

Corrosion coupons are a simple yet effective tool for providing a quantitative estimation of corrosion rates occurring in an operating system. They also provide a visual indication of the type of corrosion which may be occurring in the monitored system.

THE CORROSION COUPON

- Is a piece of metal of predetermined shape, size and surface area
- Is a metal of similar chemical composition to the process equipment
- Has a uniform reproducible surface finish
- Has a distinguishing serial number
- Is exposed to the same corrosive medium as the process facilities
- Is exposed for a fixed period of time
- Gives visual indication of the type of corrosion
- Indicates the rate of corrosion

Every Caproco coupon is stamped with a unique serial number, and every coupon order is supplied with written certification, including: serial number, material, weight and dimensions. All Caproco coupons are weighed to four (4) decimal places, packaged individually in vapour phase inhibited envelopes and hermetically sealed for a one (1) year shelf life.

Caproco standard coupons are grit-blasted and furnished with insulation for mounting. Mounting hardware is supplied with the coupon holder. Polished, ground or weld bead coupons are also available.

Coupons manufactured from any material and dimension are available on request. Material may be customer-supplied to match an existing system.

STANDARD COUPON SPECIFICATIONS

Strip Coupon - 3/4" Width (Fig.1)

Commonly-used coupon supplied for most evaluations. The size is 3" x 3/4" x 1/8" (76.2mm x 19.0mm x 3.2mm) with two (2) mounting holes. The exposed surface area is 4.65 in² (3,000mm²).

Strip Coupon - 1/2" Width (Fig.2)

Used with low pressure access equipment or through narrow ports that a standard 3/4" wide coupon

cannot pass. The size is 3" x 1/2" x 1/16" (76.2mm x 12.7mm x 1.6mm) with two (2) mounting holes. The exposed surface area is 2.65 in² (1,709mm²).

Rod Coupon (Fig.3)

This pencil-like coupon is screwed into an insulator which is then screwed into an NPT Bullplug Coupon Holder. The rod coupon standard size is \varnothing 1/4" x 4" (\varnothing 6.3mm x 101.6mm), with a milled flat area for the serial number. One end is threaded for screwing the coupon into the insulator, the other is notched to accept a flathead screwdriver. The exposed surface area is 3.27 in² (2,109mm²).

Flush Disc Coupon (Fig.4)

These circular coupons are used where coupons cannot protrude into the line and interfere with flow or pig passage. Standard size is \varnothing 1.25" x 1/8" (\varnothing 31.8mm x 3.2mm). A chamfered hole allows for mounting with nylon flathead screw and back-up disc insulation. The exposed surface area is 2.40 in² (1,548mm²).

Fig.1 Strip Coupon 3/4" x 1/8" x 3" lg



Fig.2 Strip Coupon 1/2" x 1/16" x 3" lg



Fig.3 Rod Coupon



Fig.4 Flush Disc Coupon

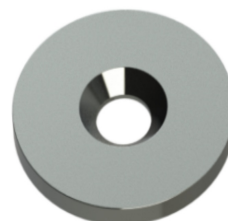
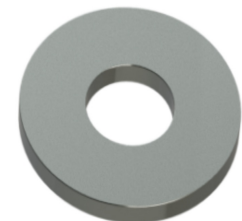


Fig.5 Disc Coupon



Disc Coupon (Fig.5)

These circular coupons are used in stacked multiple disc monitoring applications. Standard size is \varnothing 1.25" with a thickness of $\frac{1}{8}$ " (\varnothing 31.8mm x 3.2mm) with one mounting hole. The exposed surface area is 2.65 in² (1,709mm²).

Coupon Insulation

Caproco standard coupons come furnished complete with insulation made from Delrin, which has a temperature rating of 200°F (93°C). Insulation for higher temperature requirements is available and should be specified when required. The higher temperature insulation materials are:

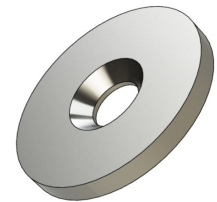
- Teflon - 500°F (260°C)
- Rulon - 550°F (288°C)
- Ceramic - 1472°F (800°C)

CAPROCO STANDARD STRIP COUPONS

COUPON TYPE AND PART NUMBER									
MATERIAL	1018 MILD STEEL	304 SS	304 LSS	316 SS	316 LSS	A106 GR B	API 5L GR B	DUPLEX (UNS 31803)	POLISHE D 1018
3" x 3/4" x 1/8"	10620	10621	10622	10623	10624	13764	13450	31183	12455
3" x 1/2" x 1/16"	10625	10626	10627	10628	10629	31322		31167	31044
2" x 3/4" x 1/8"	11878				12435		31243	31324	
2 7/8" x 7/8" x 1/8"	13488			13024		13023			
2" x 1/2" x 1/16"	11873		13163						
3" x 1/2" x 1/8"	31102								
2 1/2" x 1/2" x 1/16"	11874								
2" x 1/2" x 1/8"	31118								



