



- Maximizes corrosion inhibitor efficiency
- Flexible configuration
- Installs quickly – no plant shutdown required
- Operating pressure up to 1125 psi
- Operating temperature up to 392°F (200°C)
- Uses standard 1” tees for easy connection and add-ons
- Provides metal loss, corrosion rate, pressure, temperature, flow, and bacterial activity in your pipelines

The **Cosasco Side-Stream Assembly (CSSA)** is a portable, cost-effective corrosion survey tool to quickly provide accurate metal loss, corrosion rate, pressure, temperature, flow and bacterial activity to maximize corrosion inhibitor efficiency.

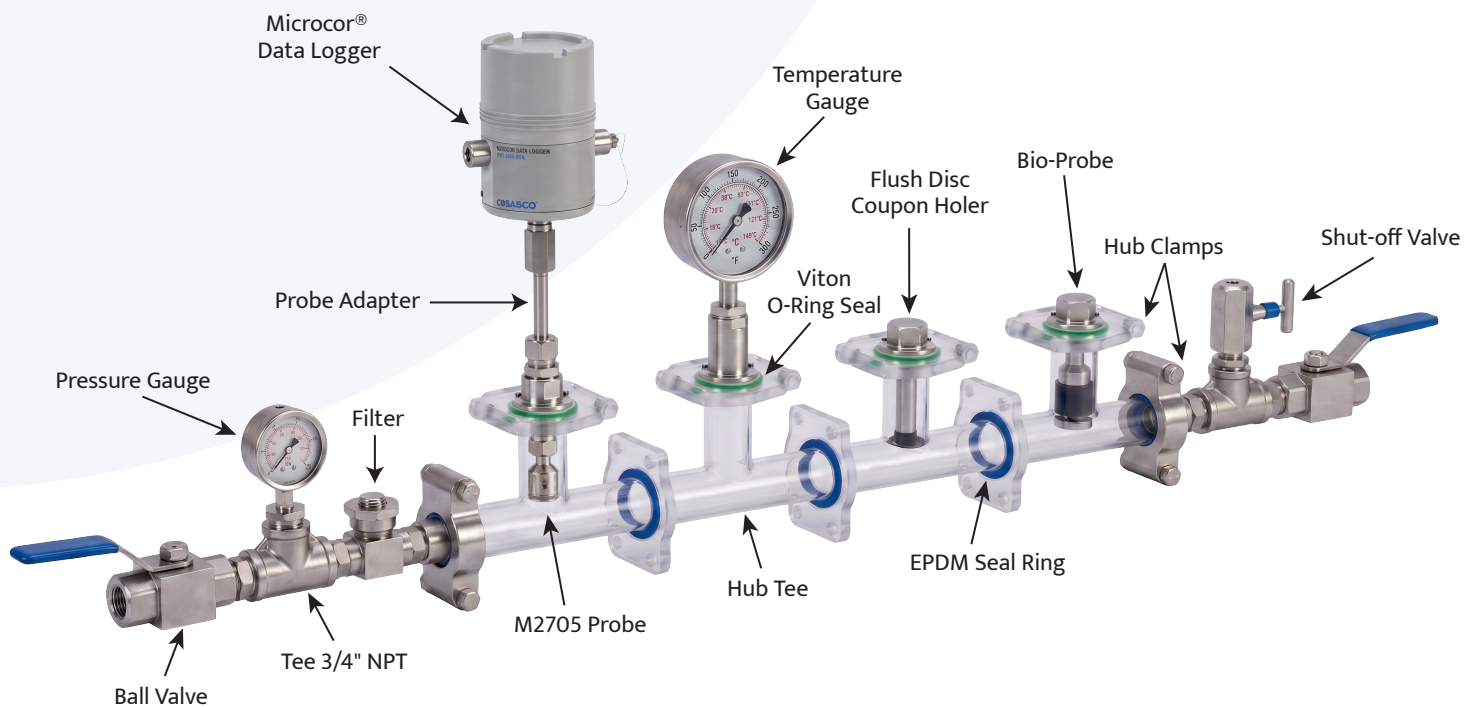
The tool is built of easily-connected 1” tees, each with a different monitoring technology, so you can pick and choose the number and types of monitoring required for each particular application. Your system connects to the upstream and downstream ends of the CSSA with flexible high-pressure hoses (not included).

The valves, pressure gauges and flow meter on the tool allow you to ensure that you have proper representative flow through the CSSA to provide reliable survey data on which to implement an optimized asset management control plan. The CSSA survey tool can be used for operating pressures up to 1125 psi and temperatures up to 200°C in its standard form.

Cosasco offers the following measuring technologies for the CSSA Tool:

- Microcor® High Speed Electrical Resistance (ER)
- Linear Polarization Resistance (LPR) Probe
- Metal Loss Coupons
- Process Parameters (Pressure and Temperature)

The CSSA with these various rapid measurement techniques will quickly give you a clearer picture of your particular corrosive environment. This allows you to test the effectiveness of changes to your inhibitor injection rates, and even evaluate alternate inhibitors and treatment much more rapidly than was previously possible. Installation is quick and easy with minimal cost, yet the results can be a life-saver in terms of improved asset management and reduced treatment and maintenance costs.



**Basic Parts of the CSSA**  
(not all parts listed are shown)

The basic CSSA kit includes Pressure and Temperature Gauges and Coupon Holder with the option of a Bio Probe, Microcor Flush Probe, LPR Probe with Data Logging Instruments. Additional monitoring points can be added for other process parameters.

