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内蒙古包钢钢联股份有限公司无缝钢管厂

SEAMLESS TUBE MILL OF BAOTOU STEEL UNION CO.,LTD

内蒙古包钢钢联股份有限公司无缝钢管厂
地址：中国 内蒙古 包头市昆区河西工业区
电话：+86-472-2187016　　+86-472-2184731
传真：+86-472-2182037　　+86-472-2185948

SEAMLESS TUBE MILL OF BAOTOU STEEL UNION CO.,LTD
Add: Hexi Industrial Area, Kun District, Baotou City, Inner Mongolia P.R.C.
Tel：+86-472-2187016　+86-472-2184731
Fax：+86-472-2182037　+86-472-2185948

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企业概况

包钢钢联股份有限公司无缝钢管厂于1971年7月1日投产，是我国品种、规格最为齐全的无缝钢管生产基地之一。历经改革发展，现拥有Φ400mm自动轧管机组、Φ180mmMPM两辊限动芯棒连轧管机组、Φ159mmPQF三辊限动芯棒连轧管机组、Φ460mmPQF三辊限动芯棒连轧管机组等四条热轧无缝钢管生产线，及配套的Φ159mm、Φ460mm两条高压锅炉管光亮热处理线，Φ159mm、Φ180mm、Φ426mm三条油套管、专用管调质热处理线，拥有五条油套管加工线。具备年生产热轧无缝钢管192万吨和加工石油成品套管22万吨的能力。可生产直径从Φ38mm至Φ457mm、壁厚从2.9mm至60mm范围内的石油套管、管线管、低中高压锅炉管、液压支架管、高压气瓶管、结构用无缝管、输送流体用管、管件用管、车桥管、方矩管等。

1996年获得原中国冶金工业质量体系认证中心颁发的ISO9002证书，2002年获得ISO9001证书，并通过历次复审；2007年，通过GB/T 24001环境体系认证和GB/T 28001职业健康安全管理体系认证以及ISO10012《测量管理体系、测量过程和测量设备要求》国际化认证，形成一套完整的职业健康、环境保护、安全管理、产品质量保证体系。

1997年取得了美国石油学会颁发的API会标使用许可证；2000年获得TUV南德意志集团（TUV SUD）颁发的德标TUV证书。包括低中压锅炉管在内的13大类产品获得了A1、A2(1)(2)、B(1)(2)(4)级特种设备（压力管道元件）制造许可证。2012年和2014年分别取得中国船级社（CCS）和挪威船级社（DNV）认证。生产的低中压锅炉用无缝钢管、结构用无缝钢管、石油套管、油管、气瓶用无缝钢管先后被授予冶金产品实物质量“金杯奖”和“冶金行业品质卓越产品”，锅炉用无缝钢管被评为“全国用户满意产品”。

配备了具有中国国家实验室能力认可（CNAS）的综合性钢管检验室，具有对钢管进行拉伸（高、低温）、冲击、硬度（布、洛、维、里）、疲劳、断裂力学、落锤、金相、应力腐蚀、油脂分析等试样加工检测能力。现有23套无损检测设备，其中管体检测设备15套，由德国GE、FOERSTER、NK和英国UNICORN公司进口，国产管端检测设备8套，均可对钢管内外表面、内部、分层缺陷进行无损检测和壁厚测量。

产品主要出口到亚洲、中东、非洲、欧洲等地。近年来主要出口泰国、印度、韩国、土库曼斯坦、哈萨克斯坦、马来西亚、阿曼、沙特、埃及、肯尼亚、刚果、德国、俄罗斯等国家，并在我国石油、煤炭、化工、电力等工业的现代化建设中发挥了重要的作用。



