

**CRYSTEEL MFG. INC. HYCO CYLINDER
TROUBLE SHOOTING GUIDE (CYLINDER DOESN'T COME DOWN)**

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This document describes the steps to take to diagnose a warranty problem if the customer says that the cylinder doesn't come down all the way.

What to do if the customer says: *The cylinder doesn't come down all the way*

- The first thing to check is that there is nothing mechanically holding the dump body up. Remove any obstructions that keep the body from coming down.
- Mechanical frictional force is something that might cause a cylinder to not come down. Because of the seal design used, there is no adjustment required to the seal. Therefore, should sticking occur, adjusting the retaining glands would not have any effect. Inspect the cylinder stage sleeve for straightness. A bent tube will cause added friction between moving parts. If any parts are bent, replace the cylinder.
- Check to see what pressure rating the system is running at. The system pressure may be or was too high and caused the cylinder to swell in the seal area. Upon retracting the cylinder, the swelled area will be forced into the next larger stage and not allowed to fully retract. These two stages may, then, be stuck together and not be able to extend. Inspect the sleeves for swelled areas and if found, replace the cylinder.
- Check that the reservoir air breather is not blocked. If the breather appears dirty, replace or clean the breather.
- Check that the hydraulic components are working properly and not hydraulically locking the cylinder up.
- Cylinders with internal auto-bleed design may have internal damage. Determine this cause by eliminating all the other possibilities.