

Western Instruments Inc.

Established 1965

26509 Township Road 543
Sturgeon County, Alberta
T8T 1M1 Canada

Phone: (780) 459-6720
Fax: (780) 459-7837
E-mail: info@westerninstruments.com

Web: www.westerninstruments.com

Corrosion Coupons

At Western Instruments, we are very aware of the use and application of Corrosion Coupons. Based in Western Canada, we have a long standing relationship with Caproco (www.caproco.com), an early pioneer in the technology. The original founders of both company's had a personal relationship, and Caproco's founder Mr. Bill Hewes subsequently became the President of NACE International.



Pocket Pit Gauge measuring Coupon.

The Strip Coupon illustrated here has been prepared and preserved (lacquered) after its removal and evaluation. Here, the technician is measuring a 0.025" (0.64mm) deep Pit. Traditionally Coupons are cleaned and weighed to measure loss of material, however Western Instruments Dial Pit Gauges permit the practical mechanical measurement of pit depth on coupons. Western's development of the Pit Gauge Product Series has lead other Coupon manufacturers to promoted the use of our Pit Depth Gauges, namely Metal Samples, & Rohrbach Cosasco to mention the larger Coupon manufacturing companies.

Coupons come in many shapes and sizes for Pipelines, such as a standard rectangular coupon (3" x 3/4" x 1/8"), a Flush Disk Coupon (1 1/4" x 1/8"), or a Corrosion Ring Coupon used within a 'Well Bore'. Rectangular Coupons typically remain un-corroded (or limited corrosion) under their mounting fixture, which typically has a Plastic insulator (Teflon/Delrin) thus a corrosion technician uses this area as a reference area for "zeroing" his Pit Depth Gauge. In this case, one of our Reaching type Pit Gauges are often used, as it allows the longer contact blade to reference the un-corroded material, and "reach" the Dial Indicator into the corroded areas of the coupon.

In some cases new coupons are used and checked regularly, to establish initial corrosion rates. In these cases small/shallow isolated pitting occurs, and here technicians use our Pocket Pit Gauge (N88-4). The Pocket Pit Gauge has a reversible blade, so it is easy to see the small pit and ensure the contact point actually enters the pit. In these cases, the technician may want to use our #3 Contact Point (N88-N), as the pits have a very small diameter. The Pocket Pit Gauge is also used for irregular surfaces (complex curvatures) as one would see on Flush Disk or Ring type coupons.