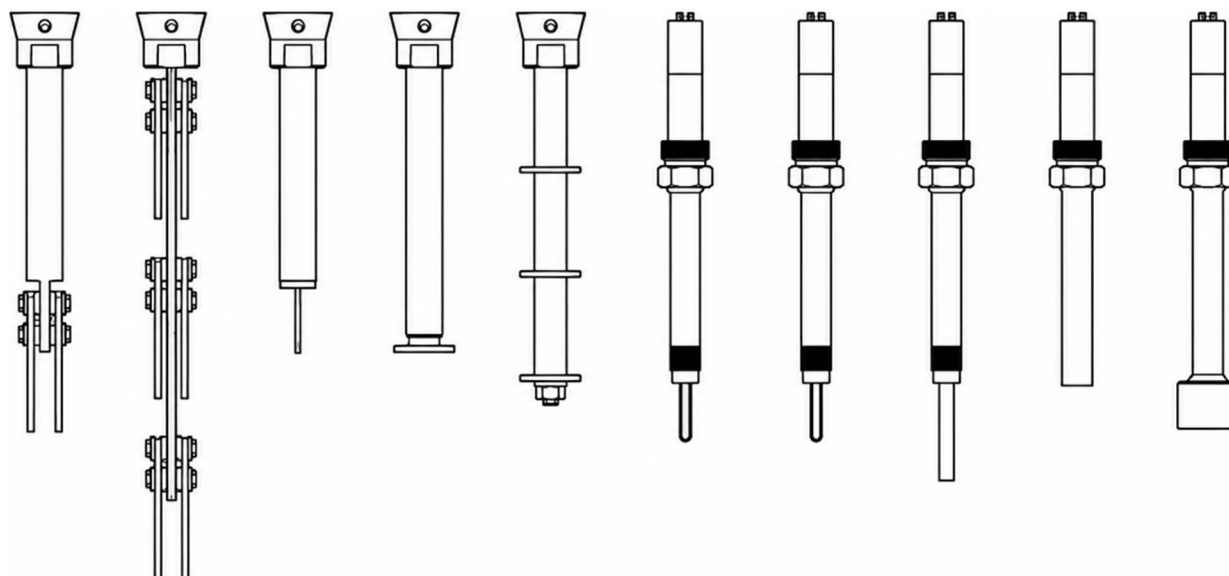


PIPELINE INTERNAL CORROSION MONITORING & CHEMICAL INJECTION SOLUTIONS

Reliable · Safe · Intelligent
Since 2007

**Corrosion Monitoring · Chemical Injection & Sampling System
Retriever System · On-line Monitoring · Data Management**



COMPANY OVERVIEW

ABOUT GLOAZRUE

Since 2007, GLOAZURE has specialized in Pipeline Internal Corrosion Monitoring Systems, Chemical Injection Systems and Sampling Systems for Oil & Gas, Petrochemical, Power and Process industries.



Since
2007



High Quality
& Reliability



Global
Supply



Customer
Focused



Continuous
Innovation



OUR SOLUTIONS

- ✓ Corrosion Monitoring Devices (Coupon, ER, LPR, etc.)
- ✓ High Pressure Access Fittings & Retriever Systems
- ✓ Chemical Injection & Sampling Systems
- ✓ Data Acquisition & Monitoring Instruments
- ✓ Integrated Corrosion Control System (ICCS)



SAFE OPERATION
Under pressure



HIGH RELIABILITY
Robust design



EASY MAINTENANCE
User friendly



FLEXIBLE SOLUTION
Customizable



GLOBAL SUPPORT
Fast & professional

HIGH PRESSURE ACCESS FITTING & RETRIEVER SYSTEM

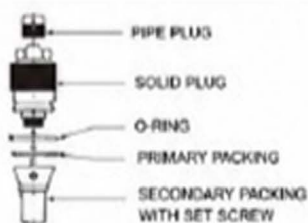
Safe Access · Reliable Sealing · Continuous Monitoring.



