“Our customers want a tailored machine, not a prototype”

More product variants, smaller batches and more frequent changeovers present pharmaceutical production with new challenges. How can these requirements be automated without starting from scratch with every line? Raphael Huber, Managing Director of RoboMat AG, explains why customised solutions and proven technology belong together.

Mr Huber, how are specialised therapies and a greater product variety changing the requirements for pharmaceutical production?

Drugs are increasingly being developed for specific diseases and patient groups, and we notice that in production, too. In certain areas, smaller quantities have to be produced economically. Large-scale production isn’t disappearing as a result, though – the two run side by side. On top of that, there are more and more formats. Syringes and autoinjectors come in different sizes, shapes and designs. Even so, customers want to process as much as possible on the same line. In the past, the first question was usually how many parts per minute the machine could handle. Today, our customers want to know just as much how long a format changeover takes and when the line is running stably again afterwards.

What makes it so demanding for manufacturers to produce smaller quantities and different product formats economically on one line?

A line that handles only one format can be very efficient. But if you have to change over frequently, it stands idle every time. With small batches, that naturally weighs much more heavily. You could set up a separate machine for each format, but that ties up capital and production space. And if volumes turn out lower than planned, those machines may not be sufficiently utilised. That’s why you have to look at the whole picture. In the end, it comes down to how many good parts I get for the capital invested. That includes output, changeover times and a clean restart. Speed alone says little.

A custom-developed machine sounds like the right answer. Why are customers nevertheless often sceptical about such new developments?

I often hear the sentence: “I don’t want to buy a prototype.” I can understand that well. Customers want a machine that fits their products and processes exactly. At the same time, they want to know what they’re getting into. If important functions still have to be developed, questions come up immediately. Will it work in operation? Will we reach the required output? How long will the ramp-up take? Especially with new drugs, time-to-market is important, and every delay costs money. Our job is therefore to address individual requirements and still keep the implementation predictable.

How does RoboMat combine customer-specific solutions with the reliability of proven technology?

We don’t start from zero every time. RoboMat has around 50 years of experience, and much of what customers need today, we have already built in a similar form and still support to this day. You can think of it as a modular kit. We take proven elements, combine them and adapt them to format, process and available space. That leaves far fewer unknowns, whether in design, commissioning or ramp-up. It also helps later in operation: we know these modules, we know how to maintain them and where things can get stuck.

Can you explain with a concrete example how this works and what advantage customers gain in day-to-day production?

Take the labelling of autoinjectors. The task is always the same, but each format has to be picked up, guided and labelled slightly differently. That’s why we design the line for the agreed formats right from the start. Depending on the design, the changeover is tool-free or automatic – with robots, for example, using an automatic gripper change. We also design our machines from the outset so that line clearance is as simple as possible. In pharma, that is a very important point. It’s similar when loading and unloading trays or feeding into packaging lines. For customers, this means fewer manual steps, shorter interruptions and compact lines that fit into their existing production.

What should pharmaceutical companies look out for today when investing in a new line so that it also meets future requirements?

First, you should consider which formats you need today and which will realistically be added. Often you can’t say conclusively at the start of a project. In that case, the line must be adaptable later. Building in everything conceivable from the beginning only makes it complex and expensive. With us, it often happens that we extend a machine to new formats years later. Then I would look closely at the format changeover. What do I have to do for it, do I need tools or specialists, and how quickly does the line run stably again afterwards? That is just as important as the output per minute. And from the supplier, I would expect transparency. What is proven, and where is something newly developed? That is also our approach at RoboMat: we automate flexibly, but build on technology that has already proven itself.

Raphael Huber
Managing Director, RoboMat AG
More information at: robomat.ch

RoboMat
ROBOTICS & AUTOMATION

C2-Vertraulich