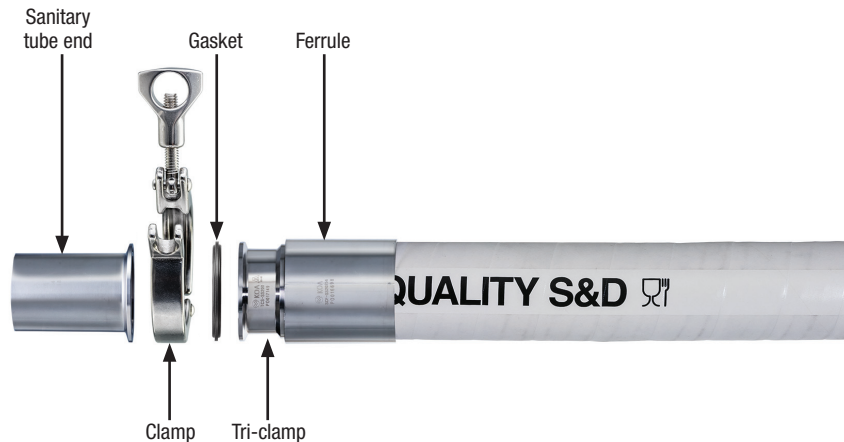


# Sanitary Fittings Training

## Intro to KOA Sanitary Fittings & Gaskets

### SANITARY FITTING TYPES (CLAMPED)

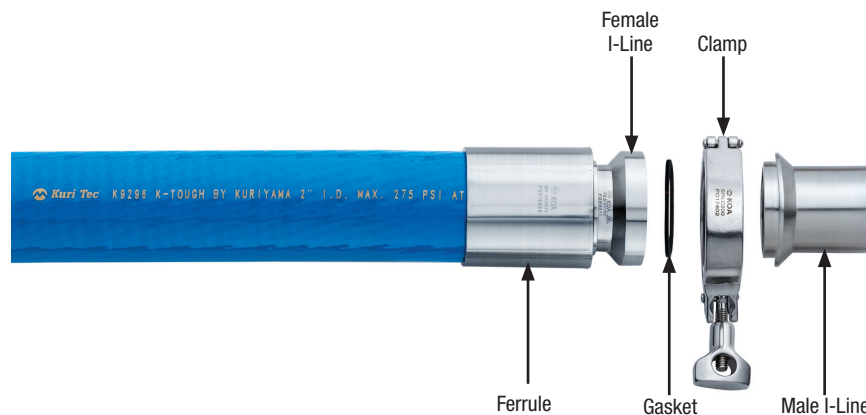


#### Tri-Clamp

Tri-Clamp fittings are the industry standard. The connection consists of two identical, flat-faced flanges, connected by use of a clamp. A gasket is placed into the grooves on the faces to prevent leakage.

KOA Sanitary Fittings offers both crimpable Tri-Clamps for clean in place (CIP), and also clampable, rubber hose and brewery hose Tri-Clamp fittings, for clean out of place (COP) operations.

Note: Most tri-clamp fitting sizes match the size of their corresponding clamp. However, to increase clamp interchangeability (thereby reducing the variety of clamps which must be stocked) the 1-1/2" clamp is used with the 1" tri-clamp fitting. Please refer to the tri-clamp sizing chart on page 27 to determine the correct clamp required based on fitting size.



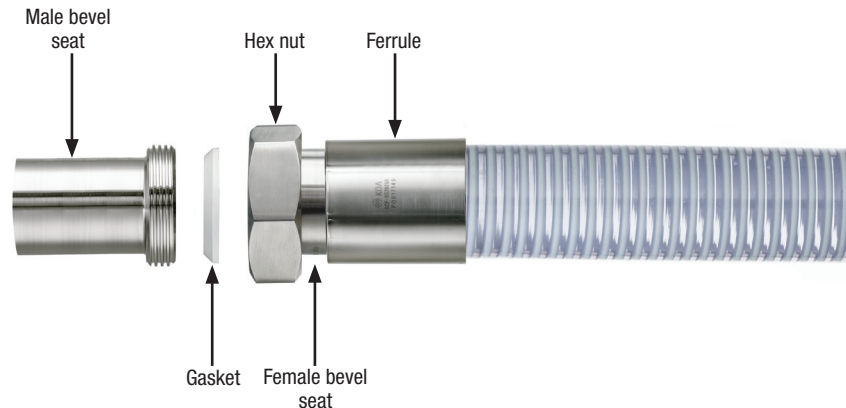
#### I-Line

I-Line fittings are heavier duty for use in more demanding applications. The connection consists of male and female versions, nested together and secured with a gasket and clamp. They're able to withstand greater temperatures, vibrations and pressures than standard tri-clamp fittings. Also, the design helps eliminate over compression of the gasket. They're popular in the wine and tomato processing industries.

# Sanitary Fittings Training

## Intro to KOA Sanitary Fittings & Gaskets *(continued)*

### SANITARY FITTING TYPES (NON-CLAMPED)



#### Bevel Seat

Bevel Seat fittings, also referred to as Acme threads, are generally used in lower pressure applications such as milk transfer. The connection consists of a male and a female end, the faces of which are angled 45° to create a metal on metal sealing surface. The male bevel seat is threaded, and the two are joined together by use of a nut. The metal on metal seal is sometimes considered sufficient to prevent leakage at lower pressures, however, a gasket can be used for higher pressure applications. Special Bevel Seat Hex Wrenches are available to assist with nut tightening and untightening.



#### Tube End

Tube end fittings, also referred to as butt-weld fittings, are used for welding onto sanitary tube fittings. The connection consists of a schedule 40 tube end which is welded directly onto the sanitary tubing, giving the versatility to create any type of sanitary fitting hose end connection.