# CONSULTING AND STUDIES

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

# welcome to our consulting services

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#### Consulting | Studies

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### 01. METALLURGICAL PROCESS OPTIMIZATION

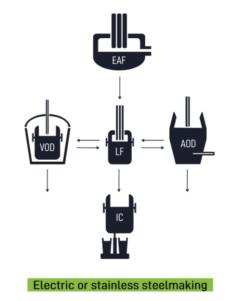
Our production-proven experts are familiar with the latest melting and casting technologies and know how to transfer experience and implement solutions.



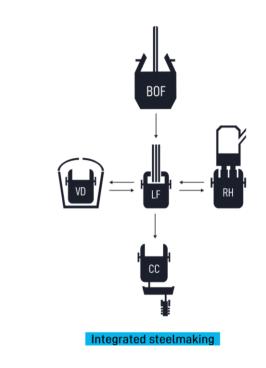
# 01. METALLURGICAL PROCESS OPTIMIZATION

#### Where we are supporting our customers:

- Scrap yard and raw material optimization
- Optimization of the EAF process (change of furnace operating modes)
- Improvement of secondary steelmaking (reduction of non-metallic inclusions, slag metallurgy, degassing, decarburization, alloying strategies, etc.)
- Ingot casting (plate preparation, casting rate, powder addition, solidification)
- Continuous casting (solidification, EMS, soft reduction, cooling strategies, reduction of internal and surface defects, etc.)



Our technological expertise covers integrated steelmaking, as well as electric steelmaking, with a special emphasis on the production of quality steels, stainless steels and high-alloyed grades.



# 01. METALLURGICAL PROCESS OPTIMIZATION

#### our work | references

- 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



### 02. REQUIREMENT & SOFTWARE ENGINEERING

Together with you, we create and develop future-oriented, modern and innovative digital solutions for the production of tomorrow.



# 02. REQUIREMENT & SOFTWARE ENGINEERING

#### Where we are supporting our customers:

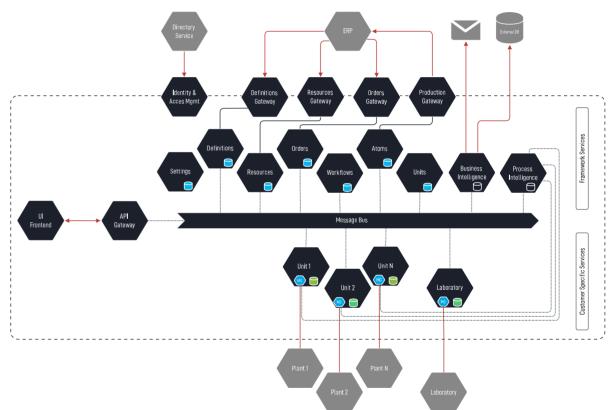
- Evaluating the current situation (software systems, overall IT architecture, degree of automation and digitization)
- Cross-system analysis of business processes.
- Establishment and standardization of interfaces
- Systematic and professional requirement engineering
- Work-out and design of solutions
- Support with software integration (communication & change request management, project planning and monitoring,
- Identify possible Industry 4.0 technologies (find the right product).



# **02. REQUIREMENT & SOFTWARE ENGINEERING**

#### our work | references

- 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



### **03. FEASIBILITY & BUSINESS STRATEGY STUDIES**

With our experienced C-Level experts in the field of metallurgy, we prepare independent reports and help in the development of cooperate strategies.



# **03. FEASIBILITY & BUSINESS STRATEGY STUDIES**

Where we are supporting our customers:

- Working out conceptual studies for upgrades of existing plants.
- Consulting for creating tender documents for new investments and supervision of the tender phase.
- Conducting an independent review of an ongoing investment project.
- Elaboration and evaluation of capex and opex measures CAPEX and OPEX
- Business model evaluation and development



### **03. FEASIBILITY & BUSINESS STRATEGY STUDIES**

#### our work | references

- 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



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