

System to monitor the disc position on Bianca

In applications where aggressive or harmful media are used, the reliable function and monitoring of the valve position is key to safety. Especially in critical cases, actuators are therefore often oversized in order to guarantee a reliable function also with extreme operating conditions. However, this oversizing creates, especially with pneumatic actuators and higher pneumatic supply pressure, the risk of a drive torque that can be too high for the valve itself. In this case, the shaft of the valve can be twisted or even sheared off at the weakest point, the external end of the shaft, if the disc is blocked e.g. by solid parts or swollen liners. Also, high cycle rates with high torques or additional mounting brackets can result in an increased clearance between actuator and valve shaft.

The normally used position indication of the valve by using the feedback of the end position of the actuator is in these critical applications not sufficient, as the position of the actuator is monitored but not the real position of the valve disc. This can result in fatal consequences during operation, as the disc of the valve might not be in final close position caused by above described reasons, although the actuator itself has reached his final position.

A solution for that problem is a new development by InterApp, the inner shaft monitoring at the valve itself, like shown in the picture. Monitoring the position of the shaft in the valve itself allows to definitely detect the disc position, independently from the monitored position at the actuator. With that new system, in the case of a hazardous incident, a huge damage caused by an irregular feedback of the valve position can be effectively avoided.

For further information contact us: <https://www.interapp.net>