企业愿景：打造国内一流无缝钢管企业

Company target: To be the top-ranking seamless tube mill in China

Company overview

Seamless Tube Mill of Baotou Steel Union Co., Ltd was started production from 1st July 1971, and now is one of the seamless steel tube production bases with most complete varieties and specifications in China. It had been equipped with four hot rolling lines through reforming and development containing Φ400mm plug mill,Φ180mm two rollers retaining rack MPM mill,Φ159mm and Φ460mm three rollers retaining rack PQF mill as well as two Φ159mm and Φ460mm bright heat treatment lines for high pressure boiler and three Φ159mm, Φ180mm and Φ426 mm heat treatment lines for casing and special pipe. Its annual output reached to 1.92 million tons of hot seamless tube and 220,000 tons of casings by five OCTG threading lines. The main product includes casing, line pipe, LP/MP and HP boiler pipe, hydraulic pillar pipe, HP vessel pipe, structural seamless pipe, fluid conveying seamless pipe, pipe fitting, trailer axle pipe and square pipe etc with the range of diameter from Φ38 to Φ457mm and wall thickness from 2.9 to 60mm.

Seamless Tube Mill of Baotou Steel Union Co., Ltd had been awarded with ISO9002 and ISO9001 Certificate issued by original China Metallurgical Quality Institute in 1996 and 2002 respectively and passed through the official reviews. It was also got GB/T 24001 Environmental System Certificate, GB/T28001 Occupational Health and Safety Management and ISO10012 international certificate for "Measurement management system, measurement process and the requirements of measuring equipment" in 2007 and formed one complete set of system for occupational health,environmental protection,safety management and PQA.

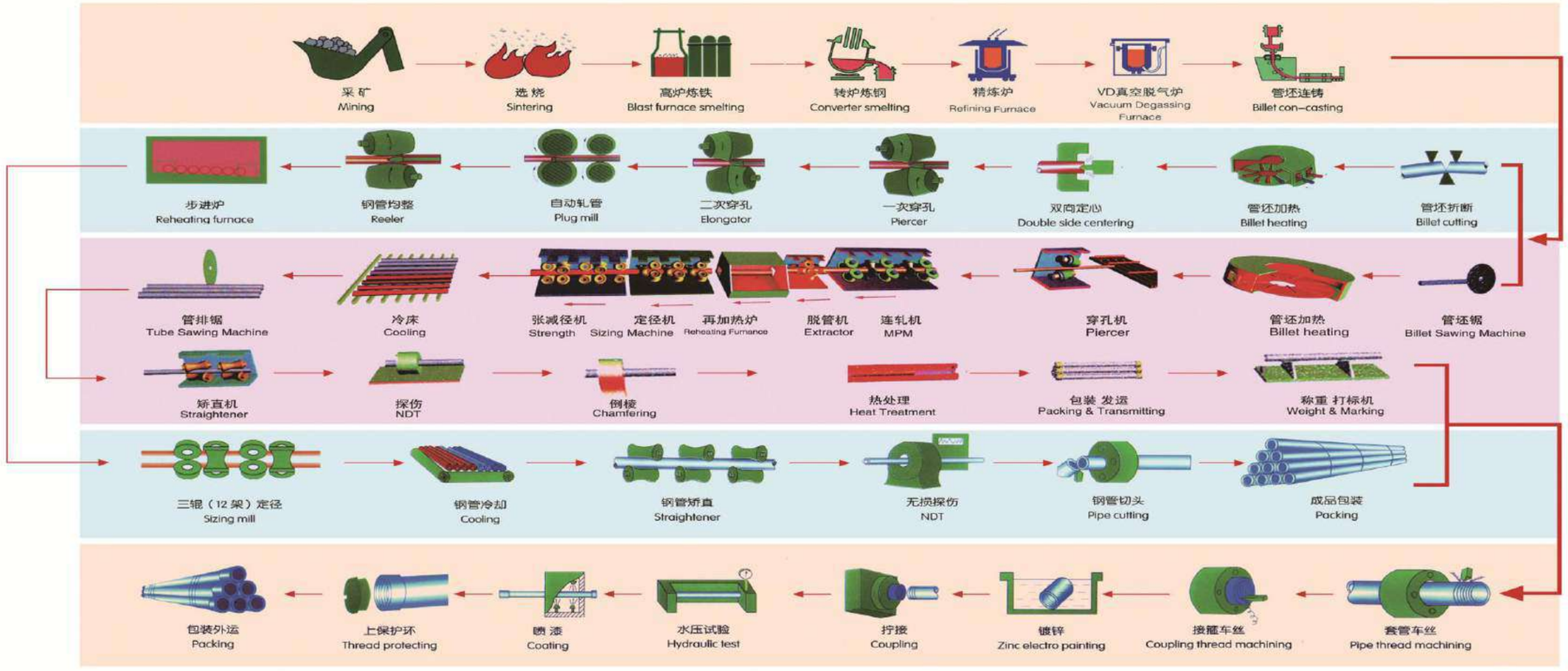
Seamless Tube Mill of Baotou Steel Union Co., Ltd had been awarded with the certificate of Authority to use the official API Monogram in 1997 issued by American Petroleum Institute and awarded with TüV certificate issued by TüV SÜD in 2000 for 13 types of products including LP and MP Boiler pipe were obtained the manufacture license for special equipmen (pressure piping components) of grade A1、A2 (1) (2)、B (1) (2) (4). The CCS and DNV certificates had been obtained in 2012 and 2014 respectively. Seamless steel pipe for LP & MP boiler and gas bottle, structure use pipe, tubing and casing were achieved with "Golden Cup" for metallurgical products quality and "Superior Quality Products In metallurgical Industry". Also the boiler pipe was appraised as " National Customer Satisfied Product ".

