

Application Data

Power ♦ Cooling Water ♦ Flexgates® & TFO



At a powerplant operated by Oklahoma Gas & Electric, cooling water from the cooling tower was being discharged through an 18" line. A butterfly valve was used to throttle the flow of the water before it was discharged directly to atmosphere. The pressure drop of this free discharge caused cavitation at the end of the line, potentially damaging the line.

The butterfly valve was also the only valve in the line, so it could not be isolated for maintenance. The plant needed to add an isolation valve to the discharge line, and something to stop the cavitation

problem. They had used Red Valve product in other areas of the plant, and thought of Red Valve as a problem solver.

An 18" Flexgate Slurry Knifegate Valve was added to the line upstream of the butterfly valve to provide a tight shutoff for isolation. At the end of the line, a Tideflex® TFO Flow Restrictor was provided in a Series 39 body to provide a restriction to put back pressure against the butterfly valve and stop the cavitation.