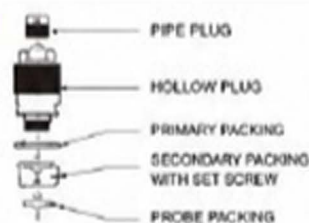
NON TEE Type



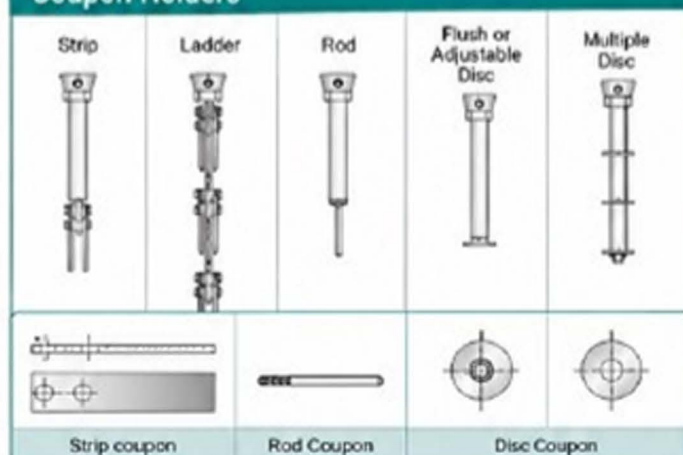
Solid Plug



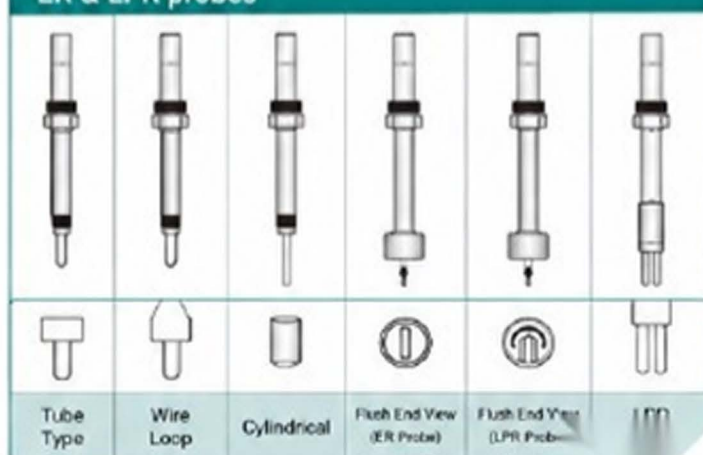
Hollow Plug



Coupon Holders



ER & LPR probes



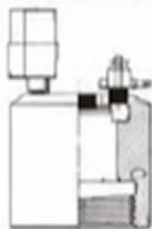
HIGH PRESSURE ACCESS FITTING & RETRIEVER SYSTEM

Safe Access · Reliable Sealing · Continuous Monitoring.



2" HIGH PRESSURE ACCESS FITTING SYSTEM - HP40 Series

Heavy Duty Protective
Cover with Bleed Valve



Heavy Duty Protective
Cover with Hole



Heavy Duty Protective
Cover without Hole



TEE Type



Flareweld



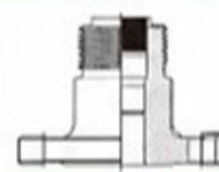
Buttweldolet



Socketweld

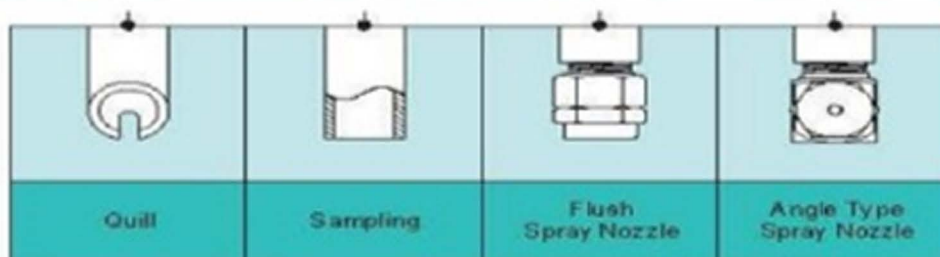
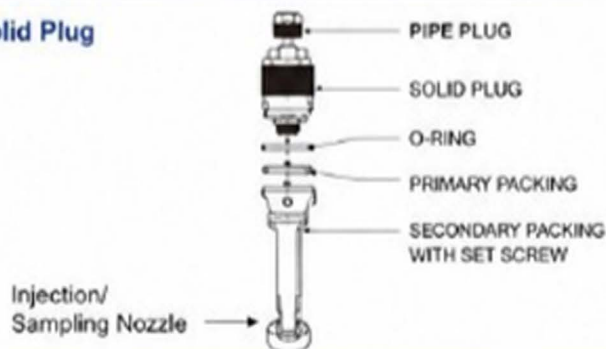


