



## Torque Recommendations for Tank Connections

A White Paper from Assmann

*Polyethylene storage tanks are equipped with multiple nozzle types depending on our customer's specifications. The purpose of this document is to outline our general guidelines for torque specifications for different fitting types used on polyethylene tanks. Since polyethylene is elastomeric in nature, torque values listed below are general guidelines and are subject to some variation.*

Assmann hydrostatically tests all of our storage tanks with water prior to leaving our facility guaranteeing a liquid tight seal. **NOTE: Assmann does not recommend tightening nozzles while nozzles are under hydrostatic loads!**

| Fitting Type         | Description  | Torque                                       | Notes   |
|----------------------|--|--|---|
| Bulkhead             | Through wall compression type bulkhead fitting             | Hand tight + 1/4 to 1/2 compression nut turn | Body of bulkhead fitting must be held stationary while tightening the fitting to prevent internal gasket from spinning.                   |
| Flange / Donker Type | ANSI flange fitting with rubber encapsulated donker bolts  | Donker bolt torque 11 Ft-Lbs.                | Donker bolts have rubber encapsulated heads. A quick short ratchet motion will help the bolt grip the tank interior and tighten the bolt. |
| Metallic 3/8" Stud   | Metallic through wall tank connection with 3/8" dia. bolts | Bolt torque 30 Ft-Lbs.                       | Maximum torque recommended consult factory prior to exceeding this amount.  |
| Metallic 1/2" Stud   | Metallic through wall tank connection with 1/2" dia. bolts | Bolt torque 50 Ft-Lbs.                       | Maximum torque recommended consult factory prior to exceeding this amount.  |
| Metallic 5/8" Stud   | Metallic through wall tank connection with 5/8" dia. bolts | Bolt torque 75 Ft-Lbs.                       | Maximum torque recommended, consult factory prior to exceeding this amount.   |

