GATE VALVES
NRS, OSY & UL/FM

Ductile Iron Hand Wheel
Stainless Steel Stem And Stem Nut
Ductile Iron Body And Bonnet
Ductile Iron Packing Gland
Flanged And Grooved Design
Fused Bonded Epoxy Coating
PURPOSE:
Gate valves are used when a straight-line flow of fluid and minimum restriction is desired. Gate valves are classified as either RISING STEM (OSY) or NON-RISING STEM (NRS) valves. On the non-rising stem gate valve the stem is threaded on the lower end into the gate. As the handwheel on the stem is rotated, the gate travels up or down the stem on the threads, while the stem remains vertically stationary. The rising-stem gate valve, also known as (OSY) outside stem and yoke shown in the figure to the left has the stem attached to the gate; the gate and stem raise and lower together as the valve is operated.

SIZING AND INSTALLATION GUIDE:
Gate valves are not suitable for throttling purposes since the control of flow would be difficult due to valve design and since the flow of fluid pressuring against a partially open gate can cause extensive damage to the valve. Except as specifically authorized, gate valves should not be used for throttling. Beeco Gate Valves come in all pipe sizes 2 1/2” to 10” in NRS and OSY designs in Flanged by both Flanged and Grooved along with a Grooved by Grooved version. Beeco also carries a full line of UL/FM approved OSY designed valves for the fire protection market.

HOW IT WORKS:
A gate valve consists of an actuator—such as a lever, a hand wheel or an electric motor—a housing, which holds the valve mechanism, and a gate—a rectangular or circular piece of metal that acts like the gate on a fence. When the gate is raised, liquids or gases can pass through the gate. When the gate is closed, the flow stops. Most gate valves are operated by a handle, whether the handle is a lever or a hand wheel, like the knob on a faucet. If you turn the handle counter clock-wise, the gate raises. If you turn the handle clockwise, the gate drops.

FEATURES AND BENEFITS:
All NRS and OSY valves come standard with Stainless Steel Stem and Stem Nut. All gate valves come standard with ductile iron body and bonnet along with an NSF grade fussed epoxy coating inside and out. Beeco offers a full line of UL/FM approved and listed valves epoxy coated fire engine red for use in the fire suppression market and rated for a working pressure up to 300 PSI (21 bars), and tested at 5 times the rated working pressure. All packings are made of graphite with EPDM gaskets, and all valves have passed the 1,000 life cycle test.