NPT



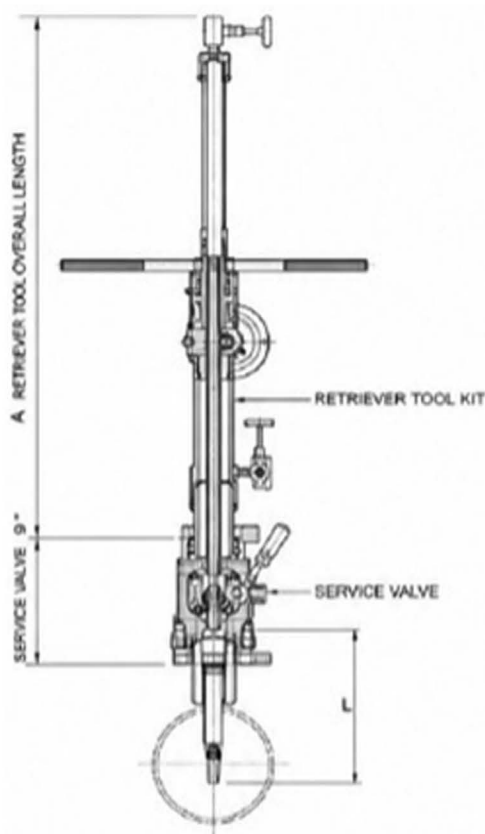
Flange

Solid Plug



Retriever Tool Kit Set for High Pressure Access Fitting Assembly

HP40 Series



These consist of

- one Retriever Tool Set and
- one Service Valve (Full Bore Type)

GLOAZURE offers a retriever tool with a service valve that can be used to insert probe/coupon/sensor or retrieve them from a process whilst operating under full pressure.

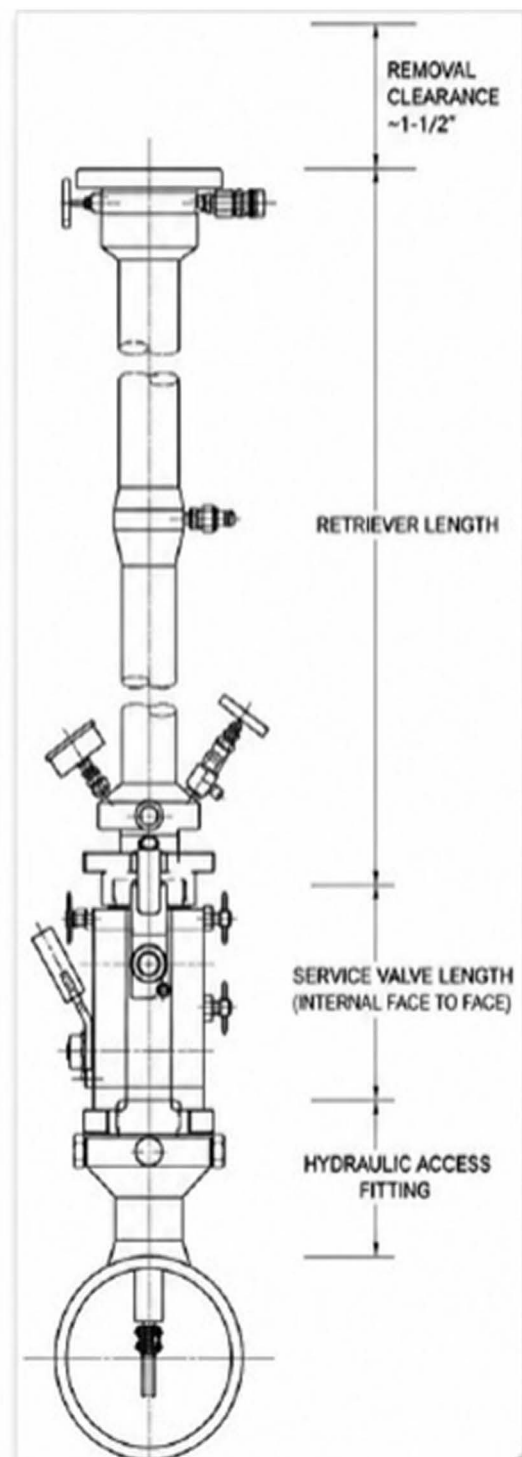
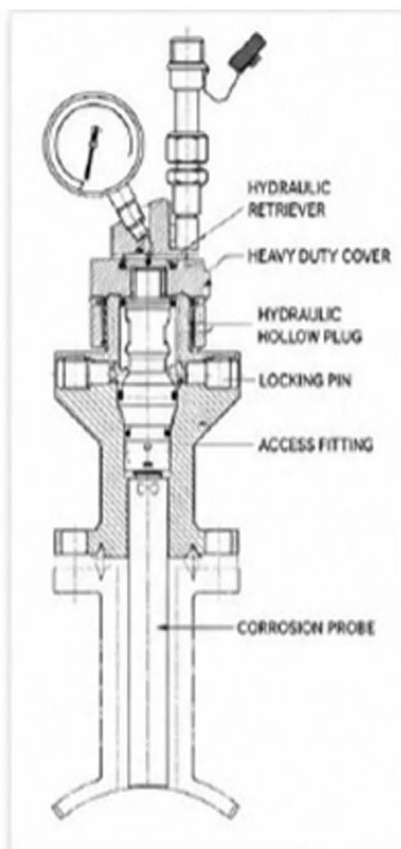
It can be used to retrieve coupons and probes from the unit's two inch access fitting system or from all standard two inch access fitting systems, when used with an inexpensive adaptor.

