W WELD OVERLAY CLAD PIPE

- Metallurgical weld overlay clad pipe is composed of the cladding that is bonded by weld overlay to the backing material.

Product information

OD Range	88.9-1220mm
Max. Length	12.5m
Backing Pipe Grade	GR.B, X42, X46, X52, X56, X60, X65, X70, X80, etc.
Welding Consumable	ER309LMo, ER316L, ERNiCrMo-3, ERNiFeCr-1, etc.



Key Technology



1 Automatic WOL equipment, AVC tracking, HDV monitoring, Automatic parameters recording



2 Double electrode by double torches, low heat input with low dilution＜5%



3 Surface min. roughness can be reached 3.2 μm as customers required

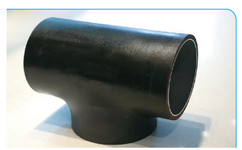


4 AUT for transverse and longitudinal defects and lamination for both carbon steel and CRA layer

C CLAD FITTINGS AND FLANGES

Clad fittings:
OD: DN150-DN900

Clad flanges:
OD: DN100-DN1000



TEE



ELBOW

H HOT ROLL BONDED CLAD PIPE

- Metallurgical clad pipes composed of hot roll or explosive bonded plates are manufactured through forming, welding, heat treatment and other processes.

Product information

OD Range	323.9-1626mm
Max. Length	12.5m
Max. WT	80mm (including CRA layer)
Annual Capacity	10000 tons

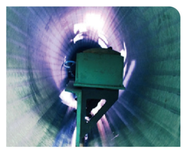


Key Technology

1 **J groove** by continuous milling, higher accuracy of the plate width
2 Better effect by **JCO** forming process, OoR tolerance of ID within ±1mm for good foundation on girth welding
3 **Laser tracking system** for pre-welding to avoid offset
4 High-precision **heat treatment** furnace to ensure uniform temperature for pipe body
5 Full range of **NDT technologies** to prevent blind area



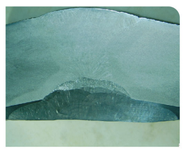
JCO FORMING



HOT WIRE TIG



NDT



HRB JOINT SECTION

Jiuli has the capability to provide external coating such as FBE, 3LPE and 3LPP etc. Up to 2022, the company has supplied more than 500 km coated pipe for IOC projects.



Jiuli



HIGH-PERFORMANCE
MATERIAL FOR GLOBAL INDUSTRY

CLAD SOLUTION DIVISION
ZHEJIANG JIULI HI-TECH METALS CO., LTD.



C COMPANY PROFILE

Zhejiang Jiuli Hi-Tech Metals Co., Ltd, a public company listed in Shenzhen stock exchange market (Stock code: 002318), is founded in 1987 and located in Huzhou - 150 km from Shanghai.

Jiuli has developed bi-metallic pipe production lines for mechanically lined pipe and metallurgical clad pipe. Bi-metallic fittings and flanges can also be provided.

With excellent product quality and first-class service, Jiuli has been recognized globally. As one of the main CRA lined and clad pipe suppliers of CNPC, Sinopec, CNOOC, Zhejiang Petrochemical, Jiuli also has close cooperation with international well-known companies such as Shell, ExxonMobil, Petrobras, TechnipFMC, McDermott, etc.

HSE is always our top priority. As an ISO14001 and ISO45001 certified company, Jiuli is keeping growing with its HSE commitment to environmental protection, occupational safety and health in workplace.

R&D and Innovation is the key to improve company competitiveness. Jiuli has established the National Accredited Enterprise Technology Center and CNAS qualified laboratory, equipped with up to date equipment for full scope of inspection & testing, which ensure the delivered products with high quality.



M MECHANICALLY LINED PIPE

- Mechanically lined pipe is manufactured by cold expansion of the internal corrosion resistant alloy liner using hydrostatic internal pressure to achieve mechanical fit connection between carbon steel and CRA layer, with a weld overlay at each pipe end.

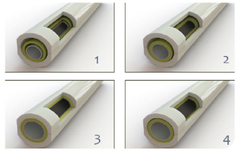
Product information

Backing Pipe Grade: GR.B, X42, X46, X52, X56, X60, X65, X70, X80, etc.
CRA Liner Grade: TP304L, TP316L, TP317L, UNS N08904, UNS N08825, UNS N06625, UNS S31254, etc.
OD Range (Other sizes can be produced by agreement.): 76-610mm
WT Range: 7-35mm
Max. Length: 12.5m
Annual Capacity: 15,000~18,000 tons



Key Technology

1 Full-length hydro-expansion method with external die controlled (max. pressure 160 Mpa) guarantees better roundness, straightness and gripping force.



HYDRO-FORMING DIAGRAM


HYDRAULIC PRESS

2 Hot-wire GTAW with double electrode, AVC control system with low heat input and low dilution to achieve high speed, high efficiency and high quality


OVERLAY WELDING

3 Pipe end ID tolerance within ±0.25mm can be achieved by fully automatic end machining equipment


LASER ID MEASUREMENT

4 Jiuli has continuous lines for CRA liner with applicable OD up to 630mm


LARGE DIAMETER CONTINUOUS WELDING LINE

JIULI MLP qualified by major EPC

- Full-scale bending simulation, full- scale fatigue testing, weldability testing, FEA etc. at international third-party lab.
- Jiuli MLP is applicable for various lay methods.

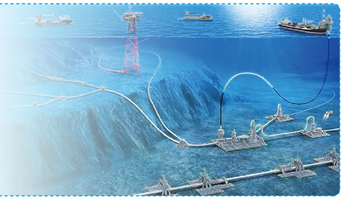

FULL- SCALE BEND TEST


WELDABILITY TESTING

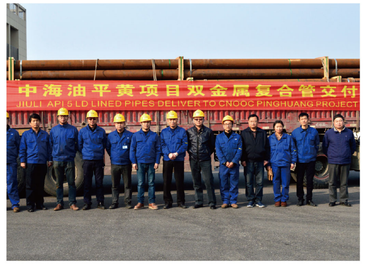

INSTALLATION

P PROJECT REFERENCE

Project Name	PBHY Oil & Gas Project (Subsea)
Client	CNOOC/CHINA
Product Category	MLP
Size	219.1mm×(12.7+3)mm
Grade	API 5L X65QO PSL2 + UNS S31603




MLP INSTALLATION



MLP DELIVERY