

INTERVIEW

EXPERIENCING DIGITALIZATION

What values really matter.

Dr. Reifferscheid, what can experts from all over the world look forward to seeing during their visit to the SMS group booth at the METEC trade show?

At the SMS group booth, visitors to the fair will experience the future of the learning steel mill, in other words of a digital eco-system. No visions, but hands-on solutions that already today create added value for the plant operators. We show how we use digitalization to improve processes on a permanent basis. Our aim - to the benefit of our customers - is to achieve a steel mill that operates at maximum profit. At the SMS group trade fair booth, we can explain in personal dialogs what is feasible. As the "Leading partner in the World of Metals", we present an exhaustive picture of what digitalization means for our industry.

How important are personal contacts in the digitalization age?

Personal contacts are essential. Digitalization is a service-oriented business, which will prosper only if done close to or together with the customer. We are partners to the experts at our customers' works and we implement the projects in concert with them. In so doing we start out from very different requirements and conditions. We tailor our approach to the customer's individual situation and necessities, and remove doubts or concerns, if any, about what challenges digitalization may bring.

What should the trade show visitors take a look at on the SMS group booth?

Well, actually, they should see everything. But those particularly interested in digitalization should talk to me or my colleagues, and we will be happy to show them around and talk about the four central topics that characterize the learning steel mill. There will be interactive desks informing about how we go about plant condition monitoring, production planning, product quality and the platform that brings all these spheres together. All these topics are very closely interlinked. Digitalization establishes itself as an eco-system that integrates everything. It is all about finding answers to one very complex question: How can I relate product quality to the condition of the plant, to production control and to production planning? What options does the platform provide to interlink these various functions and correlate them with one another? We will present the visitor a solution, and we look forward to discussing that solution with him.

Is the trade fair also about getting feedback?

Yes, it is because digitalization absolutely needs mutual exchange. It is not a one-way street. What we present at the trade fair is one possible outlook, one target scenario of where we think the journey of digitalization will take us. The way to that scenario will be different in each individual case. And we will have to consider

USE CASE

A Use Case describes an existing or planned system from the user's perspective by means of simple models. A Use Case provides understanding of how the actor and the system interact. Each Use Case should go with a User Story which maps the monetary value of the application. The valuation should be objective, assessable and negotiable. The User Story should be triable at small scale.



Dr. Markus Reifferscheid, Vice President Research & Development at SMS group and Managing Director of SMS digital GmbH, describes in this interview why a visit to the SMS group booth at METEC 2019 is definitely worthwhile. He explains the benefits and advantages of digitalization for the plant operators and tells what differences there are between SMS group and digital providers.

SMS digital

step would still leverage enough value in the specific use case. Only if that is for certain will we proceed. As a full-liner, we look at the complete process chain. We can improve the melt-shop, the continuous casting plant, the rolling mill, the annealing line, the galvanizing line and all other plants of the supply chain through digitalization, because we have the necessary technological know-how and expertise.

Is SMS group a trailblazer in the digitalization market?

This question cannot be answered in one sentence. We have been active in the field of digitalization for many years, long before the term has become a buzzword. And yes, I think that we hold a leading position when you look at the customer value our implementations leverage. Additionally we have many promising proofs of concept in the pipeline. Whether they will be implemented will depend on the success potential for the customer and the customer's specific requirements. This is another great strength of ours. We have the know-how to assess the benefit for the customer. We can provide him comprehensive advice as to how to tackle digitalization. Therefore our consulting service is extremely helpful already in the forefront. Thus the customer can focus on those use cases that will be most profitable for him. In this way, he benefits from our longstanding experience and from our products, about which we can say: They create provable added value. ▶

whether that target scenario really provides every customer the full scope of added value. Therefore we must tackle the issue by exchanging ideas at eye level as partners. However, when discussing digitalization issues, one may run the risk of getting lost in visions. Out of excitement, one may easily say: "That's what I need!" It is often only afterwards that the vision turns out not to have been the right choice. SMS group takes a different approach here. Digitalization is not an end in itself. Instead, its focus should be value creation. Digitalization is a process which we agilely plan and implement step by step and in cooperation with the customer. Before we take the next development step, we always ask ourselves whether that next

Could you please describe in more detail the consulting service provided by SMS group?

