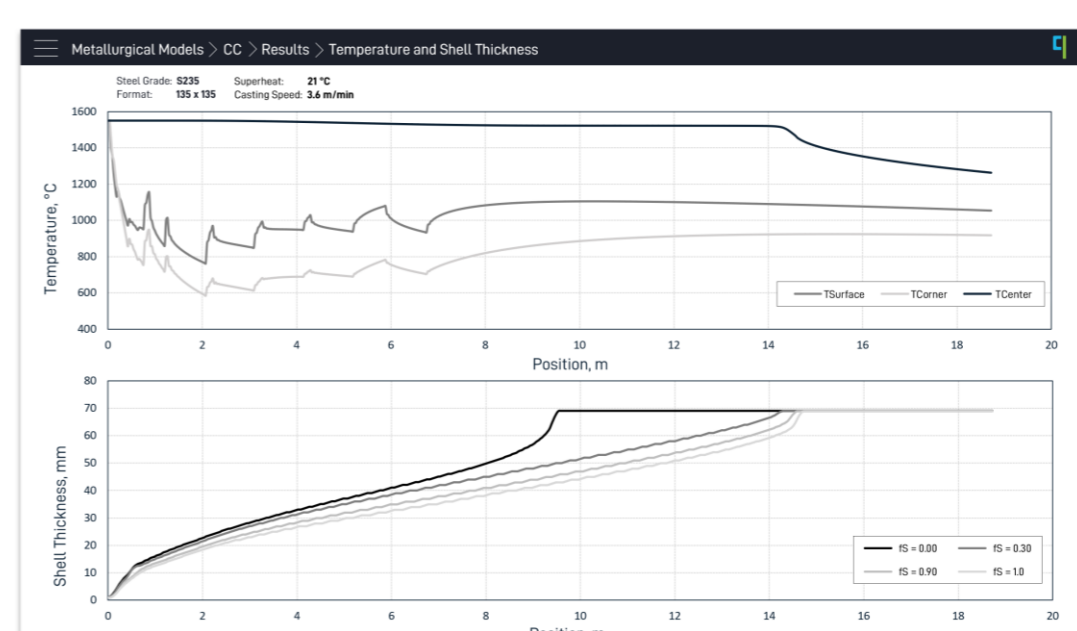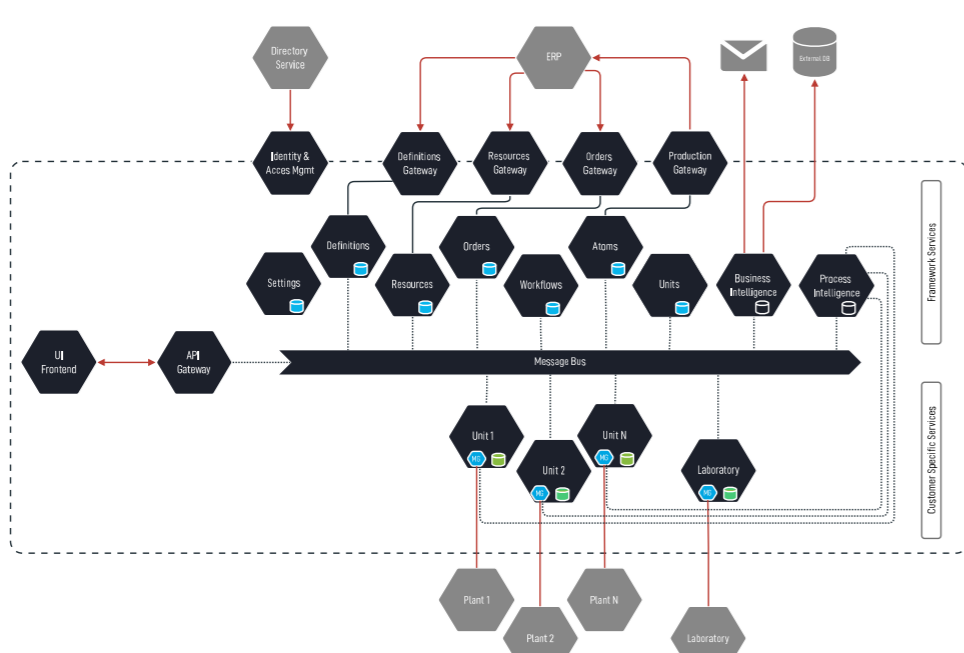
Useful technologies are created by combining a wide variety of engineering disciplines.

ABOUT US

we love and live metallurgy

In a time of ever-changing challenges, companies are faced with the question of how to set the course for **intelligent** technologies. These challenges can be mastered with a fair, reliable and competent partner.
We at **qoncept** want to shape the future of a sustainable process industry with and for our customers.

Combined expertise for customer success

Success

We are an interdisciplinary team (metallurgists, physicists, mathematicians, system and mechanical engineers as well as software developers) dedicated to the sustainable success of our customers. We are passionate about delivering efficient technologies tailored to our customers' needs.
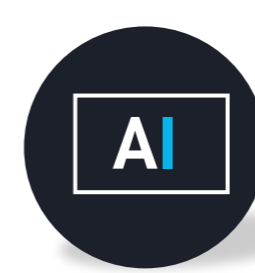
WHAT DRIVES US

Our four key priorities, to which our products and services contribute significantly, are the following:

CO_2
decarbonization

Fe
use of raw material

Al
digitalization

H_2
new technologies

decarbonization
This requires an understanding of the new technologies. Sound knowledge is a prerequisite for meeting the challenges of technological change.

use of raw materials
The ever-changing prices of raw materials and electrical energy, as well as the uncertain availability of scrap and alloys, require advanced software tools to optimize the use of raw materials.

digitalization
Existing and new metallurgical processes need to be modelled across processes and in real time using advanced software.

new technologies
In order to secure a competitive advantage, new processes using the latest technology have to be developed and implemented in the day-to-day business.