## **AXESS ER PROBES**



## **AX ER (Electrical Resistance) Corrosion Probes**

Early detection of changes in corrosion is key to implementing and optimizing a robust corrosion control program. The Axess range of ER probes and instrumentation provides a highly sensitive method of detecting corrosion and erosion events by monitoring small changes in the electrical resistance of a metal element directly exposed to the process.

The use of ER (electrical resistance) probes is a proven, established industry technique which operates on the principle that the electrical resistance of a metal element will increase as the cross-sectional area decreases due to corrosion or erosion. Axess ER probes utilize a second element, called the reference element. Manufactured from the same material as the measurement element, the reference element is stored inside the body of the probe, where it is shielded from the process and used to auto-compensate for changes in electrical resistance due to other factors such as temperature.

Unlike some other technologies, Axess ER probes operate independently of the process properties and can therefore be used in almost any environment.





Incorporating Axess ER probes and instrumentation into an integrity management program provides early, reliable detection of changes in corrosion/erosion rates allowing operators, integrity, and maintenance teams to optimize corrosion control programs, increase safety and extend asset life.

Axess offers ER probes in a variety of configurations to suit almost all monitoring locations and processes. Wire Loop probes offer increased sensitivity but shorter life span. Tubular element probes are more robust, have longer lifespans and are ideally suited to monitoring center of line. Flush probes can be installed with the element positioned in line with the pipe wall and are therefore suited to monitoring top and bottom of the line where localized corrosion may occur. Multiple mounting options are offered for both high and low pressure systems with many of these being retrievable for maintenance and replacement under normal operating conditions using Axess retrieval equipment.

Please visit <u>www.Axess-Corrosion.com/resources</u> for more information or contact an Axess expert to discuss your monitoring requirements.

## **Key Features**

- Multiple Mounting Options (High and Low Pressure)
- Ideal for High Pressure 6K PSI and High Temperature Applications
- Shields available for High Velocity Flow
- Flush Probe Element available for Bottom of the Line/Pig-able Lines
- Cylindrical, Wire Loop, and Flush elements available in any materials required and different Probe Spans to suit

## **Sample Part Numbering:**





