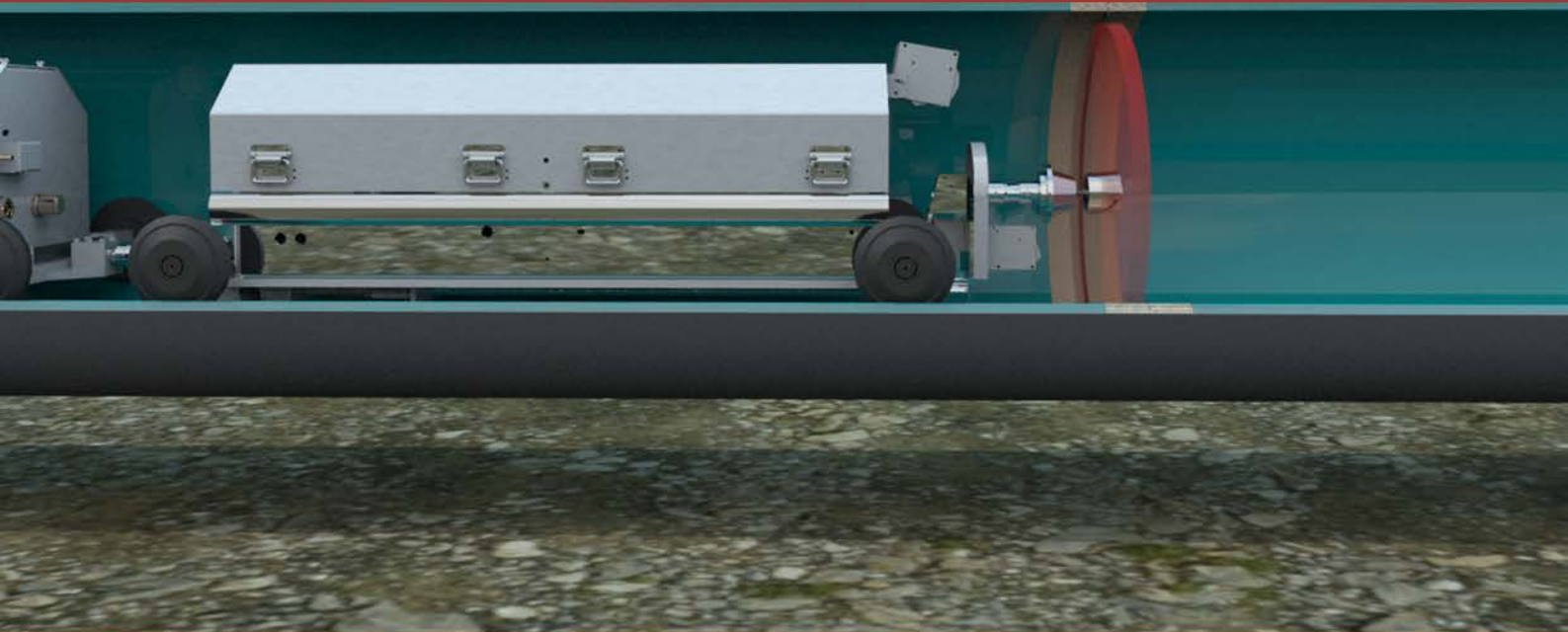




PIPELINE INTERNAL FIELD JOINT ROBOT COATING



Tyhoo Industries

One-stop Solution Provider

ABOUT TYHOO

Tyhoo Industries is one of the worldwide leading professional providers of petroleum services and products specialized in one-stop solution for anti-corrosion, services for oil and gas exploration production, gathering and transferring, inspection and many other services for both onshore and offshore petroleum industry, chemical and petrochemical industry and other energy fields.

