



**Griffco Valve Inc.**  
188 Creekside Dr.  
Amherst, NY 14228 USA  
Phone: 1 716 835-0891  
Fax: 1 716 835-0893

# **CORPORATION STOPS**

## **Installation and Operation Manual**

### **WARNING: Read Carefully Before Installation and Maintenance**

Retractable injection quills are designed to deliver chemicals to the center of a pressurized pipe or into a tank. To ensure a safe installation the following precautions should be followed.

#### **Precautions:**

- When inserting or withdrawing the injection quill minimize the process pressure.
- Ensure the safety chain and hook are secured while the injection quill is under pressure.
- Do not over tighten the compression nut. Tighten nut to the point where any leaking stops.

#### **Installation Instructions:**

1. With the injection quill retracted and the ball valve closed, install the Corporation Stop into the pipe tap at the injection point.
2. Cut the injection quill and the restraint chain equally (if necessary), so that the quill tip is close to the center of the pipe. **Do not cut poppet tipped quills.** For clean liquids, the 45° angle of the inclined edge should face the flow as shown in the figure below. For slurries and other like fluids that can clog the tip, make sure the 45° angle faces downstream. For flat or poppet tips the direction is not important.
3. Insert the quill into the closed corporation stop, through the compression nut and gland until it makes contact with the valve ball. Tighten the compression nut enough to snug the gland around the quill. Fasten the safety chain ensuring it is taught. Open the corporation stop ball valve and push the injection quill into the process main. While holding the quill in place reconnect the hook to the safety chain at the desired insertion length. Tighten the compression nut.
4. Do not over tighten.
5. Connect chemical feed line to opposite end. It is recommended to connect to the chemical system pipe with a flexible line for ease of installation and maintenance.



←  
**Flow**

#### **Maintenance:**

#### **CAUTION: Always wear suitable protective equipment before servicing!**

The corporation stops were designed for minimizing the amount of maintenance required to keep the valves in operation. However, periodic replacement of the internal components is required. A parts kit can be purchased from your local Griffco Valve distributor.

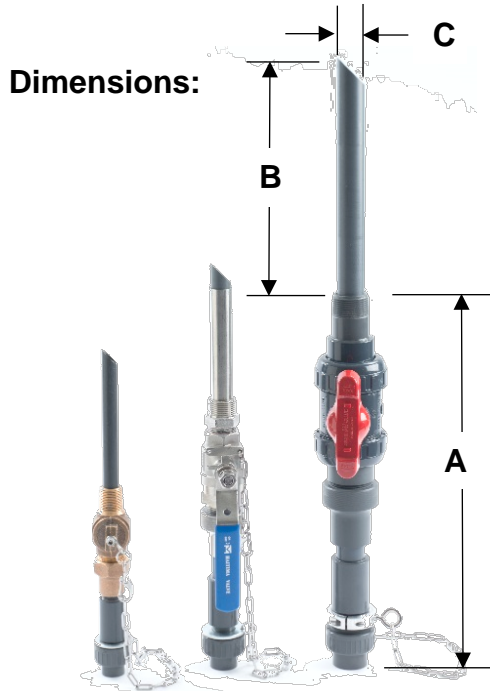
#### **Caution: Ensure chemical lines are isolated or drained and flushed with water. Make sure the safety chain is locked in position before starting to prevent potential quill ejection.**

- A. Slowly unscrew the compression nut behind the ball valve assembly to allow the quill to slide outward, and check for leaks.
- B. When the quill tip passes the ball valve, close the ball valve to isolate the process fluid.
- C. Inspect the quill, seal, check valve and o-ring (if furnished) by removing the union nut from the check valve and withdrawing quill.
- D. After any repairs, screw the compression nut back on the corporation stop and slide the quill through the nut and gland until it reaches the valve ball. Snug the compression nut. Open the ball valve slowly and check for leaks. Slide the quill in until it reaches its operating position.
- E. Replace the chemical line and union nut.

