Corrosion Bypass Racks

Accurate Corrosion Monitoring Under Representative Process Conditions

A corrosion bypass rack provides a safe and reliable method for monitoring corrosion without interfering with the main process line. By diverting a controlled portion of the process fluid through a dedicated bypass loop, monitoring devices are exposed to actual operating conditions while remaining easily accessible for inspection, maintenance, and replacement.

1. Integrated Multi-Technology Monitoring

Designed for continuous monitoring, bypass racks allow operators to combine long-term weight-loss analytical data with real-time electronic monitoring in a single modular assembly.

Technology	Measurement Principle	Application & Operational Value
Corrosion Coupons	Weight Loss Baseline	Provides fundamental long-term, quantitative weight-loss data and visual surface evaluation of uniform and localized pitting attack.
ER Probes	Electrical Resistance	Delivers continuous corrosion rate measurements in conductive or non-conductive environments (gases, oil, water).
LPR Probes	Linear Polarization	Provides instantaneous real-time corrosion rate data in aqueous, electrolyte-rich solutions for immediate chemical dosing adjustments.

> **Comprehensive Insight:** Combining long-term coupons with instant electronic probes gives asset managers a complete, multi-layered overview of process corrosivity and upset conditions.

2. Flexible Installation & System Options

Engineered for straightforward integration into industrial piping systems, bypass racks allow safe isolation and servicing without requiring process shutdowns.

- **Simple Piping Integration:** Seamlessly connects to existing piping networks using standard industrial process connections (flanged, NPT, or socket weld).
- **Multiple Station Configurations:** Available with 2, 3, or 4 monitoring stations, allowing operators to configure the system precisely according to their monitoring requirements (e.g., dual coupons plus ER and LPR probes).
- **Quick-Connect Systems:** Optional quick-connect versions enable corrosion coupons and probes to be installed or exchanged within minutes—without requiring specialized tools or long maintenance windows.

3. Tailored Solutions from Imotron

As an official distributor of Metal Samples, Imotron supplies complete corrosion bypass rack assemblies tailored to your specific process parameters, pressure classes, materials, and space constraints. Whether for industrial cooling water, process chemicals, or oil & gas systems, our bypass racks ensure high-accuracy corrosion data collection while maintaining operational safety.

Optimize Your Corrosion Monitoring Strategy

Contact Imotron to discuss your process conditions and request a custom-engineered corrosion bypass rack configuration.