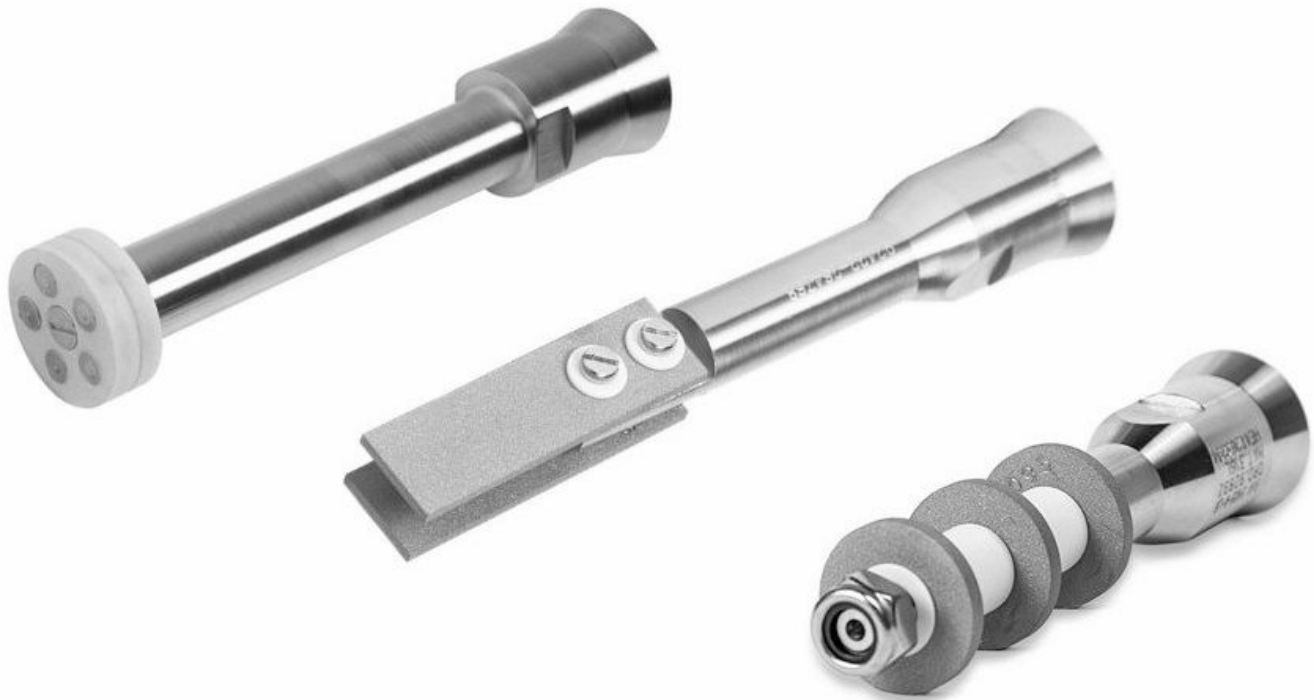


# Roxar™ Retrievable Weight Loss Coupons and Holders



Use of Weight Loss Coupons is a commonly-used method for internal corrosion monitoring. Roxar Weight Loss Coupons are used to quantify corrosiveness of pressurized systems (pipes or vessels) by measuring the weight of elements exposed to corrosion over a given period.

The Roxar Weight Loss Coupons have the following features:

- Provide information on localized corrosion so the pitting rate can be quantified
- Provide the preferred method for validating information provided by ER probes
- Offer various types of metals for coupons to suit customer applications
- Meet NACE specifications
- Provide a low cost investment
- Are certified to show the serial number, weight (provided in grams to four decimal points precision), dimensions, and material type

## Operating principle

The Roxar Retrievable Weight loss Coupon and Holder is installed on the pipe or vessel exposed to process and removed after a defined time interval. The standard time interval is typically 90 days. Upon retrieval, the coupon is cleaned and weighed. The difference between the initial weight and final weight, the exposure period, and the surface area of the coupon are used to calculate the corrosion rate.

Coupons can be used to:

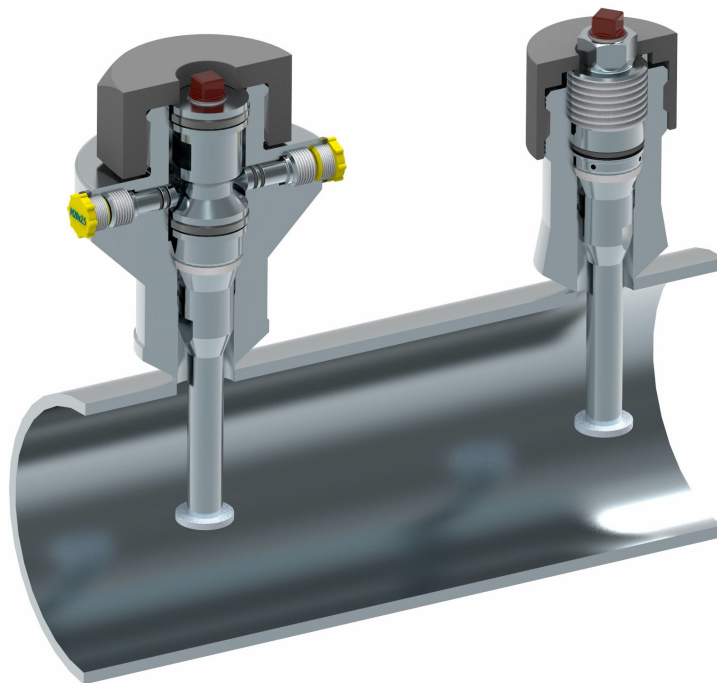
- Evaluate the corrosiveness of systems
- Monitor the effectiveness of corrosion-mitigation programs
- Tune process conditions

As a result, coupons results are linked to the corrosiveness of the system rather than to absolute metal loss on the pipe itself.

