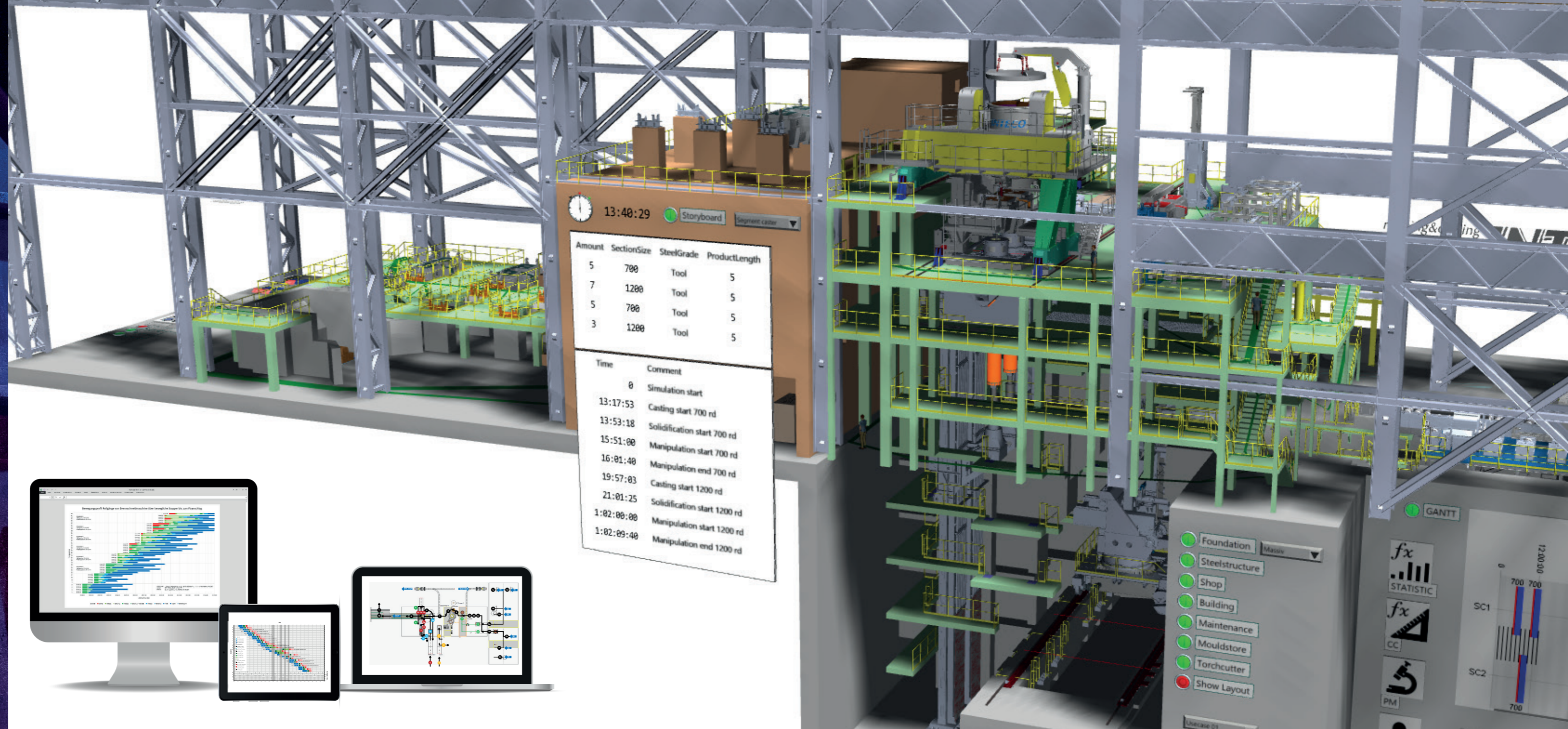


ABOUT INTECO

INTECO



WHO WE ARE...