### Ordering Information

Model ER Two-Wire Transmitter																																																															
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CSSA	S31603	1	50	1	0	1	← Example
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\*Hub Blanks will be provided for Additional Monitoring Points

### Replacement and Additional Parts

Order Information: Coupon Holder	Description
P/N 001748-S31603-2.25	Hub Flush Disk Coupon Holder, Connection Size 1.5", Length 2.25"
P/N CI-D-XXXXX-0-3-0-0*	Disc Coupon, XXXXXX Material
XXXXXX = UNS Number of Coupon Material	
Accessories	
P/N 208620	Insulation Set, Cosasco® 2" Flush Disc Coupon Holder.

Order Information: Bio Probe	Description
P/N 001749-2.63-XXXXX	Hub Bio Probe, Connection Size 1.5", Length 2.63"
Accessories	
P/N 625071-XXXXXX	Element Set (5 each per set)
XXXXXX - UNS Number of Element Material	
Accessories	
P/N 124900	Set Screw
P/N 003965-14	Mounting Screw

Order Information: ER Probe				
Model	Fixed NPT Mounting ER Probe Assembly			
M2705	Complete Probe Assembly			
↓	Code	Element Form		
	F10	Flush, 10 mil thickness (5 mil life)		
	F20	Flush, 20 mil thickness (10 mil life)		
	Code	Element Alloy		
	K03005	Carbon Steel		
↓	Code	Order Length		
	3.38	3.38" Order Length		
M2705	F10	K03005	3.38	← Example
P/N 001743-2	Hub, Connection Size 1.5", 3/4" FNPT, Length 2"			
Note: Threaded hub connector is mandatory for ER probe installations and must be ordered with the probe.				

Order Information: ER Instrumentation	
Order Information: Transmitter	Description
P/N MT-9485A	Microcor® Transmitter, RS-485, Aluminum Cover
P/N MT-9485A-SS	Microcor® Transmitter, RS-485, Stainless Steel Cover

### Replacement and Additional Parts

Order Information: ER Instrumentation Continued	
Order Information: Communication Cable RS-485	Description
P/N 748197-A-L	Transmitter to Junction Box Communication Cable, RS-485 (IECEX / ATEX)
Order Information: Probe Adapter	Description
P/N 745092-A	Probe Adapter for Fixed ER Probe, Probe to Transmitter
Order Information: Data Logger and Transfer Unit	Description
P/N M-200-0-NB	Microcor® ER Data Logger, BT, Aluminium Cover, No Battery
P/N M-200-1-NB	Microcor® ER Data Logger, BT, Stainless Steel Cover, No Battery
P/N TU-500-1	Data Transfer Unit, BT Wireless Device
Order Information: Probe Adapter	Description
P/N 745092	Probe Adapter for Fixed ER Probe, Probe to Data Logger
Accessories	Description
P/N 748400	7.2 V Lithium Power Module

Please refer to the MWT Data sheet for other wireless transmitter and data logging options.

Order Information: LPR Probe				
Model	Fixed NPT Mounting LPR Probe Assembly			
7222	Complete probe assembly without electrodes			
↓	<b>Code</b>	<b>Order Length</b>		
	LL.LL	2.50 Inches Order Length		
	↓	<b>Code</b>	<b>Element Alloy</b>	
		K03005	Enter UNS Number: Enter 0 if not required	
7222	4.50	K03005	← Example	
P/N 001743-2	Hub, Connection Size 1.5", 3/4" FNPT, Length 2"			
<b>Note:</b> Threaded hub connector is mandatory for ER probe installations and must be ordered with the probe.				

### Replacement and Additional Parts

Order Information: LPR Probe Continued					
Electrodes Part Number		Description			
P/N 060814-XXXXXX		LPR Electrode Kit			
Where XXXXXX is the UNS alloy number					
Element Availability					
UNS Number	Alloy	UNS Number	Alloy	UNS Number	Alloy
K03005	Pipe Grade Carbon Steel	N08020	Carpenter 20 Cb3	A91100	Aluminum 1100
S30400	304 S.S.	N04400	Monel 400	R50400	Titanium GR2
S30403	304L S.S.	C71500	Cu/Ni 70/30	C44300	Ars. Ad. Brass CDA #443
S31600	316 S.S.	C11000	Copper 110 ETP	A92024	Aluminum 2024
S31603	316LS.S.	C70610	Cu/Ni 90/10	060942	D.G.M. (Galvanic)

All elements are furnished "as machined" unless otherwise specified. Exceptions are Mild Steel which is vacuumed annealed.

Order Information: LPR Instrumentation	
Order Information: Probe Adapter	Description
P/N 710973-A	Probe Adapter for Fixed LPR Probe, Probe to Transmitter/Data Logger
Order Information: Transmitter	Description
P/N E-9020	E-9020 LPR Transmitter, RS485, Aluminium Cover
P/N E-9020 -SS	E-9020 LPR Transmitter Transmitter, RS-485, Stainless Steel Cover
Order Information: Communication Cable RS-485	Description
P/N 748197-A-L	Transmitter to Junction Box Communication Cable, RS-485 (IECEX / ATEX)
Order Information: Probe Adapter	Description
P/N 710973-A	Probe Adapter for Fixed LPR Probe, Probe to Transmitter
Order Information: Wireless Transmitter	Description
P/N CWT-9020-0-0-NB	LPR Wireless Transmitter, HART 7 RADIO, Aluminium Cover, No Battery
P/N CWT-9020-1-0-NB	LPR Wireless Transmitter, HART 7 RADIO, Stainless Steel Cover, No Battery
Order Information: Probe Adapter	Description
P/N 710973	Probe Adapter for Fixed LPR Probe, Probe to Data Logger
Accessories	Description
P/N 748400	7.2 V Lithium Power Module