Seamless Tube Mill of Baotou Steel Union Co., Ltd was equipped with the integrated steel pipe laboratory with CNAS certification, and can make the pipe tests for stretch (low and high temperature), impact, rigidity (HB, HRC, HV, HL), fatigue, fracture, falling weight, metallographic, stress corrosion and oil analysis etc. The nondestructive test on pipe surface, internal and laminar defects as well as wall thickness measurement can be made by 23 sets of NDT detection units in the mill, among of 15 sets are imported from GE, FOERSTER, NK in Germany and UNICORN in UK for pipe body detection, while 8 sets made locally for pipe end detection.

Most of our pipes were exported to Asia, Middle East, Africa and Europe etc and mainly to the country like Thailand, India, Korea, Turkmenistan, Kazakhstan, Malaysia, Oman, Saudi Arabia, Egypt, Kenya, Congo, Germany and Russia etc. in recent year. Also it had played an important role for the national modernization construction in the industry of petroleum, coal, chemical and electricity etc.



生产工艺
Process flow chart



Φ400mm自动轧管机组 ↙

采用Φ400毫米自动轧管机，该机组是由原苏联设计并提供全套轧制、精整、套管加工设备，年设计能力为30万吨，现最高产能可达50万吨/年。可按国际先进标准生产外径为Φ244.5-426mm、壁厚为7-50mm的23个品种、150多个规格的无缝管材。

Φ400mm plug mill line

Φ400mm plug mill was designed and supplied with full set of rolling, finishing and casing processed equipments from the former Soviet Union. And its design capacity was 300,000 tons/year and max. 500,000 tons/year to be reached now for 23 types and over 150 different sizes of pipes produced in accordance with the international advanced standards for OD from Φ244.5-426mm and WT from 7-50mm.

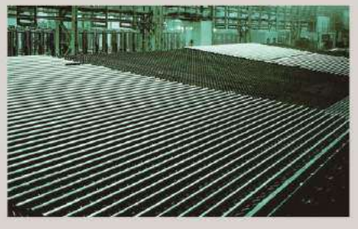










Φ180mm MPM两辊限动芯棒连轧管机组

采用的是由意大利INNSE公司引进的五架MINI—MPM机组，年设计能力为20万吨，现年产量已达40万吨，可生产外径为Φ60-244.5mm、壁厚3.2-27mm范围内的各种无缝钢管。配套建设的热处理生产线，年处理量为12万吨，可生产N80、L80、P110及自主研发的BT系列等优质钢级的无缝钢管。



Φ180mm MPM mill line

The five MINI—MPM rolling mills were from INNSE company in Italy with designed capacity 200,000 tons/year and max. 400,000 tons/year to be reached now. The pipes produced are in the range of OD from Φ60—244.5mm and WT from 3.2—27mm. Additional matched heat-treatment line was designed with capacity of 120,000 tons/year and can produce the seamless tube with high quality grade of N80, L80, P110 and the BT series developed by ourselves.







