

Model 790 New Liveload Stuffing Box Design



Why a Liveload System is needed:

All fully plastic lined valves have plastic that is molded onto the metal parts. The plastic has a coefficient of thermal expansion that is 7 to 10 times as great as the iron or steel behind it, so with as little as a 20°F change in temperature (either ambient condition or from the process), all of the parts of the valve will be moving and can result in stem leakage.

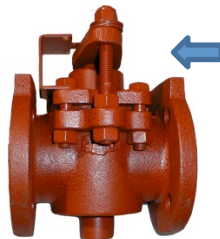
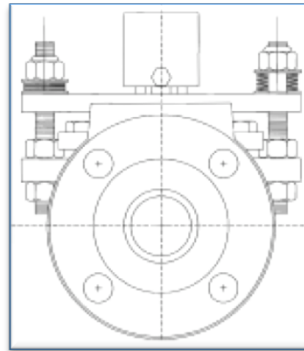
Features & Benefits of New Liveload System:

- The highly visible adjustment caps (the “yellow” bottom cap), allow plant maintenance personal to easily see when an adjustment is required, before there is any stem leakage.
- Substantial force on the packing flange remains after as much as 3/8” of relaxation, there will be a longer period of time to recognize an adjustment is required before any stem leakage occurs.

Issues with current Liveload Systems:

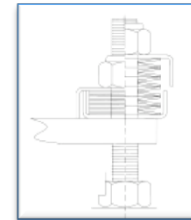
- It can be difficult for plant maintenance personal to determine if the belleville springs are adjusted correctly until the stem has started leaking.
- Small amount (1/8”) of plastic relaxation causes large reduction in sealing force on stuffing box, requiring frequent adjustments to avoid stem leakage.

Current Liveload System



Hard to see if belleville springs are adjusted correctly.

New Liveload System



Visible yellow indicates need for adjustment BEFORE stem leakage occurs!