The safety and ease of operation of the retriever tool with the service valve system are important benefits. A retriever stroke can be selected by the customer according to piping conditions.

Letter	DESCRIPTION	MATERIAL				
		4"	12"	16"	24"	36"
A	RETRIEVER TOOL OVERALL LENGTH	42"	58"	67"	82"	97"
L	INSERT LENGTH	11"	20"	23"	31"	

2 Inch Hydraulic Access Fitting

HP70 Series



Service Valve	Single	Double
Part No.	CM220010	CM220020

Low Pressure Retractable Access Fitting System

LP70 Series

Gloazure Low Pressure Retractable system is applicable to maximum operating pressure 1500 psi



STRIP COUPON



LPR PROBE



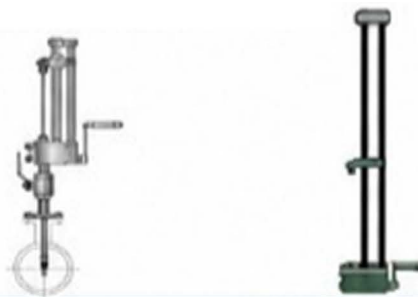
WIRE LOOP PROBE



INJECTION QUILL

This main parts of the Access Fiting Assembly are;

- Stuffing Box
- NPT Nipple
- Full Port Ball or Gate Vawlve (Option)
- Coupon & Coupon Holder / Probe & Probe Holder / Injection Tube or Sampling Tube etc.



PART NUMBER	HOLDER LENGTH	
	(INCHES)	MM
CM-1010	24" – 24"	608 – 610
CM-1011	24" – 28"	610 – 711
CM-1012	28" – 36"	711 – 913
CM-1013	36" – 36"	913 – 914
CM-1014	36" – 40"	914 – 1016
CM-1015	40" – 44"	1016 – 1118
CM-1016	44" – 48"	1118 – 1219
CM-1017	48" – 52"	1219 – 1321

Data Acquisition & Instruments

GLOAZURE provides reliable and accurate data acquisition solutions for corrosion monitoring in demanding environments.