Φ159mm PQF三辊限动芯棒连轧管机组

热轧线主体设备由SMS INNSE公司设计制造，采用三辊式PQF工艺，年设计能力为40万吨，可生产外径为Φ38.0-168.3mm、壁厚2.9-25mm、长度6.0-14.63m的热轧无缝钢管。同时配备有热处理线（调质处理和光亮处理）及油管管端加厚线。已开发油管、加厚油管、钻杆料、耐腐蚀套管、稠油热采井用套管、抗硫化氢腐蚀管线管、车桥管、承压用无缝管、高压锅炉管等。

Φ159mm PQF mill line

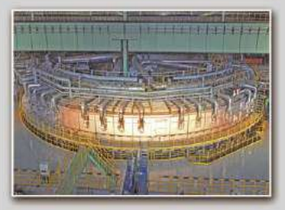
The main hot rolling equipments were imported from SMS INNSE in Italy with designed capacity of 400,000 tons/year. It can produce the hot rolling pipes with OD from Φ38.0-168.3mm, WT from 2.9-25mm, length from 6.0-14.63m. This line was also equipped with the heat treatment line for quenching & tempering and bright treatment and one EUE line. It had been developed in this line for tubing, thicken tubing, drilling pipe, resistance casing, heavy oil thermal recovery pipe, H_2S resistance line pipe, KF-XY, pressure pipe and HP boiler pipe etc.





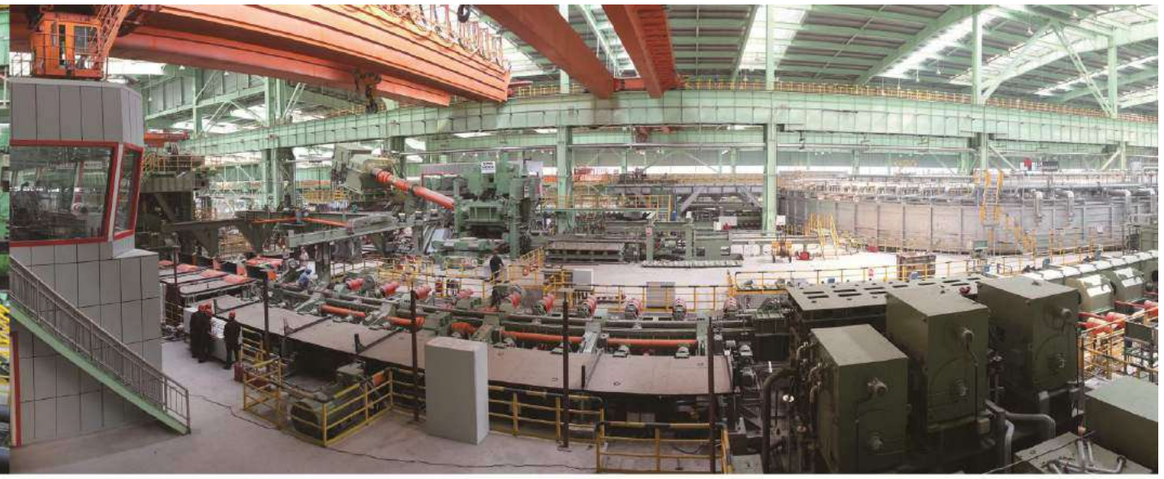












Φ460mm PQF三辊限动芯棒连轧管机组

该生产线年设计能力为62万吨。主要产品规格为Φ244.5-457mm，壁厚范围6.0-60mm。热轧线主体机械设备由德国SMS INNSE公司设计制造，电控设备由瑞典ABB公司设计制造。该生产线采用了世界上最先进的三辊限动芯棒连轧管生产工艺，具备在线测径、测厚、漏磁探伤等完备的质量保证手段，同时配备有热处理线（调质处理和光亮处理），可生产满足国内外用户需求的具有高附加值的各类高钢级产品。已开发石油套管、机械结构用管、气瓶管、石化用管、耐腐蚀套管、耐腐蚀管线管、承压用无缝管、低高温用管、液压支架管、冷拔用管、低中压锅炉管、高压锅炉管。



