PETROL STEEL



专业生产大口径直缝双面埋弧焊钢管

Professional On LSAW STEEL PIPE Manufacture

PETROL STEEL

质量控制

我公司建立了完整的 ISO9001:2008/API Q1/ 压力管道元件制作等联合质量体系，实行制度化管理、程序化运作。实现了“9 项 ”100%” 质量控制率，即：全板 100% 的超声波探伤检测；焊接后 100% 的焊缝连续超声波探伤；100% 的全焊缝 X 射线工业电视检查；100% 的内焊缝工业电视检查；100% 的水压试验检查；水压、扩径后 100% 的焊缝超声波探伤；100% 的 X 射线工业电视检查及管端拍片或图象记录；100% 钢管外观检查和 100% 钢板外观检查，且均由质检部门进行专检。确保我们的产品达到标准要求并满足用户的需要。

5L-0866

THE AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING®

American Welding Society

Quality control

The company has established a complete joint quality control system of ISO9001:2008/API Q1/pressure pipeline compents production, implements institutionalized management,programmed operation,and achieved nine 100% qualified controlling rate, which are:100% ultrasonic flaw detection for the material plate;100% automatic on-line UT test after welding; 100% whole-length seam X-ray test; 100% inside weld line industrial TV test; 100% hydrostatic test; 100% automatic on-line seam UT test after hydrostatic test, expanding; 100% X-ray test and make X-ray film or picture record on pipe ends; 100% pipe appearance and plate appearance inspection, and all above tests are proceeded by quality control department.The purpose is to ensure our products to meet standard requirement and satisfy the users.



力学试验室 Mechanics Lab

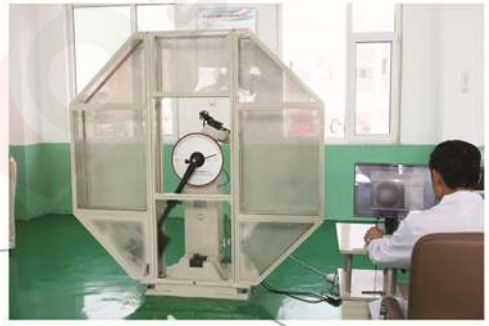
PETROL STEEL



光谱直读分析 Chemical analysis Spectrometer



万能试验机 Universal Testing Machine



低温冲击试验 Low CVN Impact Test Temperature



50000J落锤冲击试验 50000J DWT TEST



UT探伤 100% UT test

RT探伤 100% X-ray test





金相显微镜 Metallurgical Microscope

水压机 Hydraulic test machine





PETROL STEEL

精细

Meticulousness

精細是關鍵

精细管理是整个企业运行的核心工程。企业要做强，需要有效运用文化精华、技术精华、智慧精华等来指导、促进企业的发展，需要把握好产品质量精品的特性、处理好质量精品与零缺陷之间的关系，建立确保质量精品形成的体系，为企业形成核心竞争力和创建品牌奠定基础。

Detailedness is the key

Detailed management is the core project to run an enterprise. Any enterprises seeking for development needs to effectively use cultural essence, technical essence and wisdom essence to guide its development. It also needs to grasp the characteristics of top-quality products. handle the relation between top-quality products and zero-defect. Establish a system to ensure top-quality products to form is a solid foundation for creating its core competitive power and brand.



PETROL STEEL

核心产品线

铣边机、预弯机、成型机、预焊机、扩径机等主机均采用国际一流的设计制造技术。是国内专业生产大口径埋弧焊管配套设备厂家供应，全线实现 PID 自动化控制和在线无损检测自动化控制，在钢管设备制造领域内享有盛誉。

Product Line

Plate Edge Milling Machine , Plate Edge Crimping Machine, Forming Machine, Track Welding Machine,and the Mechanical Expansion Machine are produced by the professional manufacturer of large diameter submerged arc welding equipment. They are all adopt the first-class design and manufacture technology internationally with the PID control automation and online nondestructive testing automation control. It is prestigious in the field of Steel pipe equipment manufacturing



