



**ISO 9001:2000 CERTIFIED**

## **Installation, Operating & Maintenance Instructions**

### **WCT Series Iron, Steel and Stn. Stl. 'Twin Door' or 'Double Door' Check Valves**

#### **Introduction:**

The Colton WCT series 'twin door' or 'double door' check valves are spring loaded and center guided, providing reliable, low maintenance service for a wide range of service conditions. The WCT series is a wafer style valve designed to fit between line flanges.

#### **Warning:**

Piping systems can be dangerous - safety precautions must be observed. Before removing your check valve from service, make sure that it has been isolated, the pressure released and, where necessary, the fluid between the isolation valves has been drained to an acceptable receptacle.

#### **Installation:**

Ensure that all machined surfaces are free of defects and the inside of the check valve is free of foreign objects. Foreign matter such as pipe scale, metal chips, welding slag, etc., can obstruct disc movement or damage the disc or the seating surface.

The Colton WCT series check valves can be installed in vertical (upward flow) or in horizontal piping with the flow in the direction of the arrow on the body and when installed in horizontal piping, the hinge pin must be in the vertical position to ensure proper operation.

When pressurizing the system, increase the pressure gradually and check for leakage at all joints.

#### **Maintenance:**

Design features minimize wear and maintenance requirements. However, extended use with fluids having suspended solids can cause interference with spring action and premature wear of the seating surfaces. Also, use of a check valve at a fraction of its capacity can cause disc flutter and excessive wear.

Before attempting the following shaft extraction, be sure to press a protected hand over the disc spring to prevent it unexpectedly launching itself when the shaft is removed.

To disassemble, remove the valve from the line and lay flat with the inlet facing down. Remove the pipe plugs from the top and bottom of the body, insert a punch and lightly tap the top of the shaft (hinge pin) until it is accessible on the other side of the body. Pull the shaft through the body to remove. The internals of the valve are now ready to be inspected and cleaned.