

'We want to make things easier'

Interroll's modular platforms are manufactured at 16 locations worldwide. Given this diversity, how does Interroll ensure its promised quality across all countries? The answer is provided by the Group-wide Interroll Production System (IPS), which is being further developed into IPS 2.0. moving spoke with Elisabetta Brunetti, Director Interroll Production System, who previously held IPS responsibility exclusively for Ticino-based Interroll SA, about the importance of production systems and continuous improvement in the age of digitalization.

Ms. Brunetti, how is your company positioned in the production sector?

The task of our production organization is to make our quality products available to customers worldwide in identical quality – and to do so on a make-to-order basis and with the shortest possible delivery times. To this end, we maintain a production network of 16 manufacturing and assembly sites, which cooperate closely with each other and have access to the expertise of a globally responsible Center of Excellence in each product group. All these companies are united by the fact that they work according to the same concept with the Interroll Production System, which we introduced back in 2006.

What is this concept based on?

Our Group-wide production system is based on the Japanese Kaizen principle, which was developed by Toyota and has now become established among the most demanding industrial companies in a wide range of sectors. With this concept, we achieve a continuous and systematic improvement of production processes, the elimination of waste, but also the optimization of all other areas of a company like office work and administrative processes. We pursue very clear goals with our production system: It is about maximum standardization, the lowest possible internal complexity and the highest degree of productivity in order to offer solutions that provide customers with real added value.

What are the general conditions under which your company produces?

Traditional production from stock makes no economic sense for us. The reason is that we have to meet a huge variety of customer requirements. This applies both to product variance and order volumes. Potentially, we have to be able to manufacture up to 60,000 variants of a single model for certain product groups – with very small batch sizes. So we are always talking about on-demand manufacturing. In extreme cases, these are even one-off productions that nevertheless have to be handled with the quality and efficiency advantages that industrial mass production makes possible.

Doesn't every production company work under different conditions? Doesn't that make it easy to lose track of everything?

This danger can be avoided by keeping a constant eye on the current status of the on-site processes and systems implemented in each case. On this basis, differences as well as similarities become transparent. It also gives you the opportunity to make best-practice comparisons and set Group-wide standards in this area. Why is standardization so important ?

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On the one hand, you prevent having to reinvent the wheel over and over again at 16 sites. So you become more efficient. On the other hand, you also achieve important economies of scale. Especially if – like us – you consistently drive the digitalization of the necessary processes in manufacturing with our Interroll Production System 2.0. In this phase in particular, it is important to agree Group-wide on the appropriate digital tools and to avoid uncontrolled implementations that you will have to painstakingly and costly prune again later.

Can you give an example to illustrate this?

One example is the use of order slips and the Kanban system, which classically relies on the use of cards in the production area. Digitizing and visualizing this information flow as consistently as possible offers great potential for optimization – especially when this is linked to our Group-wide enterprise resource planning system (ERP). Our Center of Excellence in Wermelskirchen serves as a role model here, i.e. for the establishment of a paperless factory, and our other plants are following suit. Corresponding information for employees is visualized there via small monitors directly at the workstations. The elimination of order slips and other paper information makes time-consuming processes superfluous and eliminates potential sources of error. This simple example shows the potential that the ongoing development of our production system into IPS 2.0 can open up. Digitalization can therefore make proven principles of lean production or total quality management much more effective.

What does this mean for product design?

That we should create as little internal complexity as possible in manufacturing. This is one of the reasons why we stringently rely on a modular platform strategy. The use of common parts that have been proven hundreds of thousands of times allows us to design our production very efficiently, quickly and flexibly. At the same time, this creates the basis for the high quality of our solutions worldwide. This is because our platform strategy makes it easier for us to use standardized processes in our production system everywhere.

What methods do you use?

A wide range, including Total Productive Maintenance (TPM), Total Service Management (TSM) and Kanban. Different methods and tools are used, depending on the task at hand. Very different topics are affected, such as operational processes, platform management and product quality. But the task is ultimately always the same: It's about constantly improving efficiency by making use of standardization. We want to make things easier and make the best possible use of and expand the expertise of our employees. Above all, our customers benefit from this – in terms of quality,

costs and delivery times.

When is this optimization process likely to be completed?

This process will never be completed. Nothing is perfect forever. That is one of the basic principles of Kaizen. The concept also works independently of the technologies used. So you need staying power and you have to think in the long term – a principle of our corporate culture that fits in exactly with the basic principle of our production system. After all, this is basically about cultural development, which involves personal attitudes and beliefs.

In other words, you always have to keep people in mind when it comes to digitization?

Exactly. Ultimately, it's about involving every employee to work on improving his or her own environment out of personal conviction. This also applies to the use of digital processes. That's why people will always be at the center of our production system. For example, you must give everyone the necessary freedom to make suggestions for improvement. These ideas must be discussed together and must not go unheeded. This is the only way to ensure the high level of commitment and identification that you need, especially in production.

Centers of Excellence

The need to implement customer requirements into products with maximum added value has resulted at Interroll in a global network of Centers of Excellence. Our COE in Wermelskirchen (near to Cologne, Germany) concentrates on conveyor rollers, RollerDrive and controls, used as key products in roller conveyors for container transport and other internal logistics systems. This is the core of our company DNA - we have produced more than 500 million conveyor rollers in our company history.

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