

Practical applications show just what "robust" and "long-lasting" mean

Magnetic cylinder sensors don't have it easy in day-to-day use. In spite of high mechanical loading from impacts, vibrations, extreme oscillations, etc., the devices must always function reliably. In addition, they are often exposed to very low or very high temperatures and, particularly in the metalworking industry, they frequently come in direct contact with coolants, lubricants, emulsions and oils, to give just an overview. In order to ensure that they always function properly and over many years or decades, inks as well as cleaning agents and solvents must likewise not affect our magnetic cylinder sensors, as the following application example shows.

A company prints promotional materials, including balloons, on which images with one or more colors are printed. In order to print the desired image on both sides, the balloons are inflated in an appropriate system to a fraction of their actual volume. In the printing station, the first side of the balloon is printed with an image and then it is turned with a turning device so that the image can also be applied to the second side. For this purpose, a vacuum head is moved towards the balloon in the turning station via a pneumatic cylinder. The head applies suction to the balloon and then moves back via the pneumatic cylinder, rotates 180°, advances again via the cylinder and places the balloon back on the receiver.

Because a balloon can easily explode during this "turning maneuver," ink splashes, and thus ink deposits, are not uncommon on our cylinder sensors. In spite of these adverse conditions, our devices with degree of protection IP67 operate trouble-free and extremely reliably over the entire production process. The system is also cleaned regularly in order to remove ink deposits, e.g., from profiles and other system components. During this process, the cylinder sensors come into direct contact with highly effective cleaning agents and solvents. Our devices remain completely undamaged by this "treatment."

With the magnetic cylinder sensors from ipf electronic, the company has found a solution for a production environment that, in several respects, meets demands on high reliability and, thus wear- and interruption-free operation. An extremely robust and long-lasting solution, in fact.

