

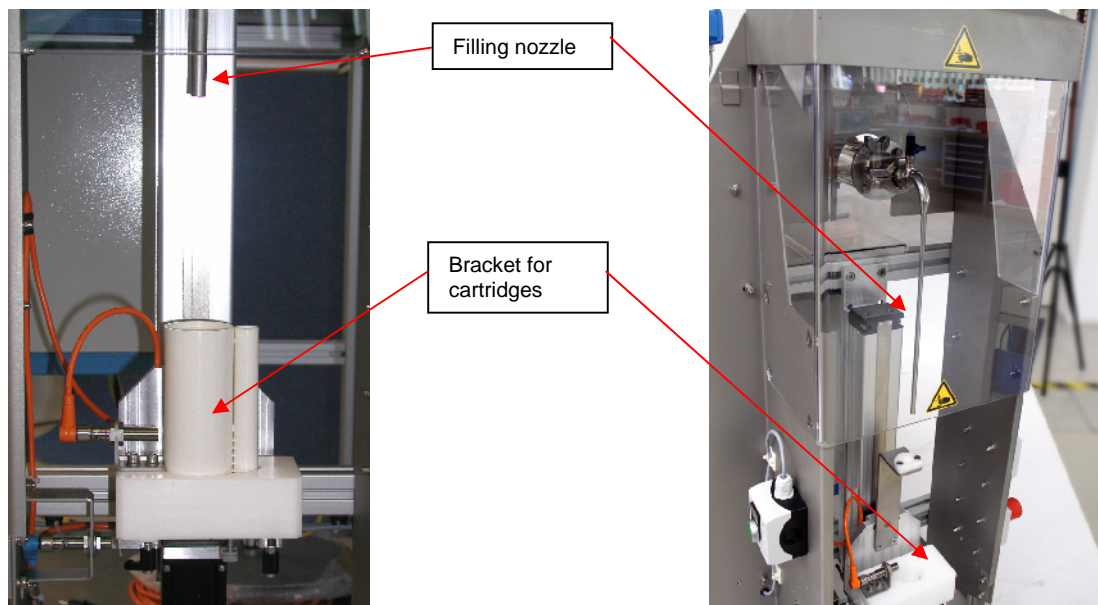
Application report

Project: Filling of cartridges (syringes) with silicones or adhesives

Customer / Branch: Silicone / adhesive manufacturer / filling companies

Description

The manufacturers of silicones or adhesives often have to refill or decant the fluids from barrels into smaller sized cartridges or syringes. Also companies, which have specialized on filling-applications (all kinds of filling- solutions) have to re-fill from different kind of barrels or cartridges. This is necessary, because for example the end-user wants other packaging-sizes. Often this issue has to be done by manual working steps, but also automated processes are needed. So also two-component adhesives could be filled into a cartridge (2-component-cartridge).

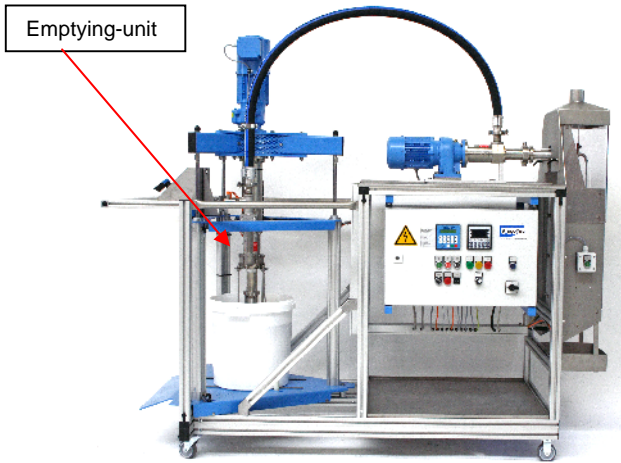


Filling side: bracket for fixing the cartridges

ViscoTec Solution

For filling-applications ViscoTec has the best solution: it is a compact device for a semi-automatic process, which combines the advantages of the ViscoTec emptying- system with the filling application. So an emptying-system for small barrels (approx. 5 until 50 l) is used on one side. This material is pumped to the other side, where the cartridges are being filled. Also a product supply by tanks is possible.

Optionally a special degassing unit could be combined. This means, that if the pumped material contains a lot of air, this air could be filtered out by a degassing tank (by setting a vacuum). Also a stirrer could be integrated in this tank in order to get a smooth treatment without any settlements. On the other side of the system, the container to be filled is placed manually into an adapter. After the start button is pressed, the container moves down in relation to the filling speed. In this way, a surface-level filling with no entrapped air is achieved. The medium is sucked out from the original container or the storage tank, and then removed by a dosing pump. The dosing capacity (filling speed) can be widely varied to match the filling process. All process-relevant parameters can be changed in the control by the user, for example the dosing quantity or the dosing time. So secure the whole process also level and pressure sensors are integrated.



ViscoFill-system



ViscoFill-system with degassing unit

ViscoTec Advantages

Filling applications are getting more and more important. ViscoTec offers a very good solution for this: Through a semi-automatic process and a very compact device this application could be fulfilled. The advantage of this ViscoTec-system is that the customer gets a high-sophisticated system which offers the customers a complete process-safe process. In combination with the ViscoTec treatment systems, like the degassing tank or a stirring system, the customer could use the module and flexible ViscoTec systems. He just chooses the systems for his special requirement and features. The repeatability of the dosing process with the ViscoTec system allows having a safe process. The whole system is also designed transportable for highest flexibility at production planning. With the control, variable amounts of filling and filling speeds are programmable. Also different batch sizes (small and middle) are possible with the ViscoFill-unit. So in times where highest flexibility regarding production processes are required and the change rate of the filled products is high, the ViscoTec solution offers this in a perfect way!



Customer potential

Material manufacturers and companies, which are specialized on filling applications (adhesives, silicones, etc.).