



BY-PASS TRAVEL and STANDING VALVES

(Patent Pending)

The design of these valves has proven to be a valuable asset to **any** Rod Insert Pump Application in pumping wells. Industry Standard Valves don't come close to the flowing capacity of the By-Pass Valve.

Increased flow capacity of **Travel Valves** help reduce **Rod Buckling** on the down stroke cycle of the pump system because fluid can flow more freely through the valve and pump. When you reduce **Rod Buckle**, you also reduce **Tubing Wear**.

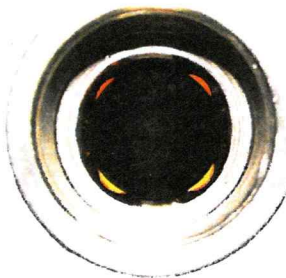
By-Pass Valves were designed to move heavy fluids and solids such as sand, iron sulfide, coal fines and other sediments through the valve eliminating ball sticking which reduces pump efficiency or causes complete pump failure.

The By-Pass Standing Valve has the same design to enhance the movement of the same heavy and thick solids as described above also, helping to eliminate ball sticking in the valve causing premature pump failure.

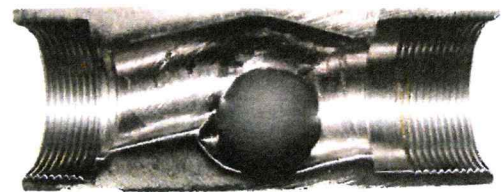
In the pictures below you can see the immense amount of flow area the Tomcat By-Pass Valve has around the ball compared to the industry standard 4 rail valves. The By-Pass Valve will not only allow easier passage of fluids and solids, but it helps plunger and rods fall easier on the downward cycle of the unit stroke. This reduces rod buckling and tubing wear.



TOMCAT BY-PASS
VALVE



INDUSTRY
STANDARD
VALVE



BY-PASS CUT AWAY