We have two basic consulting offers: Digital Awareness and Digital Fact Finding. We take a look at the customer's works together with the customer to get an idea of the prevailing level of digitalization and of what is feasible. We develop the use cases in concert with the customer, followed by an evaluation. We also offer training courses and workshops for the customer to acquire useful know-how and become well prepared for the digital transformation. And, once the consulting phase has been completed, we can provide the complete implementation from a single source. Additionally, we maintain close contacts with start-ups. This makes us a competent partner when it comes to taking start-ups on board.

Does digitalization always have to be a big, all-encompassing undertaking?

No, the rule is to "think big and start small". We offer a wide and diversified range of small digital solutions and products. While the learning steelworks being the ultimate target of the development, it is often overlooked that small solutions can also provide considerable financial value. Dozens of our references attest to the fact that small modifications that do not involve a great effort provide lucrative results, too. We have some 150 solutions that are ready to be implemented right away.

Where does digitalization begin for the plant operators?

The basis is always well functioning plant equipment and a modern automation package that controls the process. This is the starting point for digitalization. When this is there to start with, one can think beyond the situation on hand and look for ways of how to generate additional value by further advancing the existing structure. Another good thing about digitalization is that it does away with the silo mentality, in other words, thinking is no longer confined to the limits of the meltshop, the casting plant, the rolling mill and so on. Digitalization is in constant search for optimization potential in issues of more general scope and in the interrelationship between all processes and plants.



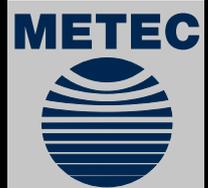
"At the trade fair, we will present an all-encompassing picture of what digitalization means for our industry."

What has SMS group that digital providers don't have?

A key aspect of digitalization is that it generates value from data. This only works if I know what kind of data I need to achieve this. Who could be in a better position to understand the data than the plant builder and the plant operator? We know what equipment to monitor and how to monitor process models - because we have developed both. And we can assess the process technology down to the last detail because more often than not it is from us. No digital provider can offer something like this. Therefore, the customer will get much more from SMS group than he would get from any digital provider.

Are you saying that in the plant and mechanical engineering area digital providers reach their limits?

Digital providers or AI companies are good at analyzing data. However, in many cases this is not enough. Often they are not in a position to really understand whether the problem they want solve really originates from the sets of data under examination. Instead, they have to rely on the customer to make the judgment. They are provided with data, but they are often not able to interpret it with sufficient scrutiny. Or they may even not be able to tell what data is missing and whether and how that data can be made available. Instead, the customer needs a partner who can do all this.



METEC, the international trade fair for metallurgy, continuous casting and steelmaking, is the meeting point for leading industry experts from all over the world.



Does this mean SMS group has all the competences necessary to implement the digitalization process at the customer's facilities?

We adopt a multi-disciplinary approach. This means our customers can talk to a team of multi-disciplinary experts, including data integrators and technology integrators. We have both, digitalization experts and specialists who understand the processes and can input their profound process know-how. Digital providers, by contrast, have to look around elsewhere for such in-depth know-how. When we provide the process model, we are the only ones to understand the model in all its details. We are going to expand our own artificial intelligence competence within our disciplines. These are very special AI competences as we can bring to bear our

domain knowledge. I would call this "industrial AI". Actively entering into a dialog with the customer's operating personnel, process engineers and maintenance staff, and developing solution proposals in a joint effort is our strength.

And for this, METEC is the right place?

It is the best place to meet technical experts from all areas and disciplines. Also our accompanying program including Leading Partner Talks will provide numerous exciting inspirations. I look forward to many talks about digitalization. ♦



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