FLUSH DISC COUPONS				
Description	1 1/4" \varnothing X 1/8"	7/8" \varnothing X 1/8"	3/4" \varnothing X 1/8"	
Material	1018 Mild Steel	10635	33032	33001



OTHER MATERIALS / FINISHES								
MATERIAL	POLISHED 1018	304 SS	304 LSS	316 SS	316 LSS	A106 GR B	API 5L GR B	DUPLEX (UNS 31803)
1 1/4" \varnothing X 1/8"	33009	10636	10637	10638	10639	13981	13445	13441

MULTI DISC COUPONS						
Material	1018	Polished 1018	304 SS	304 LSS	316 SS	316 LSS
1 1/4" \varnothing X 1/8"	10640	34014	10641	10642	10643	10644

ROD COUPONS									
Description	6" x 1/4" \varnothing	5" x 1/4" \varnothing	4" x 1/4" \varnothing	3" x 1/4" \varnothing	2" x 1/4" \varnothing	1 1/2" x 1/4" \varnothing	1" x 1/4" \varnothing	3/4" x 1/4" \varnothing	
Material	1018 Mild Steel								
	13000	32041	10630	13087	12847	32031	32044	32030	
	Stainless Steels		304 SS	304 LSS	316 SS	316 LSS			
	4" x 1/4" \varnothing		10631	10632	10633	10634			

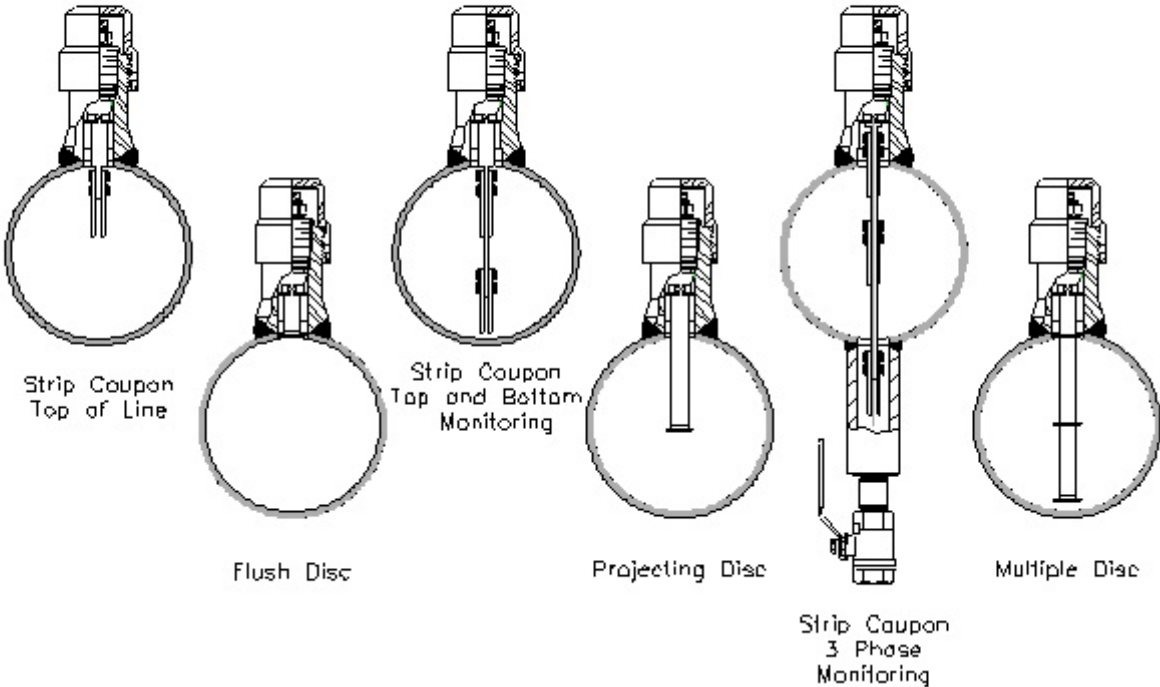


Note: Coupons available from any material, dimension and finish upon request

CORROSION COUPONS

Fig.6 Typical Coupon Monitoring

-With Access Fittings



-With Bullplugs Holders