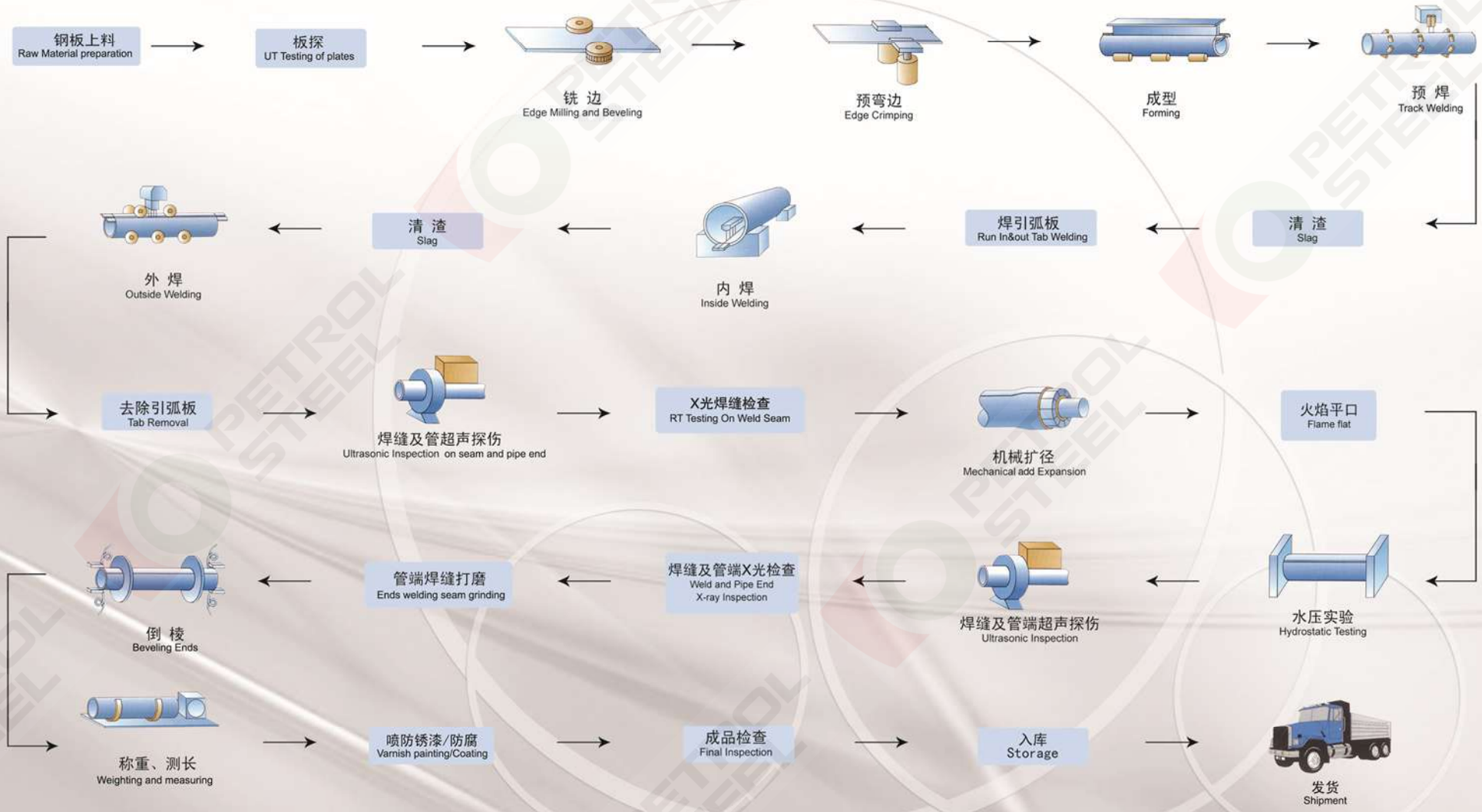
车间一览 Workshop

PETROL STEEL



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工艺流程 Process Flow Chart



PETROL STEEL



铣边 Plate Edge Beveling



预 弯 Plate Edge Crimping



成 型 Forming



预 焊 Track Welding



内 焊 Inside Welding



外 焊 Outside Welding



在线超声 Online VT



在线工业电视 Online TV-RT



全长冷扩径 Whole Length Cold Expansion



火焰平口 Fire Frame Beveling Ends



在线水压 Online Hydrostatic Test



厚度检验 Thickness Checking



在线工业电视 Online TV-RT



机械倒棱 Ends Beveling



防腐 Coating



终检 Final Inspection



入库 Storage



发运 Delivery



PETROL STEEL

精准 Precision

精準是核心

与精准的定位和沟通相适应，只有针对不同的消费者、不同的消费需求，设计、制造、提供个性化的产品和服务，才能精准地满足市场需求。

Precision is the core

Based on different customers and their different demands, we will design, manufacture and offer personalized products and service adaptable to the precise market positioning and communication, in order to meet the market demands precisely.



PETROL STEEL

常温和低温用电熔焊管 ASTM A671/A671M－10 EFW STEEL PIPE

Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures

钢管外径 Pipe OD		壁厚范围 Wall Thickness Range(mm) 钢级 Steel Grade								等级 Class
		Min	Max							
MM	In.		CA55	CB60	CB65	CB70	CC60	CC65	CC70	
457	18	7.92	22.23	22.23	22.23	22.23	22.23	22.23	22.23	10,11 12,13 20,21 22,23 30,31 32,33 S2 S11
508	20	7.92	25.40	25.40	25.40	25.40	25.40	25.40	25.40	
559	22	7.92	25.40	25.40	25.40	25.40	25.40	25.40	25.40	
610	24	7.92	30.96	30.96	30.96	30.96	30.96	30.96	30.96	
711	28	7.92	30.96	30.96	30.96	30.96	30.96	30.96	30.96	
762	30	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
813	32	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
914	36	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
1016	40	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1067	42	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1118	44	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1219	48	9.53	40.49	40.49	40.49	40.49	40.49	40.49	40.49	
1321	52	9.53	40.49	40.49	40.49	40.49	40.49	40.49	40.49	
1422	56	9.53	45.24	45.24	45.24	45.24	45.24	45.24	45.24	

中温高压用电熔焊管 ASTM A672/A672M－14 EFW STEEL PIPE

Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures

钢管外径 Pipe OD		壁厚范围 Wall Thickness Range(mm) 钢级 Steel Grade								等级 Class
		Min	Max							
MM	In.		CA55	CB60	CB65	CB70	CC60	CC65	CC70	
457	18	7.92	22.23	22.23	22.23	22.23	22.23	22.23	22.23	10,11 12,13 20,21 22,23 30,31 32,33 S2 S11
508	20	7.92	25.40	25.40	25.40	25.40	25.40	25.40	25.40	
559	22	7.92	25.40	25.40	25.40	25.40	25.40	25.40	25.40	
610	24	7.92	30.96	30.96	30.96	30.96	30.96	30.96	30.96	
711	28	7.92	30.96	30.96	30.96	30.96	30.96	30.96	30.96	
762	30	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
813	32	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
914	36	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
1016	40	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1067	42	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1118	44	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1219	48	9.53	40.49	40.49	40.49	40.49	40.49	40.49	40.49	
1321	52	9.53	40.49	40.49	40.49	40.49	40.49	40.49	40.49	
1422	56	9.53	45.24	45.24	45.24	45.24	45.24	45.24	45.24	

石油天然气用管道管 PSL1 Oil&Gas PSL1 Line Pipe API 5L/ISO3183 PSL1

Standard Specification for Line Pipe

钢管外径 Pipe OD		壁厚范围 Wall Thickness Range(mm) 钢级 Steel Grade							等级 Class
		Min	Max						
MM	In.		Gr.B/L245	X42/L290	X46/L320	X52/L360	X60/L415	X65/L450	X70/L485	
457	18	7.92	22.23	22.23	22.23	22.23	22.23	22.23	22.23	PSL1
508	20	7.92	25.40	25.40	25.40	25.40	25.40	25.40	25.40	
559	22	7.92	25.40	25.40	25.40	25.40	25.40	25.40	25.40	
610	24	7.92	30.96	30.96	30.96	30.96	30.96	30.96	30.96	
711	28	7.92	30.96	30.96	30.96	30.96	30.96	30.96	30.96	
762	30	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
813	32	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
914	36	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	
1016	40	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1067	42	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1118	44	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	
1219	48	9.53	40.49	40.49	40.49	40.49	40.49	40.49	40.49	
1321	52	9.53	40.49	40.49	40.49	40.49	40.49	40.49	40.49	
1422	56	9.53	45.24	45.24	45.24	45.24	45.24	45.24	45.24	

