Innovative coupling systems and fittings for cleaning applications in the food industry

For food processors hygiene has first priority. Therefore working surfaces, machines and premises need to be cleaned very often. The used devices need to satisfy high requirements because of rough operating conditions, used cleaning agents and strict IFS guidelines.

In collaboration with the meat producer Wolf and branch specialist Altmann Industrietechnik from Dachau, Lüdecke developed an innovative system for the thorough and efficient cleaning in the food industry.

The Wolf group pays much attention to the freshness and high quality of its products. Absolute hygiene in the production spaces and machines is a basic requirement. The hoses and fittings that have been used for the cleaning process so far (preliminary cleaning and rinsing with clear water) led to some problems in the past and didn’t meet the high quality and hygiene requirements of the company Wolf anymore. The firm is, concerning the hygienic standards, highly oriented towards the strict guidelines of the IFS food certification. Those demands among other standards the use of stainless steel for the fittings.

Customized solutions with the company Altmann and Lüdecke

Because there were no appropriate products for those high requirements available on the market, Wolf chose a cooperation with Altmann and Lüdecke. The company Altmann is already attending and supplying Wolf for several years as highly competent technical provider. Together with the fitting manufacturer Lüdecke, an extensive know-how in the development and production of high quality coupling systems and connection technology, could be obtained.

After an extensive test phase, Altmann could offer a suitable and especially durable hose for each cleaning step. Next, Lüdecke constructed appropriate fittings.

Screwings for the preliminary cleaning

During the preliminary cleaning, high water pressure and cleaning agents are being used.

The assigned requirements meet the high quality and robust screwings developed by Lüdecke (consisting of a swivel nut and a hose nozzle).

The inextricable pressing sleeve connection is perfectly adopted to the hose given by Altmann. The complete fitting is made of stainless steel 1.4404, for a working pressure of 40 bar as well as operating temperatures up to 150°C.
Compressed air program for the food sector

Next to the screwings and quick connect coupling systems Lüdecke also offers components for compressed air applications in the food industry:

- Compressed air blow-off gun with input connector made of stainless steel 1.4305
- Spiraled hose with food approval for use with
- Quick connect coupling and plug DN 7.2 made of stainless steel 1.4305

If you are interested please contact

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- Your contact person at Altmann:
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Quick coupling system for rinsing with water

Lüdecke developed a safe, robust and easy to handle quick coupling system for the following cleaning process with clear water. It guarantees a free and clean passage while coupled in order to prevent dirt accumulation.

It’s made of stainless steel 1.4404 and contains seals which are especially approved for the food industry (VO 1935/2004). The shape of the release sleeve is so designed that it still remains handy when the surface is wet or when wearing heavy gloves.

The quick connect coupling system can be used with an operating pressure up to 40 bar (depending on the temperature and the way of incorporation) and operating temperatures up to 140°C.

The assembly of the hose takes place with a crimp connector, especially adapted to the hose of the company Altmann. The assembly can be fixed or resolved with standard open-end wrenches and is therefore reusable.

Both products have been perfectly adopted to the strict requirements in the food industry. The use of stainless steel guarantees a particularly high durability of the fittings. Dirt accumulation can be prevented because of the smooth surfaces and the free passage. The whole solution provides a safe, lasting and dense assembly of the hoses which ensures a long lifetime and easy handling.

Pioneer to application in the food industry

The company Wolf is absolutely pleased with its customized system - a demonstration for a perfect development competence of Lüdecke and Altmann. During an intensive practical test both fittings proved themselves very well and convinced the management as well as the responsible technical directors of the corporation.

With this cooperation, Lüdecke and Altmann have reached a leading role in the field of hose technology for cleaning applications in the food industry.

Together, the companies offer a tested solution which meets the applicable conditions and perfectly adapted to the respective application. Fittings made of brass (e.g. claw couplings) which have been used so far, need to be changed in the cleaning areas of food manufacturers because of used materials, not permitted seals and injuries causing incorporations.

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