Weight Loss Coupons are installed onto a coupon holder, which is connected to a 2-inch system solid plug. Roxar Coupons and Roxar Coupon Holders are compatible both with standard 2-inch Mechanical Systems as well as 2-inch Hydraulic Systems.

Figure 1 shows a drawing of a disc coupon assembly installed into a hydraulic access fitting on the left side of the pipe and a mechanical access fitting on the right side of the pipe.

**Figure 1: Disc Coupon Assembly**



The following coupons and holders are standard Emerson offerings:

- Disc coupons/ holders for flush installation to the pipe or vessel wall
- Strip (a pair) coupons/ holders for projecting installation into the flow
- Bio coupons/ holders for sampling and analysis of bacterial activity

Roxar Coupon Holders are available in reinforced design for high velocities. The maximum operating temperature is 400 °F (204.4 °C).

For more information on the types of coupons available, refer to *Roxar Weight Loss Coupons: 2" Retrievable System – Product Data Sheet*.

## Model code numbering system

### Product description

Code	Product description
THCOUP	High pressure corrosion coupon assembly

### Coupon type

Code	Coupon type
0	Strip
1	Scale
2	Disc
3	Bio

### Coupon material

Code	Coupon material
N0	Not applicable; coupon and insulation not included
C1	Carbon steel S355J2 (EN10025); Insulation included
C2 <sup>(1)</sup>	Carbon steel AISI 1018; Insulation included
C3 <sup>(1)</sup>	Carbon steel ASTM A106 Gr, B; Insulation included
C4 <sup>(1)</sup>	Carbon steel ASTM A333 Gr, B; Insulation included
C5 <sup>(1)</sup>	Carbon steel API 5L Gr, B; Insulation included
C6 <sup>(1)</sup>	Carbon steel API 5L Gr, X52; Insulation included
C7 <sup>(1)</sup>	Carbon steel API 5L Gr, X60; Insulation included
C8 <sup>(1)</sup>	Carbon steel API 5L Gr, X65; Insulation included
S1	Stainless steel 316L UNS S31603; Insulation included
S2	Duplex stainless steel UNS S31803; Insulation included

(1) Not available with Coupon Type option 3.

### Coupon holder design

Code	Coupon holder design
01	Standard design, fixed length
05	Reinforced design, fixed length (no support ring)

## Coupon holder material

Code	Coupon holder material
316B <sup>(1)</sup>	Stainless steel ASTM A479 UNS S31603 (316L), bar NACE MR0175
318B <sup>(1)</sup>	Duplex ASTM A479 UNS S31803, bar NACE MR0175
760B <sup>(1)</sup>	Super duplex ASTM A479 UNS S32760, bar; NACE MR0175
625B <sup>(1)</sup>	Inconel ASTM B446 UNS N06625, bar; NACE MR0175
825B <sup>(1)</sup>	Incoloy ASTM B425 UNS N08825, bar; NACE MR0175

(1) Requires Special Tests and Certificates options MC or MT.

## Coupon holder length

Code	Coupon holder length
000	Length has to be defined before order can be accepted
060-149 <sup>(1)</sup>	Coupon holder length, mm
150-700	Coupon holder length, mm

(1) Not available with Coupon Holder Design, option 05.

## Pipe insertion length

Code	Pipe insertion length
NNN	Not applicable

## Coupon holder option

Code	Coupon holder option
Z	Standard

## Factory options

Code	Factory options
Z	Standard product

## Certificates, tests, calibrations, and services (optional)

Code	Certificates, tests, calibrations, and services (optional)
Dye penetrant examination (select any from this group)	
D1	Dye penetrant test for coupon holder
Positive material testing (select only one from this group)	
PM <sup>(1)</sup>	Positive material identification for coupon holder (without C content)
PC <sup>(2)</sup>	Positive material identification for coupon holder (with C content)
Additional raw material testing	
MC	Material inspection certificate 3.1 (supplier lot traceability per EN 10204)
MT	Material inspection certificate 3.2 (supplier lot traceability per EN 10204)
MN <sup>(3)</sup>	Material requirements according to Norsok M-630
MR <sup>(4)</sup>	Material specification type 2

(1) Not available with Special Tests and Certificates option PC.

(2) Not available with Coupon Holder Material options 625B, 825B.

(3) Not available with Coupon Holder Material option 825B.

(4) Not available with Special Tests and Certificates options MT, MN.





For more information: [www.emerson.com](http://www.emerson.com)

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