石油天然气用 PSL2 管道钢管 Oil&Gas PSL2 Line Pipe API 5L/ISO3183 PSL2

Standard Specification for Line Pipe

钢管外径 Pipe OD		壁厚范围 Wall Thickness Range(mm) 钢级 Steel Grade								等级 Class
		Min	Max							
MM	In.		Gr.B/L245	X42/L290	X46/L320	X52/L360	X60/L415	X65/L450	X70/L485	X80/L555	
457	18	7.92	22.23	22.23	22.23	22.23	22.23	22.23	22.23	17.48	PSL2 Deliver Condition: M/N
508	20	7.92	25.40	25.40	25.40	25.40	25.40	25.40	25.40	17.48	
559	22	7.92	25.40	25.40	25.40	25.40	25.40	25.40	25.40	17.48	
610	24	7.92	30.96	30.96	30.96	30.96	30.96	30.96	30.96	20.62	
711	28	7.92	30.96	30.96	30.96	30.96	30.96	30.96	30.96	20.62	
762	30	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	22.23	
813	32	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	22.23	
914	36	7.92	36.53	36.53	36.53	36.53	36.53	36.53	36.53	25.40	
1016	40	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	25.40	
1067	42	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	25.40	
1118	44	7.92	38.10	38.10	38.10	38.10	38.10	38.10	38.10	25.40	
1219	48	9.53	40.49	40.49	40.49	40.49	40.49	40.49	40.49	26.19	
1321	52	9.53	40.49	40.49	40.49	40.49	40.49	40.49	40.49	28.58	
1422	56	9.53	45.24	45.24	45.24	45.24	45.24	45.24	45.24	30.96	

PETROL STEEL

技术和研发

1.产品规格：

钢管直径：Φ457.2 ~Φ1422.4mm (16-56in)

钢管长度：3 ~ 12.5m

壁　厚：普碳、低碳合金材质生产范围为 8 ~ 50mm；

X70 以上钢级的管线钢，壁厚可达 6.4-26.4mm (0.252--1.04in)

产品标准：SO3183 、API Spec 5LPSL2 、API Spec 2B 、GB/T9711 等标准

产　量：年产大口径直缝埋弧焊钢管 15 万吨

2.用途：

主要用于陆地、海洋油气，煤浆、矿浆等介质的输送以及海洋平台、电站、化工和城市建筑结构用管。

3．主要特点：

☆经过整体机械扩径处理，钢管内部应力小且分布均匀，可有效防止应力腐蚀开裂，尺寸精度高，便于现场焊接施工。

☆采用预焊后精焊的工艺，焊接过程稳定，焊缝质量高。

☆焊缝易于实现生产过程中的无损探伤和使用过程中野外的无损探伤复查。

☆和非直缝的焊管相比，焊缝短，焊接缺陷的概率小。

☆产品规格范围大，既可生产小直径、大壁厚也可生产大直径、大壁厚的钢管。

Technology and development

1、Product specification:

O.D.: Φ457.2 ～Φ1422.4mm（16-56in）Length: 3 ～ 12.5m W.T.: 8 ～ 50mm(apply to simple carbon steel, Low carbon alloy steel); 6.4-26.4mm（0.252--1.04in）(apply to X70 and above.)

Product standards: ISO3183 、API Spec 5LPSL2 、API Spec 2B 、GB/T9711 etc.

Annual output: 150000 tons

2、Application：The pipes are mainly used as long distance transportation pipeline for oil, gas, liquid coal etc. on land and offshore. And also can be applied as construction pipes on offshore platform, power station, petrochemistry and city construction etc.