PORTABLE & FIXED MONITORING UNITS

HHU

(HAND HELD DATA LOGGER)



- Portable & user friendly
- Field data collection & storage
- Large memory capacity
- Robust design for harsh conditions
- Rechargeable battery

DCU

(DATA COLLECTION UNIT /
REMOTE DATA LOGGER)



- Remote data logging & storage
- Multi-channel data acquisition
- Continuous & scheduled logging
- Secure data storage
- Weatherproof enclosure (IP66)

FIELD TRANSMITTER

(4-20 mA / RS-485 / HART)



- High accuracy measurement
- 4-20 mA, RS-485 & HART options
- Suitable for various probes & sensors
- Corrosion resistant construction
- Reliable performance in the field

KEY FEATURES

- ✓ Supports corrosion monitoring probes: Coupon, ER, LPR, Hydrogen Probe, Sand / Erosion Probe, etc.
- ✓ Compatible with GLOAZURE monitoring systems
- ✓ High data integrity with timestamp
- ✓ User friendly interface & easy configuration
- ✓ Supports 4-20 mA, RS-485 & HART communication
- ✓ Suitable for onshore & offshore applications
- ✓ Designed for harsh & hazardous environments
- ✓ Reliable, accurate & built for long-term performance



MONITORING

Continuous monitoring of corrosion parameters from field instruments.



DATA COLLECTION

Collect & store data from multiple monitoring points securely.



DATA DOWNLOAD

Easy data download via HHU or remote connection.



REMOTE DATA LOGGING

DCU enables remote logging with scheduled data transmission.



COMMUNICATION OPTIONS

Flexible communication via 4-20 mA, RS-485 and HART protocols.

Non-Intrusive Corrosion Monitoring System

DATA LOGGER SPECIFICATIONS

- model no. : CMS-4100U, DCU (Data Collection Unit)
- corrosion rate : resolution to 0.001 mpy
- min. measuring thickness : 0.040" (1.02mm)
- protocol/communication : Modbus / RS-485, 2-wire, max. 1000' (305m)
- battery type : Li D-cell, 3.6 VDC, qty. 2
- battery life : 2 years (typical, based on 1 reading/day)
- storage capacity : 3000 readings
- UT system channels : Max. 8 ultrasonic
- digitizer frequency : 40 Msps

ENCLOSURE

- material / rating : cast aluminum or stainless steel IP66
- temperature range : -4°F to +140°F (-20°C to +60°C)
- dimensions : 5.44 × 5.63 × 5.13" (138×143×130mm)
- weight : 5.2 lb (2.36 kg)

TRANSDUCER SPECIFICATIONS

- type : dual element
- application : severe pitting
- frequency : 5 MHz
- active area (dia.) : 0.375" (10mm)
- overall dia. x h : 0.75 × 0.75" (19 × 19 mm)
- no. of transducer : 1-8
- resolution : 0.001" (0.025mm)
- thickness range : 0.040-6.0" (1.0-150.0mm)
- temperature range : -22 to +275°F (-30 to +132°C)
- attachment : magnet/adhesive
- transducer cable type : coaxial, 1/4" dia.
- maximum length to transducer : standard 10' (3.0m), option max. 50' (15.2m)

Non-Intrusive Corrosion Monitoring System

PORTABLE DATA LOGGER

- Tablet type: Ex-proof certified type
- All international explosion proof certificate are available
- 11.4 V
- weight: 1.52 kg

