

# Roxar Weight Loss Coupon Holder and Coupons

## 2" Retrievable System



### A Classic Method for Internal Corrosion Monitoring

Use of Weight Loss Coupons is a classic and still commonly used method for internal corrosion monitoring.

A Coupon of a material similar to the pipe material <sup>1)</sup> is installed inside the pipe or vessel for a given period, and after retrieval, Coupon weight loss is measured. From the weight loss, corrosion rates can be calculated. In addition, effects like pitting corrosion, scaling, deposits or bacteria can be analyzed.

All Roxar Coupons are made according to NACE specifications, and it is also recommended that Coupon analysis is done according to the NACE recommendations <sup>2)</sup>. Each Coupon is marked with serial number, weight (to 0,1 mg accuracy), dimensions and material quality. Each Coupon is individually packed in inhibited envelopes.

Weight Loss Coupons are installed onto a Coupon Holder, which is again connected to a 2" System Solid Plug. Roxar Coupons and Coupon Holders are compatible both with standard mechanical system as well as 2" Hydraulic System.

A range of Coupon Holders and Coupons are available as standard:

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

Other Coupons and Coupon Holders are available upon request (please consult factory):

- Scale Coupons (with strip Coupon Holder)
- Weld Coupons.

Roxar Coupon Holders are available in reinforced design for high velocities. Max operating temperature is 204 °C (400 °F).

1) Although Coupons can be made to specification and actual pipe material, for economic and convenience reasons it is recommended to use industry standard Coupons for normal carbon steel applications. For higher alloyed steels, Coupons should reflect pipe specifications.

2) NACE recommended practice RP 0775, latest revision.

**Roxar Disc Coupon Holders and Coupons**



Disc Coupon Holders and Coupons are normally used for flush mount installation, typically at 6 o'clock position of horizontal pipes, where water is most likely to be present. The Coupon may also be installed for middle or line or top of line installation, or even bottom of line from a top of line access point. The disc Coupon Holder is delivered with insulation kit and mounting screw.

**Other types of Coupons and Holder (ask factory for details)**



- Multiple disc Coupon Holder and Coupons.
- Ladder Coupon Holders are used when corrosion monitoring at different levels in a pipe or vessel is required.
- Scale Coupons are strip-type Coupons with a series of different size holes, which are intended to initiate scale formation on the Coupon surface.

**Roxar Bio Coupon Holder and Bio Coupons**



The Bio Coupon assembly is a simple device for monitoring bacterial activity. The Bio Coupon assemblies comprises of a housing with 5 Coupons directly exposed to the internal environment in a pipe or vessel.



A special reinforced probe design is available for conditions where velocities are high, sometimes in combination with a need for long probes. Need for reinforced design probes is normally evaluated based on wake frequency calculations.

**Roxar Strip Coupon Holders and Coupons**



The Projecting Strip Coupon Holder holds two strip Coupons. Strip Coupons are made with two mounting holes to assure a fixed monitoring position. Strip Coupons are delivered with insulators.

## Model Code Selector - Roxar Coupon Holders and Coupons

| Model             | Product Description   |                          |                     |
|-------------------|---|--------------------------|---------------------|
| TCOUP             | Coupon Assembly   |                          |                     |
| Code              | Coupon Type   |                          |                     |
| 00                | No Coupon delivered. Coupon Holder type: Strip                            |                          |                     |
| 01                | No Coupon delivered. Coupon Holder type: Disc                             |                          |                     |
| 02                | No Coupon delivered. Coupon Holder type: Bio                              |                          |                     |
| 10                | Strip Coupon 3", S355J2+N (St 52)   |                          |                     |
| 30                | Disc Coupon M8, S355J2+N (St 52)  |                          |                     |
| 50                | Bio Coupon, S355J2+N (St 52)  |                          |                     |
| 11                | Strip Coupon 3", AISI 1018  |                          |                     |
| 31                | Disc Coupon M8, AISI 1018   |                          |                     |
| 99 <sup>2</sup>   | Other Coupon Material and/or Holder Type                                  |                          |                     |
| Code              | Coupon Holder Design  |                          |                     |
| 01                | Standard Design, Fixed Length   |                          |                     |
| 02                | Reinforced Design, Fixed Length for Access Fitting Flareweld              |                          |                     |
| 03                | Reinforced Design, Fixed Length for Access Fitting MECH ≤300#, HYD ≤1500# |                          |                     |
| 04                | Reinforced Design, Fixed Length for Access Fitting MEC ≥4/600#, HYD 2500# |                          |                     |
| 99 <sup>2</sup>   | Other Design  |                          |                     |
| Code              | Coupon Holder Material  |                          |                     |
| 2C6A              | Stainless Steel A 479 Gr. 316L, bar                                       | EN 10204 3.1 NACE MR0175 |                     |
| 2D6A              | Duplex A 276 / A 479 UNS S31803, bar                                      | EN 10204 3.1 NACE MR0175 |                     |
| 2C6C              | Stainless Steel A 479 Gr. 316L, bar                                       | EN 10204 3.1 NACE MR0175 | NORSOK M630 MDS S01 |
| 2D6C              | Duplex A 276 / A 479 UNS S31803, bar                                      | EN 10204 3.1 NACE MR0175 | NORSOK M630 MDS D47 |
| 9X9X <sup>2</sup> | Project Specific Material   |                          |                     |
| Code              | Holder Length   |                          |                     |
| L1 1              | < 150 mm  |                          |                     |
| L2 1              | 150 - 300 mm  |                          |                     |
| L3                | 300 - 400 mm  |                          |                     |
| L4                | 400 - 500 mm  |                          |                     |
| L5                | 500 - 600 mm  |                          |                     |
| L6                | 600 - 700 mm  |                          |                     |
| Code              | Factory Options   |                          |                     |
| Z                 | Standard product  |                          |                     |

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|                 |   |
|-----------------|---|
| X               | ETO product   |
| <b>Code</b>     | <b>Certificate, Tests, Calibrations and Services (Not required, all are optional)</b> |
|                 | <u>Dye Penetrant Examination (select any from this group)</u>                         |
| D1              | Dye Penetrant Test  |
|                 | <u>Positive Material Testing (select only one from this group)</u>                    |
| PM              | Positive Material Identification  |
|                 | <u>Other testing</u>  |
| TX <sup>2</sup> | Project specific testing  |

<sup>1</sup> Not available with Coupon Holder Design options 02, 03, 04

<sup>2</sup> Not available with Factory Option Z

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