3、characteristics：

☆ The pipe internal stress is very small and uniformly distributed after the full- length expansion. The corrosion and cracking of the pipes owing to stress can be effectively prevented. The application of welding on site is very easy because of the high dimension precision;

☆ The inside and outside welding are performed after the tack welding , so the welding process is very stable with good weld quality;

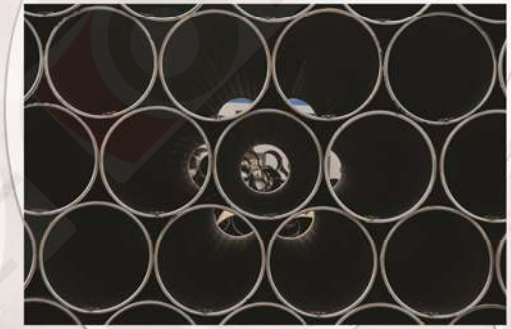
☆The NDT is easy to perform on the weld during production and field operation as well;

☆ The length of the weld is shorter than that of the non-longitudinal seam pipe, so the probability of defects occurrence is very low;

☆The coverage of the pipe specification is very wide. The pipe can be either in large diameter with wall thickness or in small diameter with wall thickness.









PETROL STEEL

防腐钢管 Coating Pipe

防腐管直径：219-1620mm
可防腐单管重量：10MT
产量：1200M2/12小时
防腐类型及标准：
1. FBE/2FBE:CAN/CSA Z245.20,DIN30671
2. 2LPE/3LPECAN/CSA Z245.21,DIN30670
3. 2LPP/3LPP:DIN30678,NFA49711
产品用途：
用于埋地管道的防腐，广泛应用于埋地石油、天然气、饮用水等项目中，具有防腐性能好、吸水率低、机械性能高等优势。

Pipe OD:219-1620mm
Maximum unit weight per pieces:10MT
Coating capability:1200M2/12小时
Coating types and standards:
1.FBE/2FBE:CAN/CSA Z245.20,DIN30671
2.2LPE/3LPECAN/CSA Z245.21,DIN30670
3.2LPP/3LPP:DIN30678,NFA49711
Using of production :
Using for underground pipeline,like underground petrol line pipe,gas pipe and drinking water line pipes,the advantage is long time anti-corrosion,low water absorption,high mechanical strength.



环氧粉末防腐

Fusion-Bonded Epoxy (FBE)



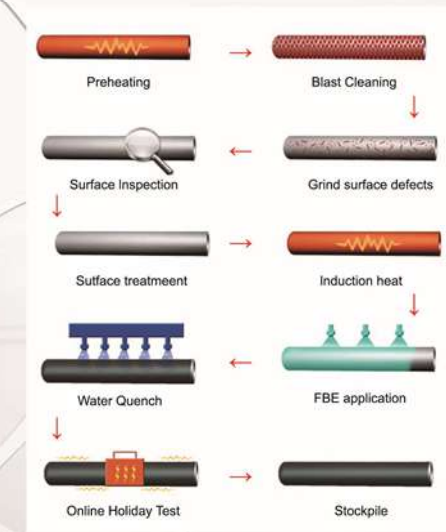
FBE防腐是一种使用环氧树脂粉末制造的薄膜防腐。防腐层厚度和其他要求执行标准EN ISO21809-2或CSA Z245.20。绝大部分FBE防腐的工作温度适用于干燥环境不高于85° C或者湿润环境不高于65° C，但目前新材料可以适用于更高温度。钢管被预热后进行抛丸除锈，然后钢管表面要进行缺陷检查，之后进行中频加热到环氧树脂粉末可以喷涂的温度，环氧粉末会被融化并与钢管融为一体，之后钢管将被水冷，最终钢管将进行防腐层缺陷检验并入库。

Fusion-bonded epoxy (FBE) coatings are thin film coatings based on epoxy-resin powder materials. Thickness and other coating configuration requirements can be found in the new EN ISO 21809-2 standard, as well as CSA Z245.20. Most FBE coatings are rated for operating temperatures up to 85°C in dry conditions and 65°C in wet conditions.The pipes are pre-heated and then blast-cleaned. The pipe surface is then inspected for any defects. Induction heating then brings the pipe to the temperature required for the spraying of the epoxy powder. The epoxy particles flow, melt and bond to the steel.The next step is to cool down the pipe through water quenching. Finally, the pipe is inspected for coating defects (known as holidays) and then loaded out for storage.