Starting out as a consulting company for the special steel industry, INTECO has grown to the only single source supplier worldwide that offers all production processes for metal treatment. Since more than 90% of our equipment and services are exported, INTECO is a global player represented by local agents and/or subsidiaries to market and service the products worldwide.

WHAT WE DO...

INTECO provides tailor-made solutions for the specialty steel industry – with the focus to further develop the service and product portfolio in the future to strengthen the leadership in metallurgical process technology and equipment for melting, refining, casting, remelting, solidification and atomization for high performance steels, super alloys and titanium.

WHAT WE AIM FOR...

We aim for innovation to constantly improve quality of the final product as well as making metal production safer, easier and more efficient. Research and development in process technology and plant design is therefore the key to success. Continuous improvements processes and operating techniques as well as design of systems/components are carried out thoroughly.

INTECO MELTING AND CASTING TECHNOLOGIES GMBH

INTECO

Wiener Strasse 25
A-8600 Bruck an der Mur
+43 3862 53 100 0
jobs@inteco.at
www.inteco.at

WE ARE PLANT SIMULATION STUDIES

INTECO

HOW TO USE YOUR DATA FOR YOUR ADVANTAGE

Even though most plant processes have already been digitalized, many companies do not use this collected data for their advantage. With the objective to get the best out of it, INTECO offers comprehensive plant simulation studies which simulate the entire production line of highly complex steel plants from raw material to the final product. The aim is to record and display every single production step and the respective duration as well as to monitor processing periods in a steel plant in order to detect potential for optimization. INTECO runs through the process repeatedly changing parameters to create different scenarios which in turn serve the customer as an orientation for decision making in green or brown field projects.

Application

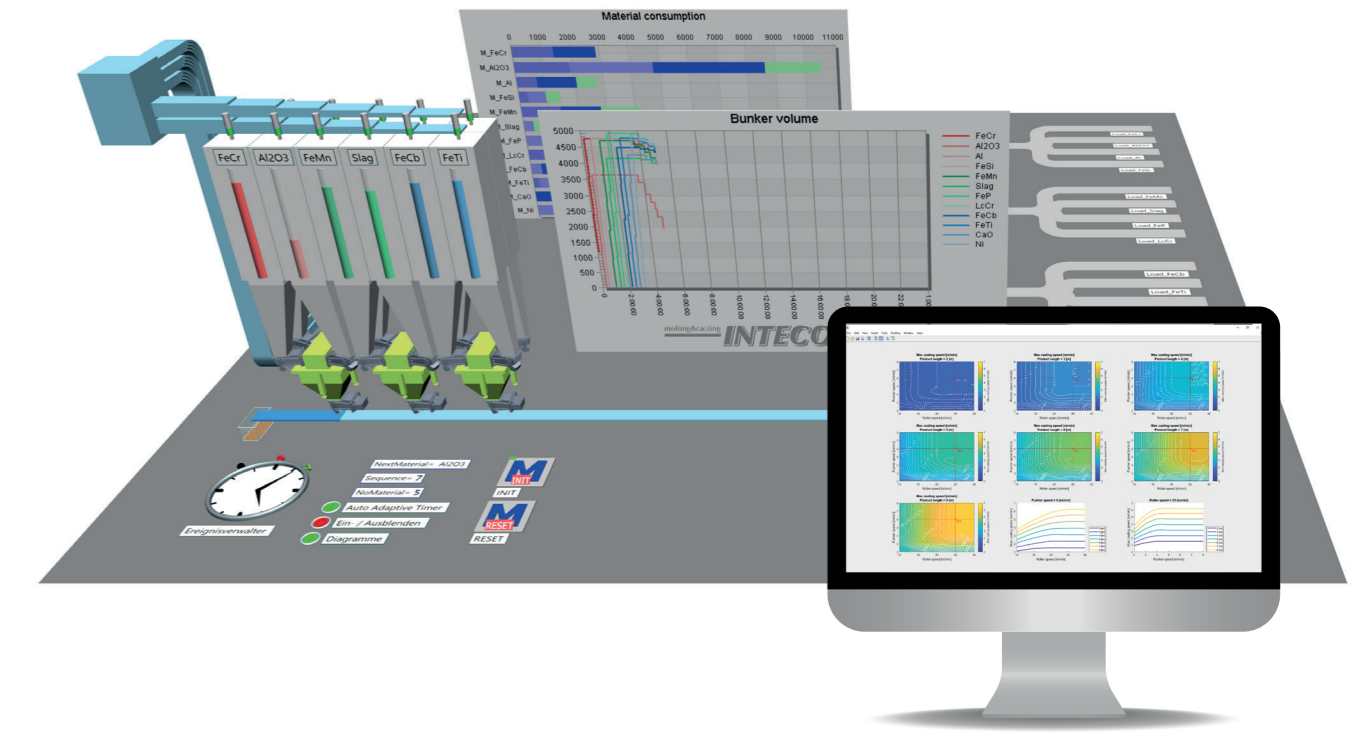
Plant simulation studies can be done for the entire production line of highly complex steel plants from raw material to the final product or for a specific target area. They do not have any limitation – no matter if applied for the melting or casting area, somewhere in between or whatever is needed in a steel mill.

