

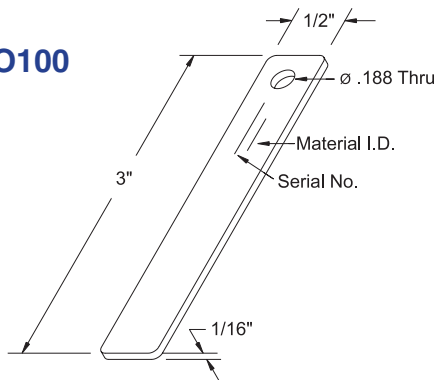
Corrosion Coupons

Accurate monitoring of corrosion rates in any environment is critical when viewed in terms of the maintenance and repair costs associated with corrosion and material failure. Test coupons provide an inexpensive means of on-line monitoring that will allow you to effectively measure the corrosivity within your system. By observing the mils-per-year corrosion rate of an exposed coupon, valuable information can be provided regarding the material's life expectancy.



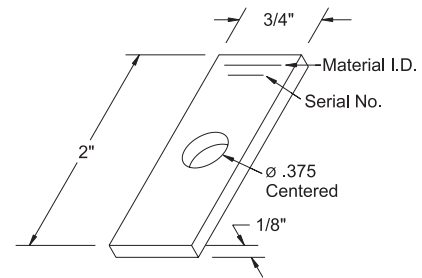
Metal Samples can make coupons in any size, shape, or material you need. Coupons can be stenciled with alloy and sequence numbers for proper identification. Mill test reports, identifying element compositions of materials used, are provided on all orders. The following coupons are four of the most commonly used in corrosion testing.

P/N CO100



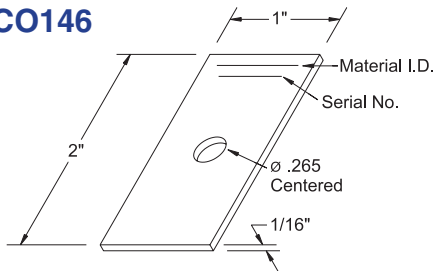
Shape	Rectangular
Finish	Double disc or glass bead
Identification	Stenciled (alloy, sequence)
Surface Area	3.38 in ²

P/N CO131



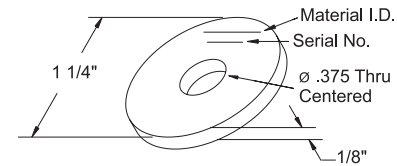
Shape	Rectangular
Finish	120 grit, glass bead, or mill
Identification	Stenciled (alloy, heat no., sequence)
Surface Area	3.47 in ²

P/N CO146



Shape	Rectangular
Finish	Glass bead or mill
Identification	Stenciled (alloy, sequence)
Surface Area	4.26 in ²

P/N CO220



Shape	Circular
Finish	120 grit, glass bead, or mill
Identification	Stenciled (alloy, sequence)
Surface Area	2.72 in ²

Finishes

- **Mill** - finished as produced from mill.
- **Glass Bead** - blasted with fine glass beads to remove mill scale.
- **120 Grit** - fine finish using a 120 grit belt. Commonly used in corrosion tests, such as pitting studies, where smooth surface finish is desired. Finishes up to 600 grit (extremely fine) can be provided.
- **Double Disc Ground** - extra fine finish using an abrasive disc that leaves minimal residue. Excellent for studies where surface finish is critical. Can produce 16-32 RMS finishes on common steels and 8 RMS on carbide steels.

Coupon Ordering and Services Available

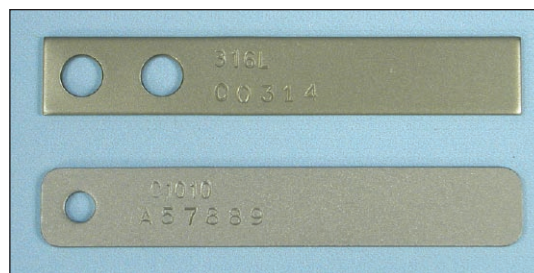
When placing your order for coupons, be ready to provide the sales person with information regarding the type of material you are testing, the size coupons required, surface finish desired, and if applicable, mounting hole size and location. The following options are available:

- Manufacturing on time and material basis
- Samples mounted on test racks and ready for installation
- Preweighing - coupons are cleaned, preweighed on an electronic scale, and individually packaged
- Weight log charts provided on computer disk
- Non-standard coupons
- Coupon measuring
- Heat-treating, sensitizing, hot dip galvanizing
- Manufacturing from your material if requested
- Coupons made to specific requirements for mounting hole locations, coupon welding, stressing, and packaging
- Plating - nickel, nickel cadmium, cadmium, chrome, silver, gold, and others upon request
- Electro-polishing, hard facing
- Non-metallic coatings
- Anodizing and alonizing

Standard Coupons

Flat Coupons

P/N	Size	Hole	Hole Location	Area Sq. In.
CO100	1/2" x 3" x 1/16"	3/16"	1/4" fr. end	3.38
CO101	1" x 2" x 1/16"	3/16"	1/4" fr. end	4.32
CO102	1/2" x 3" x 1/16"	9/64"	1/8" fr. end	3.41
CO103	1/2" x 3" x 1/16"	1/4"	1/4" fr. end	3.34
CO104	1/2" x 3" x 1/16"	(2) 1/4"	1/2" fr. ea. end	3.24
CO105	1/2" x 3" x 1/16"	3/16"	1/2" fr. end	3.38
CO106	1/2" x 3" x 1/16"	1/4"	1/2" fr. end	3.34
CO115	1/2" x 3" x 1/16"	1/4"	1/4" fr. end	
CO117	3/8" x 3" x 1/16"	9/64"	1/8" fr. end	2.64
CO118	1/2" x 3" x 1/16"	(2) 1/4"	1/4" & 3/4" end	3.24
CO120	3/8" x 3" x 1/16"	(2) 1/4"	1/4" & 3/4" end	2.48



Scale coupons (or deposition coupons) provide a qualitative measure of relative deposition rates in industrial water and manufacturing process systems.

P/N CO115 (flat)

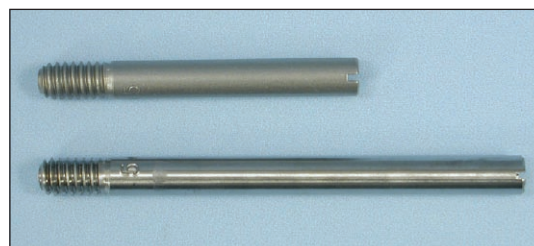
P/N ES209
(cylindrical)



The coupons listed above are made from a variety of materials (see Alloys list).

Cylindrical Coupons

P/N	Size	Thread	Slot	Area Sq. In.
ES200	1/4" Ø x 2 1/2"	1/4"-20 x 3/8"	1/16"	1.96
ES201	1/4" Ø x 2"	1/4"-20 x 3/8"	1/16"	1.57
ES202	1/4" Ø x 3"	1/4"-20 x 3/8"	1/16"	2.45
ES204	1/4" Ø x 1 1/2"	1/4"-20 x 3/8"	1/16"	1.18
ES209*	1/4" Ø x 3"	1/4"-20 x 3/8"	1/16"	



* ES209 has five 1/8" diameter scale holes.