

## Sanitary Tubing Hangers — Which One is Best for My Application?

Sanitary tubing hangers are often an overlooked part of the sanitary process world. It is somewhat surprising because all tubing and piping uses hangers. A lot of time and effort is normally spent on specifying the correct piping and fittings for a sanitary application, but most people don't know much about what the different sanitary hanger options are. We will try and bring clarity to this topic. Here are the three main types of sanitary hanger systems going from the lowest cost to the highest.



*Sanitary Hex Hangers Showing both  
the Grommet Style and Sleeve Style*

### Stainless Steel Hex Hangers

This is probably the most commonly used type of sanitary hanger system. The hanger is composed of two 304 stainless steel stamped plates that bolt together forming a hex. Rubber grommets insert into the interior of the hex to secure the tube. The grommets are available in either Buna rubber or Viton for high temperature applications. Polypropylene round sleeves are also available instead of the rubber grommets.

The most common hex sanitary hangers do not have any mounting connectors. They are normally welded to mounts using a piece of stainless steel rod. There are some sanitary hex hangers available with 3/8" FNPT or 3/8" all thread half couplings welded to the hanger so they can be screwed in place. The sanitary hex hangers are commercially available in 1/4" through 14" tube sizes.

### Polymer Block Style Hangers

This is modular sanitary hanger system using polymer blocks with stainless steel support components. The tube is secured between two polymer blocks held together with stainless steel mounting hardware. The blocks are available in HDPE, Santoprene, Polypropylene and Vekton. Which polymer insert you use is normally a function of the temperature of the piping you are hanging. Tri-Canada also now offers

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this style of block hanger with a metal impregnated insert for metal detection (interestingly, a popular request). The mounting hardware is available in 304 and 316 stainless steel.

The modular characteristics of the block style sanitary hangers gives them some unique abilities. You can stack them together giving you the ability to hang multiple sanitary process lines from the same mounting point. This can be a great advantage when hanging tube in a confined area like on a sanitary skid system. These hangers are available in ¼” through 8” tube sizes.

## Hygienic Clean Room Hangers

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This is a sanitary tube hanger system offered by Tri-Canada. They were designed originally to be used in Biopharmaceutical applications, but work very well in any sanitary piping application. The body of the hanger consists of two hinged semi-circular clamp halves that bolt together. The clamp halves have round polymer inserts that secure the tubing.

Several things make these sanitary hangers unique. The profile of the hangers is rounded so there is no area for moisture to gather. The hanger/insert assembly forms a tight seal around the tubing eliminating and potential bacterial entrapment areas found in more traditional hangers. The closure features acorn nuts so that there are no exposed threads, again eliminating areas where contaminants may be trapped.

The sanitary clean room hangers are available with a wide variety of mounting options including a style that has a mounting stanchion that swivels. The dynamic union between the hanger rod and hanger housing allows for the housing to self-adjust to the tubes slope for drain ability as well as a full 360-degree swivel. This is common-place in pharmaceutical applications. Clean room hangers are offered in sizes from ¼” through 6”.

## Conclusion

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Which of these systems is right for you? We will let you decide, but here are some of the criteria we look at. The hex hangers work well in most applications. The rubber grommets do a good job in isolating the tube, eliminating vibration. If you go with sanitary hex hangers pay attention to your line temperatures. If you are running hot products go with the Viton inserts. The Buna inserts will deteriorate over time under higher temperatures.

The block type hangers are great if you are stacking your piping and are working in close quarters.

Finally, if you want the highest level of cleanliness, the sanitary clean room hangers are the best choice. While they were originally designed to serve the biopharmaceutical industry, you might want to consider this type of hanger for your food plant. Many food plants have very wet environments. Eliminating any potential bacterial entrapment areas is important. The clean room hangers cost more. But with food safety issues getting to be a bigger and bigger deal these days they might be cheap insurance.

As always, if you have any questions on this topic or any of our other blogs, please email us at [sales@tricanada.com](mailto:sales@tricanada.com).