SPEED UP AND FACILITATE DECISION MAKING

INTECO realizes each project tailor-made to the customers' specific requirements offering full flexibility. This flexibility is also given during holistic or detailed plant simulation studies. For that, INTECO uses the Tecnomatix® portfolio which is a holistic software solution from Siemens Digital Industries Software for displaying a steel plant virtually. Thereby, all aspects of production, from process definition to planning and simulation of all production steps are covered, using the digital twin.

Furthermore, it's usage facilitates an easy information exchange with data collected elsewhere. This allows seamless transition of information from product design to manufacturing to logistics. Therefore, developing production solution with consideration of various scenarios to speed up and facilitate decision making for the customer becomes easier than ever before thanks to digitalization. The ability to evaluate the feasibility by considering all possible scenarios upfront, prevents the customer from unpleasant surprises in retrospect, like unplanned expenses e.g. This in turn increases the likeliness to place an order to turn the digital twin into reality. But not only the customer profits, also INTECO does. By simulating various scenarios upfront, INTECO's engineers can concentrate on developing proven processes and save time for extra work by lowering the risk for having to make corrections. This in turn allows INTECO to meet tight project schedules.

But INTECO not only conducts plant simulation studies for greenfield but also for plants in operation or just a small target section to help the customer to optimize material flow, performance, or power consumption, to only mention some. Moreover, such study can detect bottlenecks and help to find an easy way to eliminate those. Therefore, it can be seen as a tool to improve the throughput in general.



HOW THE SIMULATION WORKS

Reliable and holistic simulations call for a renowned expert. This is why INTECO cooperates with HATEC Automatisationsges.mbH – a partner of Siemens Digital Solutions Industries – for doing the basic programming with all the data INTECO provides. Since fullest flexibility is of utmost importance to INTECO the interface comes with fullest flexibility to be able to adjust parameters in various scenarios. The output is displayed in GANTT charts as well as Excel Spreadsheets and can be illustrated as a 2D or 3D model – according to the customers preferences.