#### **CAUTION: DO NOT OVER-TIGHTEN!**

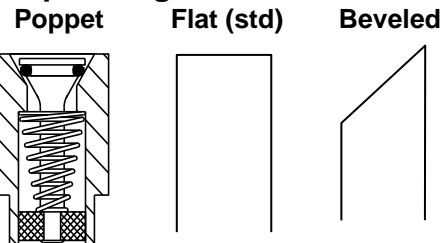
## Technical Data:

|                                    |               |  |                    |
|------------------------------------|---------------|--|--------------------|
| <b>Sizes: Model CS</b>             |               | 1/2", 3/4", and 1"   |                    |
| <b>Quill Connections:</b>          |               | <b>Plastic: Union Socket</b><br><b>Metal: Male Threads</b>       |                    |
| <b>Corp Stop Connections</b>       |               | <b>Threaded: 3/4", 1", 1.25" (NPT, AWWA [Brass only])</b>        |                    |
| <b>Maximum Temperature: (°F)</b>   |               | <b>Plastic: 140° ; Metal: 300°</b>                               |                    |
| <b>Maximum Operating Pressure:</b> |               | <b>150 psi</b>   |                    |
| <b>Materials of Construction:</b>  |               |  |                    |
| <b>Corporation Stop</b>            |               | <b>PVC, CPVC, PVDF, Brass and 316 SS</b>                         |                    |
| <b>Check Valve O Ring:</b>         |               | <b>Standard: Viton Optional: EPDM</b>                            |                    |
| <b>Poppet</b>                      | <b>Spring</b> | <b>PVC, PVDF, Noryl® 316 SS</b>                                  | <b>Hastelloy C</b> |
| <b>Injection Quill</b>             |               | <b>PVC, CPVC, PVDF, 316 SS, A 20, Hast. C, Others on Request</b> |                    |
| <b>Safety Chain and Components</b> |               | <b>316SS</b>   |                    |

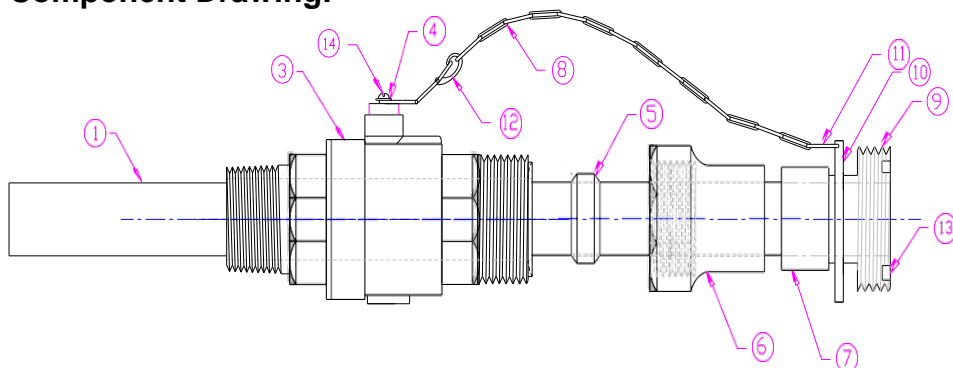


| Connection Size | Ball Valve | "A" Length | "B" Quill Length (* std) | "C" Tip OD |
|-----------------|------------|------------|--------------------------|------------|
| 1/2"            | 3/4"       | 9"         | 6" *                     | 1/2"       |
| 3/4"            | 1"         | 13"        | 6" *                     | 3/4"       |
| 1"              | 1.25"      | 17"        | 6" *                     | 1"         |

### Tip Configurations:



### Component Drawing:



| Position | Description        |
|----------|--------------------|
| 1        | Injection Tube     |
| 2        | N/A                |
| 3        | Corporation Stop   |
| 4        | Washer             |
| 5        | Gland Seal         |
| 6        | Compression Nut    |
| 7        | Soc x Soc Coupling |
| 8        | Safety Chain       |
| 9        | Check Valve        |
| 10       | Chain Plate        |
| 11       | Chain Connector    |
| 12       | Safety Hook        |
| 13       | O Ring             |