FBE COATING PROCESS



PETROL STEEL

三层聚乙烯防腐

Three-Layer Polyethylene (3LPE)



① FBE ② Copolymer Adhesive ③ Polyethylene

三层聚乙烯防腐作为主干道管线防腐是由FBE层、胶粘剂层和最外层聚乙烯层组成的多层防腐系统，它执行标准DIN30670、NFA49711、CSA Z254.2或 EN ISO 21809-1，绝大部分3LPE管道的工作温度是最高85° C。

钢管被预热后进行抛丸除锈，然后钢管表面要进行缺陷检查，之后进行中频加热到环氧树脂粉末可以喷涂的温度，环氧粉末会被融化并与钢管融为一体，之后胶黏剂和PE带相继缠绕到旋转的钢管上，之后钢管会被水冷并进行电火花检测最终入库。

Three-layer polyethylene (3LPE) mainline coatings are multilayer anti-corrosion systems consisting of a layer of fusion-bonded epoxy primer, a polyethylene-based adhesive layer and an outer layer (topcoat) of polyethylene. Their thickness and minimum technical performance requirements are the subjects of multiple industry and international standards such as DIN30670, NFA49711, CSA Z254.21 and the upcoming EN ISO 21809-1 (draft). Most 3LPE mainline coatings are rated for operating temperatures of up to 85°C

The pipes are pre-heated and then blast cleaned. The pipe surface is then inspected for any defects.Induction heating then brings the pipe to the temperature required for the spraying of the epoxy powder of the primer. The epoxy particles flow, melt and bond to the steel. The polyethylene-based adhesive and then the polyethylene topcoat are then successively extruded on the rotating pipe. The next step is to cool down the pipe through water quenching. Finally, the pipe is inspected for coating defects (holidays) and then loaded out for storage.3PE









PETROL STEEL

精益求精

Striving for perfection

精益求精是我們的目標和追求

公司具有持续创新的技术能力和以客户为中心的卓越服务能力。并通过这一核心竞争力的不断提升，为客户提供优质、便捷的服务，做国际一流的管道销售机构。

Perfection and excellence are our goal and pursuit Continuously innovative technical strength and customer-oriented service are our core competitive power. We will enhance the power and provide our customers with high-quality and convenient service in order to make the first –class piping sales institutions in the world.



PETROL STEEL

智利客户到访 CHILE CUSTOMER VISIT





意大利客户访问 CUSTOMERS FROM ITALY



法国客户检验 THE FRENCH CUSTOMER INSPECTICTION



德国劳士检验 GL INSPECTION



美国客户到访 CUSTOMER FROM USA



英国客户 CUSTOMER FROM ENGLAND



俄罗斯客户访问 CUSTOMER FROM ROSSIA



加拿大客户 CUSTDMERS FROM CANADA



领导视察 Lender' s Visit



① 客户到访 Customer visiting
② 市委领导考察 Municipal party committee leadership inspection
③ API 审核会议 API audit meeting
④ 培训会议 Training
⑤ 公司管理层会议 Management meeting





