

# Sanitary Fittings and Components

We provide sanitation-graded components for the use of transferring food, beverage, chemical or pharmaceutical particles in food and chemical industry. They are produced in basically stainless steel alloys AISI 316 (1.4408), AISI 316L (1.4404) and AISI 304 (1.4301).

Tri-clover couplings are available in the range of DN10 ~ 100, DIN 11851 fittings DN10 ~ 150, SMS 1145 couplings DN19 ~ 100, Macon DN40 ~ 70, SS valves include thread sizes  $\frac{1}{4}$ " ~ 3".

The series, inclusive of union packages for long hose end, welding butt and screw nuts or tri-clover clamps, are made according to international standards or tailored dimensions per specific demands for equipments.

## Food Grade Stainless Steel

Stainless steels are widely used in food and beverage manufacturing and processing industries. Most food contact equipment in stainless steels is manufactured from either 304 or 316 type austenitic stainless steels. The "316" grades (1.4401 / 1.4404) are often referred to as the "food" grades.



There is no known official classification for this and so, depending on the application, the equally common 1.4301 and 1.4016 grades may be suitable for food processing and handling, bearing in mind that in general terms the corrosion resistance ranking of grades can be taken as:

1.4401 / 1.4404 (316 types) > 1.4301 (304 types) > 1.4016 (430 types).

To be 100% sure of the materials we are providing we apply a trinity of checking procedure in that —

We select quality material vendors who must be ISO-certified;

All materials must be supplied with heat numbers with cross reference to the datasheet along with the delivery. We double check that at the receipt of them, records kept in profile permanently.



We use a hand-held Olympus® Innov-X Alloys and Metals Analyzer to make a triple check on the end-products which are fully worked and ready for packaging.

## Food Grade Stainless Steel

When the grade of stainless steel is correctly specified for the application, corrosion should not be encountered.

Surface finish and condition is very important to the successful application of stainless steels. Smooth surfaces not only promote good cleansibility but also reduce the risk of corrosion.

Our sanitary couplings are basically produced per following grade, which is achieved on highest-precision CNC machines followed by ultrasonic cleaning process —

inner tube roughness (Ra)  $\leq$  0.8  $\mu$ m  
outer finish (Ra)  $\leq$  1.6  $\mu$ m