



Red Valve Company, Inc.

Red Valve Company

Case Study

Long lasting knife gate valves on high-capacity Houston pumping station



The valves are used on the pumping station's raw-water intake system.

In 1987, responding to city expansion and population growth, the City of Houston installed a new sewer pumping station. Still the largest in the Houston metropolitan area, the 59th Street Water Pumping Station transfers 10 million gallons of raw sewage to Houston's Southwest Wastewater Treatment Plant every day.

The plant's original design included 11 large-diameter Series G Knife Gate Valves from Red Valve in sizes 30 and 48 inches. Intended for isolation of the massive



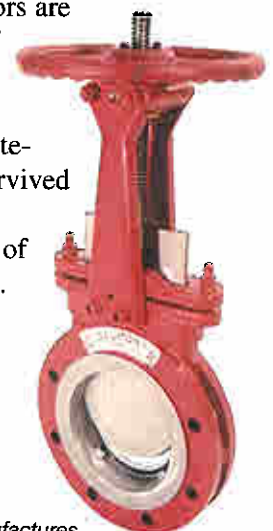
Manufactured in the late 1980s, these valves are still going strong at a Houston pumping station.

pumps operating in the station, the valves would remain open for months or even years at a time and would be required to achieve tight closure upon activation.

The Series G features a thick, stainless steel liner and a heavy-duty, cast iron body, making it tougher and more robust than competing designs. The precision-buffed knife gate is machine chamfered to reduce packing wear. The recess-free valve seat resists buildup, and two bosses welded to the seat ensure positive sealing.

The City of Houston opted for the elastomer-seated Series G, as opposed to the metal-seated version. Red Valve offers the resilient-seat option for particularly abrasive and/or corrosive applications, such as raw sewage.

Nearly 15 years later, station operators are still thrilled with the performance of the Series G Knife Gate Valves, none of which have had to be replaced or had any significant maintenance problems. The valves even survived a fire that virtually demolished the rest of the pumping station.



Red Valve manufactures knife gate valves in sizes 2-72 inches.