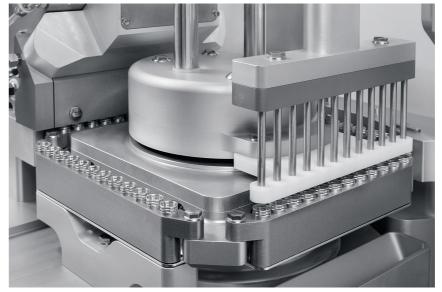
A capsule filled with three different types of individual tablets created a special challenge.



Gador has been relying on the flexibility of the Modu-C capsule filling machine from Harro Höfliger since 2016.

Solutions for niche applications

The introduction of a new combination product created a special challenge: a capsule filled with three different types of individual tablets. Each capsule had to contain a total of five tablets. "Right from the start it was clear to us that we wanted to automate the process," recalls Eduardo Sar.

Janina Pahmeier, Project Manager at Harro Höfliger, looks back on the project: "At that time we did not have a suitable dosing trolley for this niche application. We therefore examined various possibilities in order to achieve fast, clean and horizontal stacking of the tablets into the hard capsule. Finally, the solution was to modify Gador's microtablet station. We installed additional tablet buffers and adapted all format parts so that instead of the mini tablets, larger tablets could be filled too."

Until then, there were quite a few challenges that had to be overcome: "The tablets are fed to the capsules in free fall. In order to ensure that they end up well stacked, any capsule rotation must absolutely be avoided. To guarantee this, we carried out numerous tests and proof-of-principles." 3D printed parts were used in the early stages of development. This has the advantage that the parts are available in record time and can be tested and adapted. That way the specialists finally found the optimal format parts and parameters.

Creative minds in search of the perfect solution

Modularity in production plays a special role at the Argentine pharmaceutical company Gador. For the filling of capsules, even with extraordinary filling media, they rely on Harro Höfliger's Modu-C.

> s one of the largest pharmaceutical manufacturers in South America, Gador, with headquarters in Buenos Aires, has an extensive product range. "This includes a wide variety of capsules – depending on the application, we fill them, for example, with tablets, powders or pellets," says Eduardo Sar, Production Manager at Gador.

> It was because of its flexibility that Gador became interested in Harro Höfliger's Modu-C capsule filling machine in 2016. Eduardo Sar about the advantages: "Due to the diversity of

our capsule products, rapid changeovers between different dosing systems are important for us. The most convincing aspect of the Modu-C is that the dosing systems are mounted on trolleys, which means that we can easily exchange them."

For Gador, a trolley with a dosage station for microtablets was the first step: It enabled exact and productpreserving filling of tiny tablets into hard gelatine capsules. "Gradually, we then expanded our portfolio to include additional trolleys for other filling media."

"Due to the diversity of our capsule products, rapid changeovers between different dosing systems are important for us."



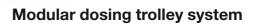
Eduardo Sar, Production Manage at Gador

About Gador

The Argentine pharmaceutical company Gador was founded in 1940 and has about 1,000 employees today. In addition to their headquarters in Buenos Aires, the company has four additional sites. Quality, price and carefully selected active ingredients are the key factors that enable Gador to supply their products to 1.5 million patients each month.



Eduardo Sar is very satisfied with the result: "By intensive testing and research, Harro Höfliger's experts not only found a reliable solution for our extraordinary product – but also a very cost-efficient one by modifying an existing station."



Dosing trolleys simplify and speed up the changeover of dosing systems. Whether for powder, liquid or solid filling media: The appropriate trolley is easily integrated into the basic machine. The basic principle of capsule filling is always the same: The empty capsule is opened in the capsule turret of the Modu-C, then it has to pass one or several filling stations before it is closed again.