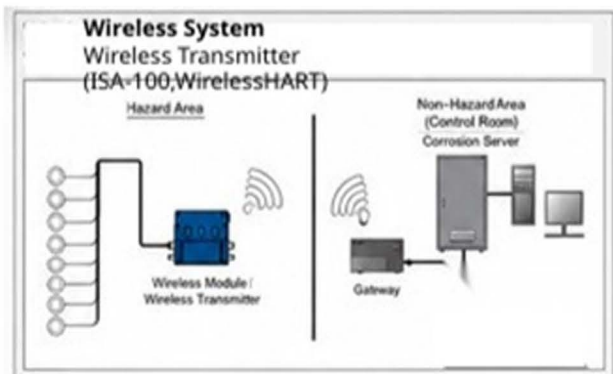
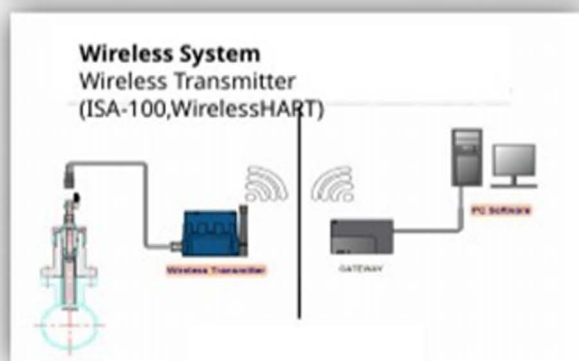
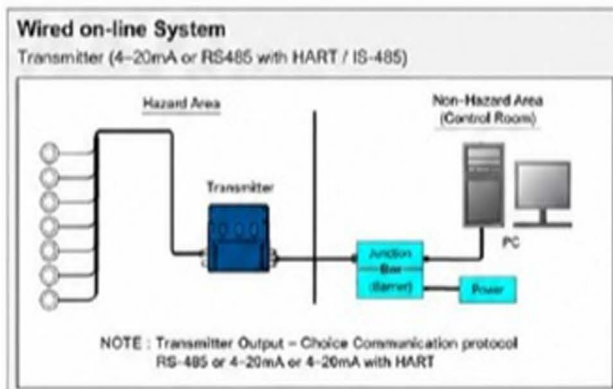
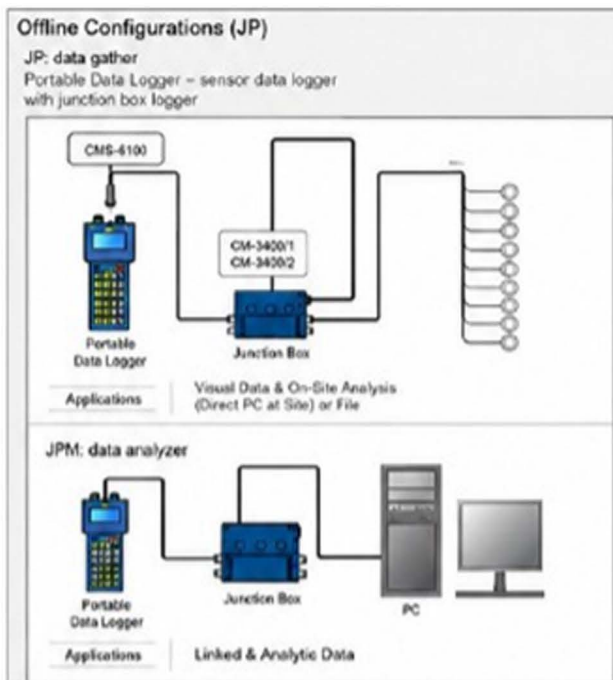
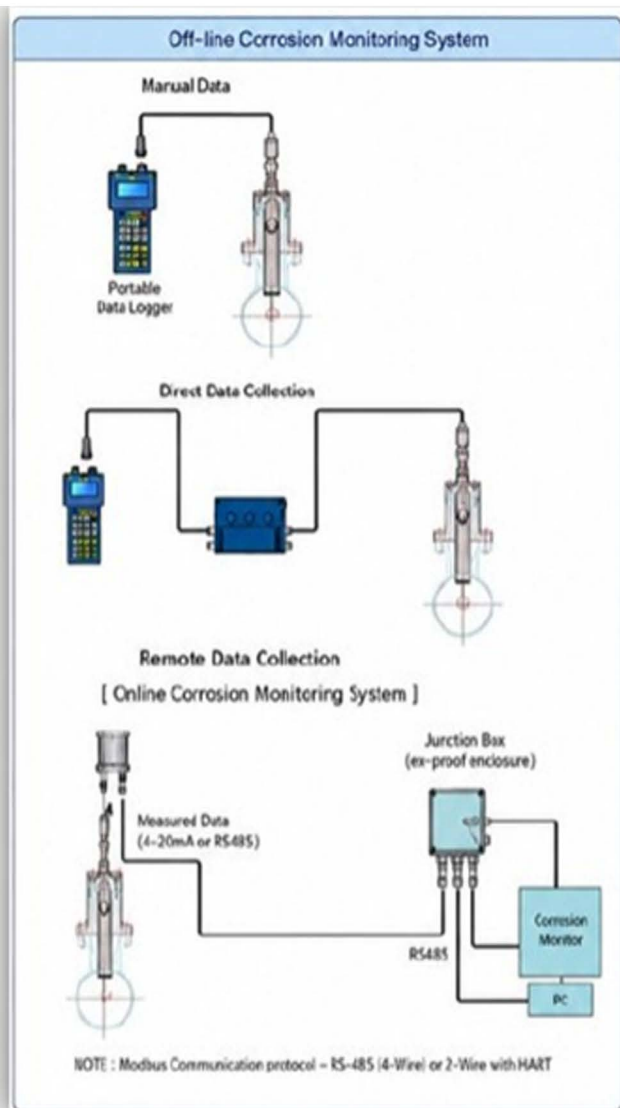
Designated Hand Held Data Logger (HHU) – CMS-4000U is available

