

# Controlled Compression System

Featuring Rubber Fab's  
Torque-Rite<sup>®</sup>



## Rubber Fab

a Garlock Hygienic Technologies company

*Distributed by:*

**Tri-Canada**

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# Torque-Rite®

Torque-Rite® converts your sanitary connections into a Controlled Compression System.



**Torque-Rite®** allows you to control compression and expansion while maintaining constant inch/pounds force insuring a controlled compression I.D. Torque-Rite® eliminates the problems associated with over- or under-tightening a seal which can lead to an unsanitary system.

## **Compression control is easy!**

When tightened, the Torque-Rite®'s self-limiting internal mechanism will make an audible **"click"** signaling the user they have reached proper inch/pounds force. If further tightening is attempted, there will be more **"clicks"** but no additional application of force on the hygienic seal (if emergency conditions arise, the Torque-Rite® has a built-in manual **override feature**).

## **Problems with over-tightening or under-tightening a hygienic seal:**

Over-tightening can tear or damage a seal and can also cause a damming effect inside the pipeline. A torn or extruded seal can hold soil and bacteria. Under-tightening leaves an undesirable concave area at the seal allowing soil and bacteria to become entrapped. Both conditions should be avoided in a sanitary system.

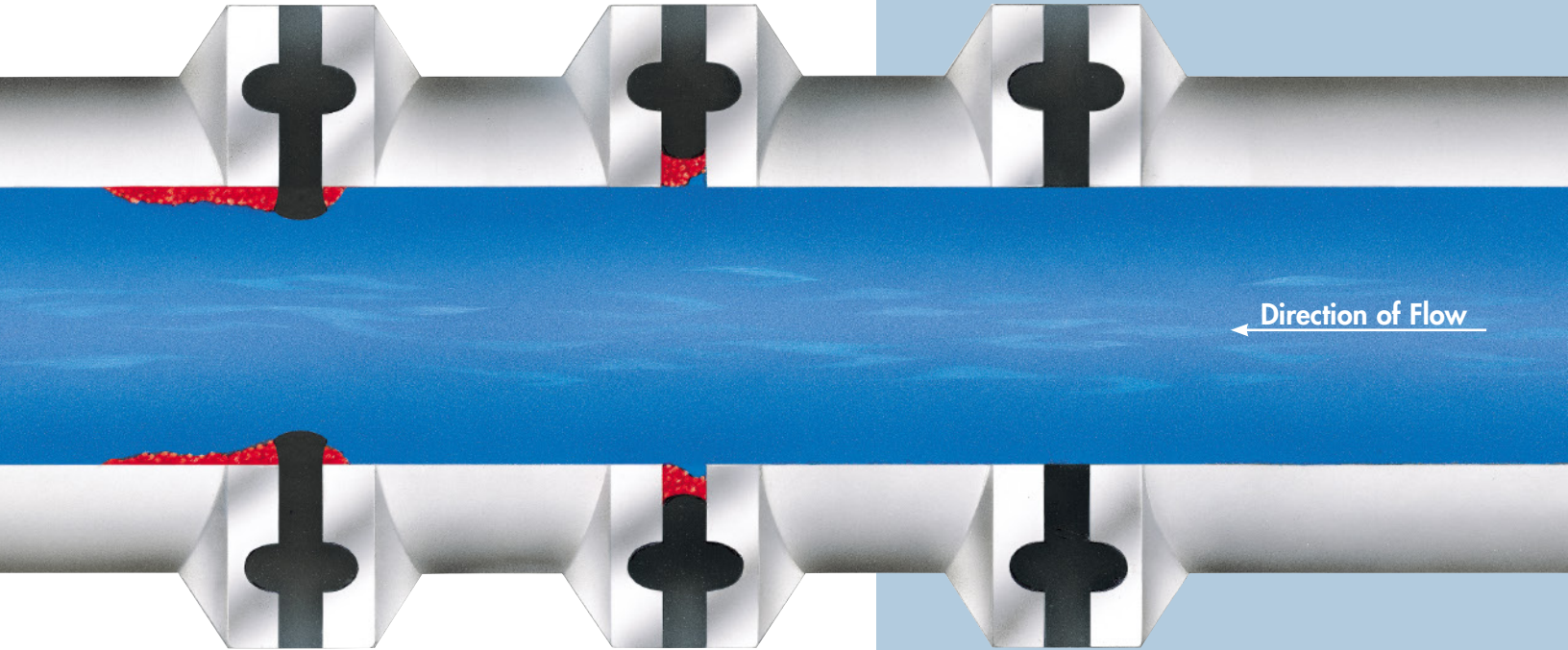
## **Maintaining a Controlled Compression Sanitary System**

By maintaining a constant force on a Controlled Compression System with the Torque-Rite®, seal I.D. is maintained lowering bacteria count and enhancing product integrity.

