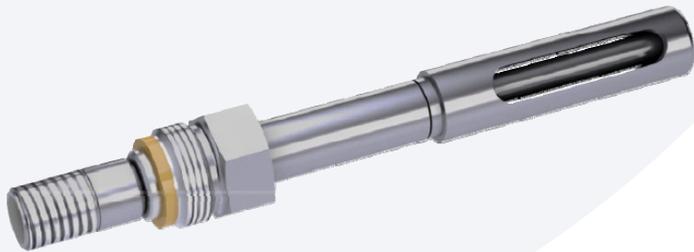


Microcor[®] Erosion Probes

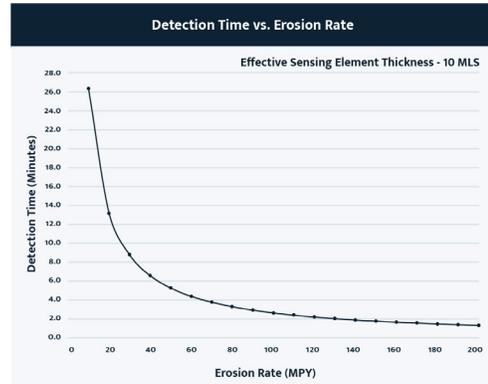
- **High Resolution Erosion Measurement**
- **Available in Offline & Online Configurations**



S4500 and S4700 Probe

Sand production in oil and gas producing wells can cause rapid erosion and wear of top side equipment such as chokes, valves, and flowlines. In addition, it may cause serious formation damage. Rapid detection and remediation of sand producing/erosion episodes is necessary to prevent shortterm failure of topside equipment and cumulative formation damage.

Cosasco offers a range of metal loss sensors and instrumentation, designed specifically to detect sand erosion at speeds approaching real time.



Sensing elements for the erosion/corrosion measurement system can be made from almost any commercially available alloy. Less corrosion resistant materials, such as carbon steel, will show the combined effects of corrosion, and erosion, whereas more resistant alloys, such as 316 or duplex stainless steel or Hastelloy, will show erosion effects exclusively. Erosion probes and instrumentation can be fully integrated with other digital loop transmitters manufactured by Cosasco, such as Linear Polarization (LPR), or high- resolution electrical resistance (Microcor[®]), to provide a comprehensive corrosion/erosion monitoring

solution within a single digital communication and data handling system.

The areas experiencing the most severe effects of erosion are the outer diameters of bends and areas downstream of changes in pipeline diameter. However, the corrosion/ erosion probe is best placed with its sensing element at the center of the line in a straight run pipe section where the greatest flow rates are experienced, since this is the place where the highest concentrations of sand are typically found.

Probes

Model	Retrievable Erosion Probe		
S4500	Complete Probe Assembly, Cylindrical Element		
	Code	Elemental Form and Thickness	
	T10	Cylindrical, 10 mil thickness (5 mil life)	
	T20	Cylindrical, 20 mil thickness (10 mil life)	
	T50	Cylindrical, 50 mil thickness (25 mil life)	
	Code	Element Alloy	
	XXXXX	Enter UNS Number	
	Code	Order Length	
	LL.LL	Order Length in Inches	
		3.25" min, 36.00" max for T10	
		5.00" min, 36.00" max for T20	
		11.00" min, 36.00" max for T50	
S4500	T20	S31603	6.00 ← Example

Model	Retrievable Erosion Probe		
S4700	Complete Probe Assembly, Angled Element		
	Code	Elemental Form and Thickness	
	F10	Angled, 10 mil thickness (5 mil life)	
	F20	Angled, 20 mil thickness (10 mil life)	
	F40	Angled, 40 mil thickness (20 mil life)	
	Code	Element Alloy	
	XXXXX	Enter UNS Number	
	Code	Order Length	
	LL.LL	Order Length in Inches	
		2.50" min, 36.00" max	
S4700	F20	S31603	6.00 ← Example