CONNECTIONS

network power, data via RS-485-to-USB adapter



Intrusive Corrosion Monitoring System Configurations



ICCS – INTEGRATED CORROSION CONTROL SYSTEM

Centralized Corrosion Monitoring, Smarter Decisions. Maximum Integrity.

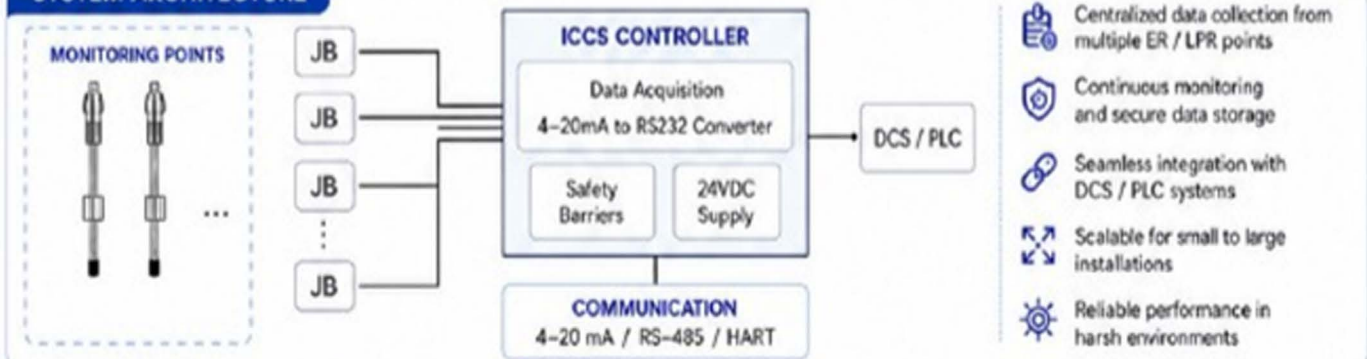
ICCS is a centralized corrosion monitoring platform designed for ER (Electrical Resistance), LPR (Linear Polarization Resistance) Intrusive sensors and Non-Intrusive Sensors and also all off-Line data. It integrates data from multiple monitoring points and provides real-time visibility, advanced analytics, and intelligent alerts to ensure the integrity of your assets and operations.



MAIN FUNCTIONS

- | | | |
|---|--|--|
|
1) System Overview
Centralized view of all monitoring points |
5) Historical Data
Secure storage and easy retrieval |
9) Event History
Complete audit trail of events |
|
2) Real-Time Monitoring
Live data acquisition and visualization |
6) Manual Inspection Data Input
Record CFI and visual inspection data |
10) Notifications
Email / SMS / System alerts |
|
3) Corrosion Trend Analysis
Identify trends and changes over time |
7) Data Analysis & Forecasting
Predict corrosion behavior and risk |
11) User & System Administration
Role-based access and system settings |
|
4) Alarm Management
Configurable alarms and smart notifications |
8) Report Generation
Custom reports and scheduled reports | |

SYSTEM ARCHITECTURE



ASSOCIATED HARDWARE



HHU
Hand Held Data Logger



Transmitter
ER / LPR



Ultrasonic Sensor



Wireless Transmitter

OUR TRUSTED PARTNERS & CONTACT

GLOAZURE is committed to delivering reliable and innovative solutions with integrity and excellence. We value the trust of our partners worldwide.

OUR TRUSTED PARTNERS & MAJOR CLIENTS (EPC / Operators)



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Integrity in Every Line