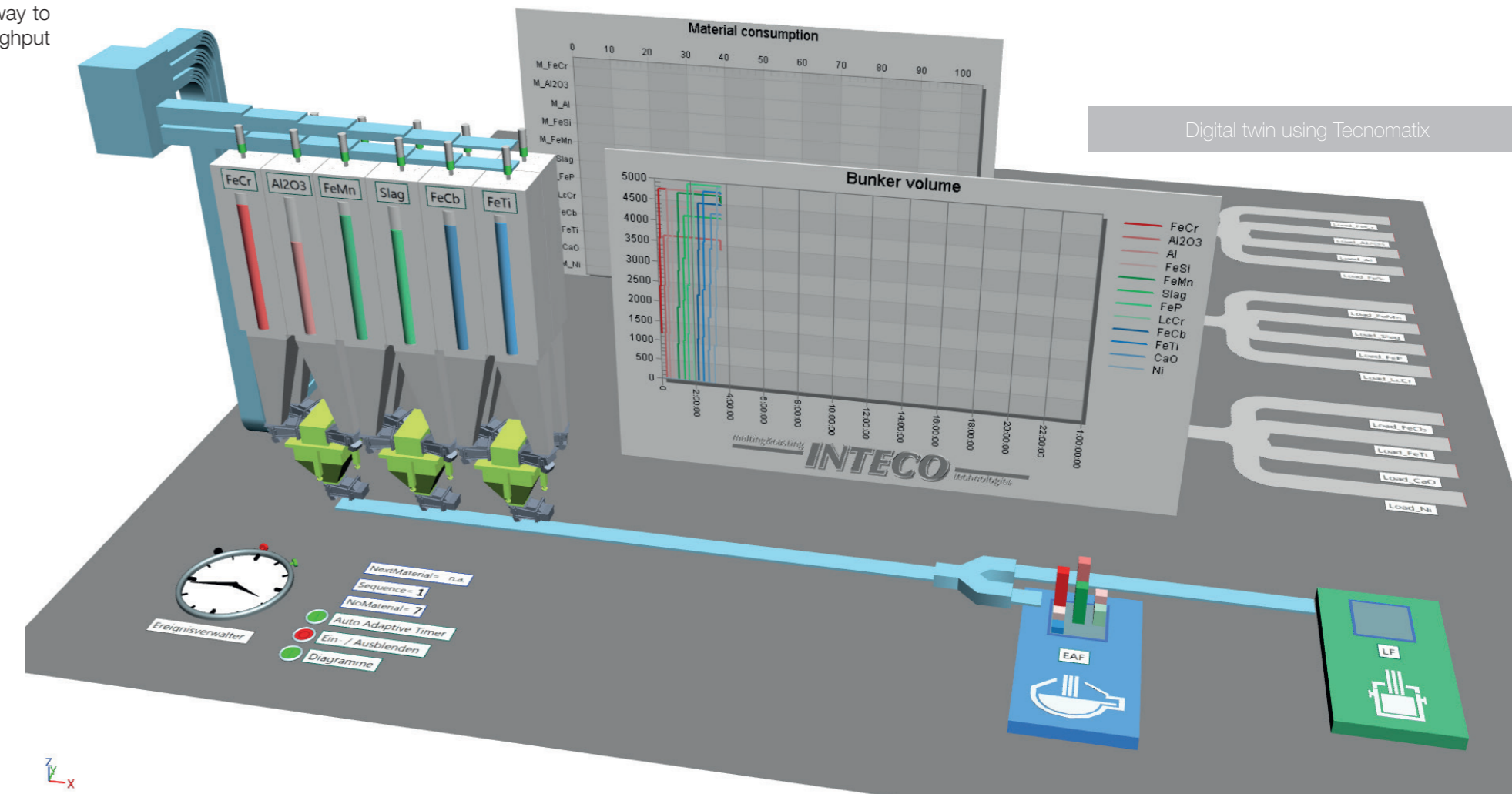


BENEFITS



Benefits of carrying out plant simulation studies ahead of the investment:

- › Digital twin to better understand what is needed and if ideas can be put into reality
- › Feasibility studies to evaluate if the project can be realized
- › Material flow optimization (e.g. annual production)
- › Detection and elimination of bottlenecks
- › Plant simulation and improvement of throughput
- › Optimization of performance and power consumption
- › Facilitates investment decision
- › Enhancement of security
- › Comparison of concepts made easy



Digital twin using Tecnomatix