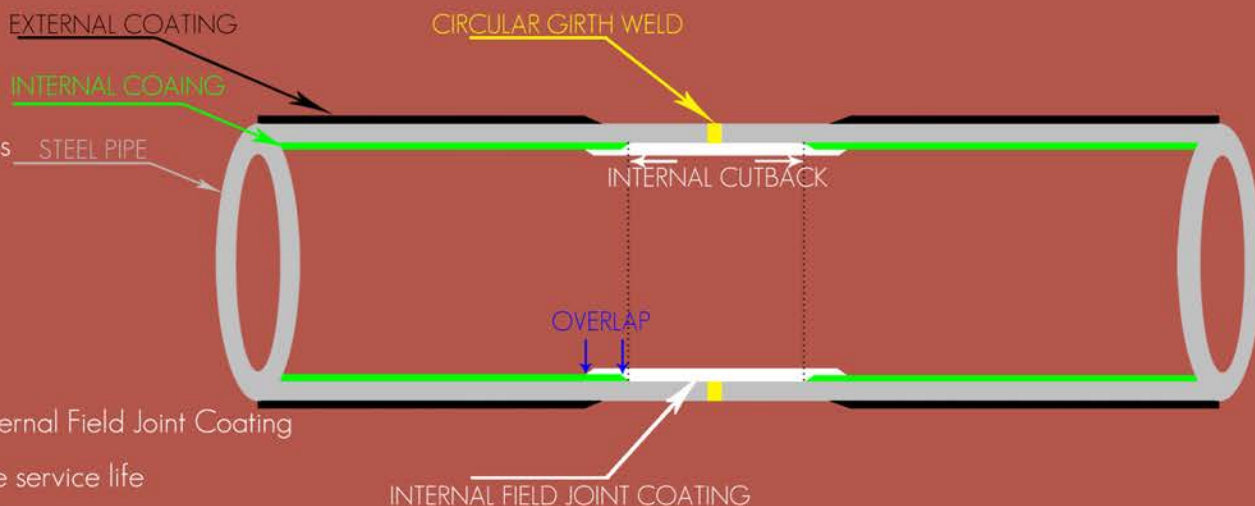
↓ SCOPE OF WORK IN PIPELINE

- Piping and Fittings
- Pipeline External Field Joint Coating Service
- Pipeline Internal Field Joint Coating Robot Service
- Pipeline Field Joint Insert Sleeve
- Shop-applied Pipe Primed Internal FBE Coating
- Shop-applied/Mobile-plant Pipe Concrete Weight Coating(CWC)
- Shop-applied/Mobile-plant Pipe External Coating

↓ INTERNAL FIELD JOINT COATING

The Internal Field Joint Coating Robot can be used in the following types of pipelines:

- Oil Pipelines
- Gas Pipelines
- Water Pipelines
- Offshore Pipelines



Benefits of Using Internal Field Joint Coating

- Increasing pipeline service life
- Increasing flow efficiency
- Reducing internal corrosion
- Providing coherent pipeline internal protection
- Reducing pipe wall thickness requirements
- Diminishing or eliminating pipeline leaks

Tyhoo's internal field joint coating (IFJC) robot has been successfully used to provide internal field joint coating protection for new constructed pipelines

with diameter from 8inch to 56inch with satisfying quality and convenient operation. Applying corrosion resistance coatings helps to provide coherent corrosion protection for all types of pipelines including natural gas, crude oil, potable water, desalination water and salt water, etc.

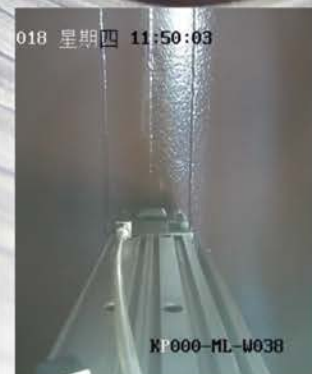
The internal field joint coating robots are wirelessly controlled with hand-held video monitoring and operation system, through which operator issues instructions to control moving, location, blasting cleaning, coating application, inspection and emergency rescue when necessary. All application and inspection actions and data will be recorded by the recording system.

After years of application, Tyhoo has established a complete project management system and QHSE management system with certified ISO9001, ISO14001 and ISO18001 and implemented them into IFJC project operation.

