

When the repair and renovation of an existing processing plant valves becomes involving necessary, the operator is faced with an important decision. First, it is important to address the following questions: Does the valve that has been used up to now meet today's requirements regarding safety, reliability and costs? And is maintenance still advisable from an economic and safety point of view? This is often not the case, and simply replacing existing valves with identical models is not the best solution. This is because there are now valves available on the market that are far more efficient than the equipment originally installed. The purchase of a more up-todate product can thus prove to be an investment in higher efficiency, increased safety and significantly reduced maintenance and costs. The firm müller quadax from Forchtenberg is a manufacturer of Four Offset butterfly valves of the Quadax® brand and offers solutions for this decision. The company regularly delivers its high performance butterfly valves as a replacement for former gate valves.

The part-turn valves from müller quadax are designed for the control and regulation of a whole range of media and are even suitable for high pressures and extreme temperatures. The version O3 was designed in such a way that it can replace a ball- or gate valve without modification of the pipeline. In contrast to other valve systems, using the Quadax® butterfly valve saves the plant operator space and weight and also reduces the cost of the plant. Gate valves are correspondingly bulky and heavy often making an additional support of the pipeline necessary. While the butterfly valve ensures reduced weight, the gate valve also requires more space, as its height is more than twice the nominal size. Another advantage of the butterfly valve can be seen in its compact dimensions; the space requirement is not much greater than the cross-section of the pipe.

During an actual replacement of gate valves in a gas application, the following comparison was decisive: The Quadax® butterfly valve DN 400 with handwheel in the form of a gate-valve replacement in carbon steel with the overall length EN558 R14 weighed 310 kg compared to the gate valve with 590 kg. When comparing the same design in DN1000, this resulted in a saving in weight of over 30%. Thanks to the lower weight, the assembly was easier while also reducing the acquisition cost. In addition, the Quadax® butterfly valve impresses with its completely friction-free opening and closing function and is also completely gas-tight. The direct benefits in use are lower process costs and increased plant safety, even in extreme temperature ranges from -270 °C to +800 °C.

Phone: +49 79 47 / 943 43-0 | Mail: info@quadax.de | www.quadax.de