PETROL STEEL

销售网络 Sales Network

Major Customer

3WINS ASIA LIMITED,HONGKONG
CNOOD ASIA LIMITED,HONG KONG
CS TRADING,U.S.A
CUNADO,SPAIN
DAEWOO GROUP,KOREA
ENTER ENGINEERING PTD LTD．SINGAPORE
FASTPACK S.A.,CHILE
FERSUM SA DE CV,MEXICO
GROUP GENOYER S.A,FRANCE
ITECO OILFIELD SUPPLY MIDDLE EAST FZCO,UAE
JAN DE NUL DREDGING N.V.,BELGIUM
MEEVER PIPES ,NETHERLANDS
MK PROMSTROYMETALL ,RUSSIA
MCL MARINE (HK) CO.,LIMITED ,HONGKONG
ONE STEEL TRADING PTY LTD,AUSTRALIA
PFF B.V.,NETHERLANDS
PIPE&PILING SUPPLIES LTD,CANADA&U.K.
STAMPTONE SERVICES,AZERBAIJAN
SENG CHOON ENGINEERING PTE LTD ,SINGAPORE
STEADY GROWTH LIMITED,TAIWAN CHINA
TOYOTA TSUSHO CORPORATION,JAPAN
TAMIN TAJHIZ PISHRO PARSIAN CO.LTD,IRAN
TROUVAY CAUVIN GROUP,UAE
THYSSENKRUPP,GERMANY
TEKNACORP USA INC.U.S.A.
TUBACERO SL,SPAIN
UNITED STEEL LIMITED ,NEW ZEALAND



PROJECT :BKB-HK14111-C2
END USER:TEXAS PIPE&SUPPLY CO.-HUSTON
CUSTOMER: DAEWOO,KOREA
PRODUCT:API 5L B PSL1 COLD EXPANSION PIPE762-1219

PROJECT :ADREDGNG PIPE UNITED STATES
CUSTOMER: CNOOD ASIA LIMITED,HONGKONG
PRODUCT:STM A830 Gr.1035 PIPE508/762
YEARS:2014

PROJECT:FOR STORAGE,GERMANY
CUSTOMER:S.T.A.D. BIANCO GROUP,FRANCE
PRODUCT:EN10219 S355J2H PIPE457-1219
YEARS:2011-2016

PROJECT :DREDGNG PIPE
CUSTOMER: JDN DE NUL,BE,BELGIUM
PRODUCT:API 5L X52 PSL1 PIPE850
YEARS:2016

PROJECT :SALLINGSUNDBROEN
CUSTOMER:MEEVER PIPES,NETHERLANDS
PRODUCT:EN10219 S355J2H PIPE
YEARS:2015

PROJECT :CPF COMPLEX AND DEVELOPMENT OF KANDYM
END USER:LUKOIL,UZBEKISTAN.
EPC:ERIELL GROUP
PRODUCT:API 5L X60M/X46NS PSL2 3LPE PIPE508/914
YEARS:2016

PROJECT:BUSHEHR PETROCHEMICAL COMPLEXOLEFIN PLANT
END USER:BUSHEHR PETROCHEMICAL COMPANY（BUPC）,IRAN
PRODUCT:ASTM A671 CC60 CL22 -51°C CVN PIPE457-1422
CUSTOMER:N-STEEL ,KOREA

ENDUSER:KAZMUNAIGAS,KAZAKHSTAN
CUSTOMER:CARBON GEOCOM LLC
PRODUCT:GOST20295 K52 3LPE PIPE720
YEARS:2016

PROJECT :KAOMBO
END USER:TOTAL ANGOLA BLOCK 32
EPC:SOFRESID - SAIPEM SA
CUSTOMER:GROUP GENOYER S.A.,FRANCE
PRODUCT:ASTM A671 CC70 CL32 PIPE 610-1219
YEARS:2016

PROJECT : BELLELLI IN PERU
END USER:REPSOL SA
CUSTOMER:FASTPACK S.A.,CHILE
PRODUCT:API 5L X70M PSL2 PIPE762/914
YEARS:2016

PROJECT:FOR STORAGE,GERMANY
CUSTOMER:THYSSENKRUPP
PRODUCT:EN10217P235GHPIPE457-1219
YEARS:2016

PROJECT :XINA SOLAR POWER PLANT PAULPUTS
END USER:ANTONIO GALLEGO BLANCO
CUSTOMER:TUBACERO,SPAIN/PFF,NETHERLANDS
PRODUCT:ASTM A672 C70 CL33 PIPE457-1422
YEARS:2015

PROJECT: NZ CONVENTION CENTRE SITE
CUSTOMER:UNITED STEEL ,NEW ZEALAND
PRODUCT:AS1163-1991 C350L0 PIPE508-914
YEARS:2016