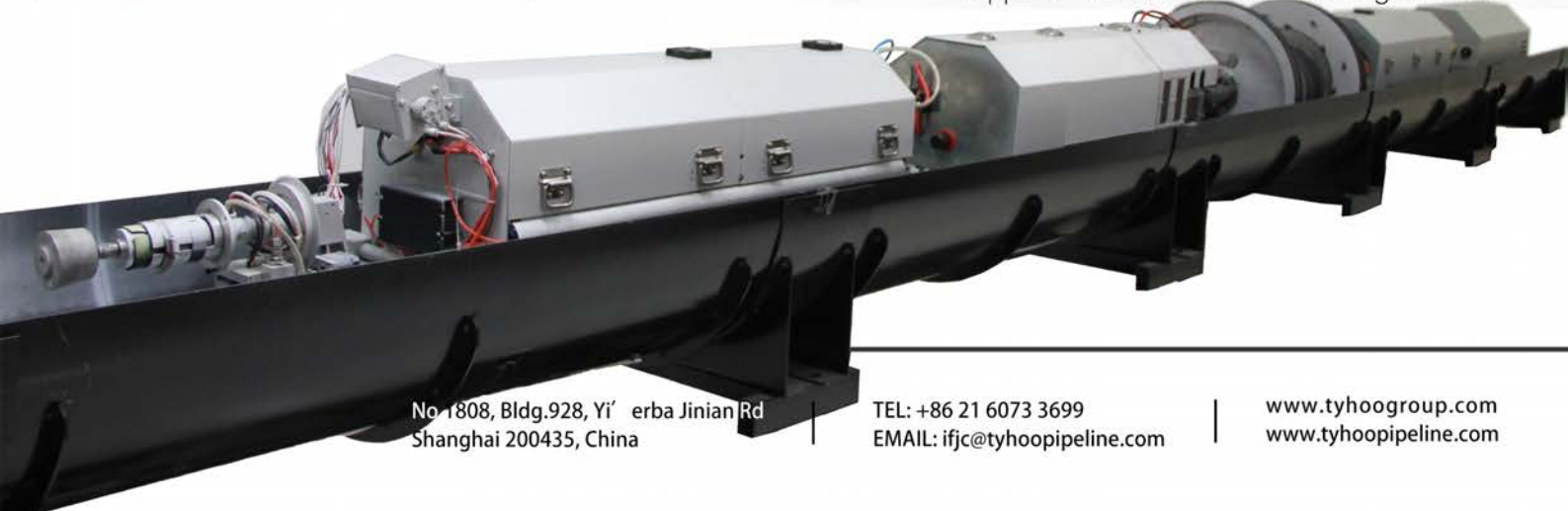


Robot Design Working Capacity

Type	Applicable Pipeline Size	Design Working Capacity (Joints/10h-day-Onshore)
#1	219.1(8") ≤ Size ≤ 273.1(10")	20-25
#2	323.9 (12") ≤ Size ≤ 457(18")	25-30
#3	508 (20") ≤ Size ≤ 660(26")	25-35
#4	711 (28") ≤ Size ≤ 914(36")	20-30
#5	1016 (40") < Size ≤ 1067(42")	20-25
#6	1219(48")	20-25



Applied Internal Field Joint Coating on Weld

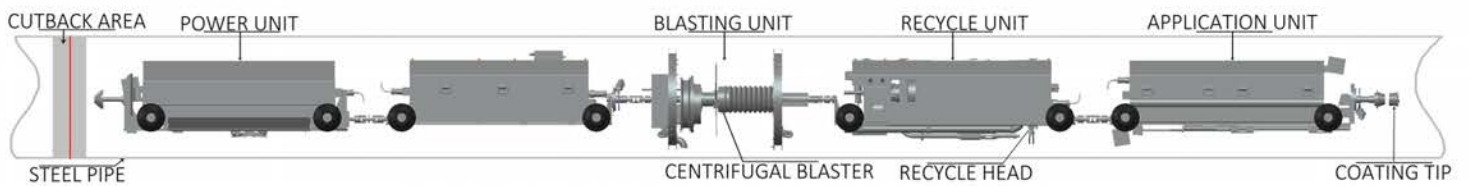




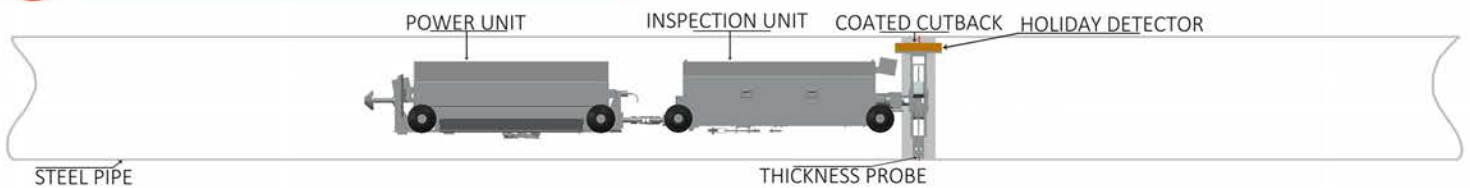
Tyhoo's internal field joint coating robot is committed to provide coherent internal coating protection at girth weld section for pipe size from 219.1mm(8inch) to 1422mm(56inch).

INTERNAL FIELD JOINT COATING ROBOT

COATING APPLICATION ROBOT



COATING INSPECTION ROBOT



←← Robot Moving Direction



Researching
Engineering
Application
Service





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