



# HP RETRIEVABLE CORROSION COUPON HOLDERS



## For use with AXHP Axess Systems

Corrosion can be extremely costly, and control is vital for the integrity management of critical assets. One of the simplest ways to monitor your facility is with the use of corrosion coupons. The corrosion coupon is intrusively inserted into the process system and periodically removed to conduct weight loss and visual analysis.

The Axess AXHP range of coupon holders are designed for use with our AXHP access systems and allow the insertion and removal of corrosion coupons in pressurized piping systems up to 10,000psi. The coupon holders are installed through permanently mounted access fittings allowing installation and replacement of coupons without the requirement to isolate process pressure avoiding expensive isolation and shutdowns.

Coupon holders are manufactured in 316SS material as standard and lengths are selected to suit the individual monitoring location.

The two main styles of coupon holder are 3" strip and flush disc. Strip coupon holders can be used for monitoring at a pre-selected area within the pipe whilst flush disc coupon holders are ideal from monitoring inline with the pipe wall. Additional coupon holder types including ladder coupons and multidisc are available for specialist monitoring withing multiphase lines.

MEET NACE MR0175 & MR0103 STANDARDS

LOW COST MONITORING OPTION

EASY INSTALLATION AND MAINTENANCE

PROVIDES AVERAGE WEIGHT LOSS DATA

PHYSICAL SPECIMEN TO IDENTIFY CORROSION MECHANISMS

### **Coupon Holder Sizing**

Once the access fitting type, and pipe dimensions are known, the style of holder and desired location of the coupons can be selected. The below formulas can then be used to position the coupons in the correct position within the line.

Use the formulas below to calculate holder length. If calculated length is not an even 0.25" increment, select next shortest to nearest 0.25".

#### Top of the Line Monitoring:

 $\label{lem:coupon} \mbox{Coupon holder positions the effective length of coupon into pipe vessel.}$ 

(A + Pw + Wg) - 2.5"

#### Middle of the Line Monitoring:

Coupon holder positions ½ of the coupon on either side of pipe centerline.

(A + 1/2Pd + Wg) - (2.5" + 1/2EI)

#### **Bottom of the Line Monitoring:**

Coupon holder positions coupon approximately 1/4" off bottom of line.

(A + Pd + Wg) - (2.75" + Pw + EI)

#### Where:

A = Length of Access fitting body

Pw = Pipe wall (wall thickness of pipe)

Pd = Pipe diameter (outside diameter of pipe)

EI = Effective length of coupon (the portion of the coupon exposed to the environment, i.e. 3'' coupon = 1-5/8'', 6'' coupon = 4-3/4'')

Wg = Weld gap (per weld procedures, 1/16" is normal per ANSI B31.1 1973)