**A Perfect Surface sanitary system is assured.**

# The Controlled Compression System

Torque-Rite® = Compression Control



## DAMMING:

*An over-tightened hygienic seal extrudes into the pipe, prevents draining, and allows deposits to build up behind the gasket.*

## UNDER-TIGHTENING:

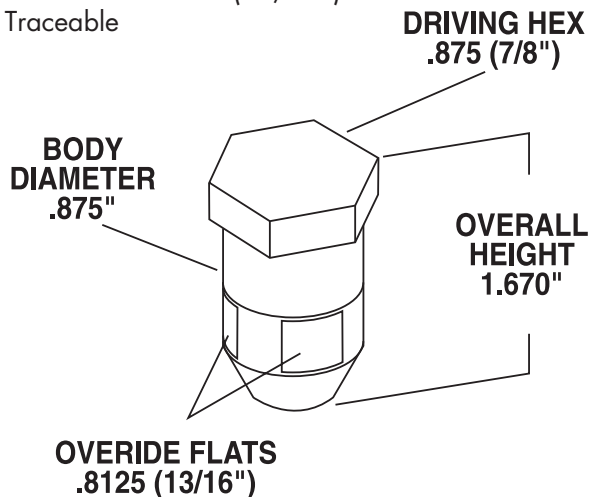
*May allow leakage. Can form concave surfaces at the product side of the hygienic seal affecting free drainage and cleaning.*

## PERFECT SURFACE HYGIENIC SEAL SYSTEM:

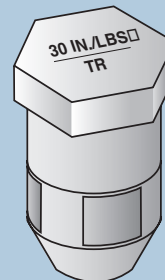
*Torque-Rite® eliminates the concerns associated with over- & under-tightening a hygienic seal. Insures that seal I.D. matches pipe I.D.*

## Torque-Rite® Specifications

Material: 440C Stainless Steel  
 Hardness: 48 Rockwell  
 Overall Height: 1.670"  
 Driving Hex: .875 (7/8")  
 Body Diameter: .875"  
 Override Flats: .8125 (13/16")  
 Lot Traceable



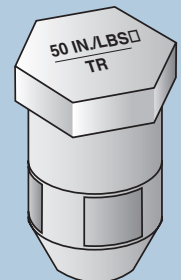
Torque-Rite® is stocked in two models.  
 (40 in/lb also available)



Model  
TR-30

Recommended for use with the following materials

- Buna
- Silicone
- FKM Fluoroelastomer
- EPDM
- Tuf-Flex®



Model  
TR-50

Recommended for use with the following materials

- PTFE
- Tuf-Steel®
- PTFE Envelope
- GYLON BIO-PRO®
- GYLON® BIO-PRO PLUS™



## Benefits of a Controlled Compression System:

- Lower bacteria counts
- Maintains/enhances product integrity
- **Insures that hygienic seal I.D. matches pipe I.D.**
- Passes **US Pharmacopeia Class VI Certification**
- Passes **cytotoxicity criteria**
- Complies with **Title 21 CFR 177.2600**
- Complies with **Title 21 CFR 177.1550**
- Complies with **USDA and 3-A Sanitary Standards**
- **Conforms to CGMP** (Current Good Manufacturing Practices)

## Torque-Rite® Features:

- An **audible "click"** indicating correct inch/pounds force
- **Maintains constant 30 or 50 inch/pounds force**
- **Manual override feature**
- **Retrofits all sanitary clamps**, mini through 6"
- **Works in rupture disk applications**
- **Works with all Smart Gasket® products** including spore trap, thermocoupler and sampler
- **No torque wrench or special training required**
- **User friendly**

NOTE: All elastomeric hygienic seals require periodic replacement. Seal life is influenced by the seal material, product application, temperature, cleaning procedures, etc. After monitoring seal condition in a process system, a schedule should be developed for periodic replacement of hygienic seals.

® Smart Gasket, Torque-Rite, Tuf-Flex, Tuf-Steel and ADI Free are registered trademarks of Rubber Fab.

Torque-Rite: United States Patent Number 6,082,941.



# Rubber Fab

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## Rubber Fab also offers The Torque Tee



The Torque Tee also allows you to control compression and expansion while maintaining constant inch/pounds force insuring a controlled compression I.D. This eliminates the problems associated with over- or under-tightening a seal which can lead to an unsanitary system.

The Torque Tee and universal torque socket are designed to aid in clamp installation and removal. Available with a family of components, the Torque Tee handle creates effective tightening leverage and aids in reaching tight spaces, including over head and behind tanks.

## Torque Tee Features

- Available in 30 in/lbs and 50 in/lbs as a standard
- Works with different style hinge clamp wing nuts
- Torque Tee Wing Socket can be used independently on wing nuts or with Rubber Fab's Torque-Rite® nut
- T-shape creates effective leverage
- Fast easy one handed tightening in the right direction
- Provides an audible click when any factory preset torque is reached
- Reversing collar disengages the ratchet mechanism and locks the tool for conventional backing off and loosening
- Aircraft quality high alloy steel, chrome plated
- Consult factory for other torques



Torque Accessories

Rubber Fab is a member of:



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