Φ460mm PQF mill line

The design capacity for this line was 620,000 tons/year with the range for OD from Φ244.5－457mm and WT from 6.0－60mm. The main mechanical equipments were designed and manufactured by SMS INNSE in Italy and electrical control devices were from ABB Sweden. The most advanced PQF technology was adopted in this line with on-line diameter detecting device, wall thickness measurement gauge and magnetic leakage flux detector etc for quality assurance. It was also equipped with a heat treatment line for quenching & tempering and bright treatment, which can produce the different types of tubes with high value-added and high grade required by the client from domestic and international. It had been developed in this line for casing, mechanical structural pipe, vessel pipe, petro-chemical pipe, resistance pipe, resistance line pipe, pressure pipe, high and low temperature pipe, hydraulic pressure pillar pipe, pipe for cold-drawing, low and medium pressure boiler pipe, high pressure boiler pipe etc.









油管管端墩粗线
Tubing thickening line



Φ159mm高压锅炉管光亮热处理线
Φ159mm bright heat treatment lines for HP boiler pipe

热处理生产线

由Φ159mm、Φ460mm两条高压锅炉管光亮热处理线，Φ159mm、Φ180mm、Φ426mm三条油套管、专用管调质热处理线组成，具备年加工41万吨的生产能力，可生产直径38—457mm范围的产品。可按照标准或用户要求对油井管、高压锅炉管、专用管等品种进行管端墩粗、调质、正火、正火+回火及退火等工序作业。

Heat treatment lines

Heat treatment lines were composed by two Φ159mm and Φ460mm bright heat treatment lines for high pressure boiler and three Φ159mm, Φ180mm and Φ426mm heat treatment lines for casing and special pipe. Its annual output reached to 410,000 tons for OD from Φ38-457mm. The pipe end upsetting, quenching&tempering, normalizing, normalizing & tempering and annealing can be made for oil well pipe, high pressure boiler and special pipe as requested by standard or order.



油井管、专用管热处理线
Heat treatment line for tubing, casing and special used pipes

Φ460mm高压锅炉管光亮热处理线
Φ460mm bright heat treatment lines for HP boiler pipe

















油套管加工线↙

由五条管体生产线和两条接箍生产线组成，年加工Φ60.3-339.7mm套管22万吨。接箍生产线年加工Φ73-365.1mm套管、油管接箍100万件。其中Φ244.5生产线是由德国Meer、比利时、美国引进的，采用了二级自动化控制系统，通过通讯网络连接，组成并行运算、集中管理、分散控制、资源共享的分布式计算机控制系统，实现了基础自动化操作方式。

OCTG threading lines

OCTG threading lines were composed by five pipe body processing lines and two coupling processing lines. The annual capacity is 220,000 tons of casing for OD Φ60.3-339.7mm and 1 million pieces of coupling for OD Φ73-365.1mm. The main equipments for one of Φ244.5 processing line were from SMS Germany, Belgium and U.S adopted with level 2 automatic control system and its basic automation was realized by means of the connecting communication network, make up the parallel computation, centralized management, decentralized control and the computer control system of distributed resource sharing.











油套管

包钢无缝钢管厂油套管产品已获得美国石油学会颁发的API 5CT证书，可按照API 5CT标准要求生产各种钢级油套管，产品成功供货中石油、中石化等用户及出口印尼、泰国、埃及、委内瑞拉、俄罗斯、土耳其等国家。近年来，依托包钢稀土资源优势，自主开发生产了稠油热采井用油井管、高抗挤毁油井管、抗硫化氢腐蚀油井管、抗二氧化碳腐蚀油井管等系列品种，产品已成功应用于中国各大油田。已成功开发出具有自主知识产权的BT系列特殊扣，其中Φ177.8×9.19mm的P110钢级BT-1特殊扣已通过实物评价试验，产品性能满足设计要求。

Tubing and casing

Seamless Tube Mill of Baotou Steel Union Co., Ltd had been already awarded with API 5CT certificate and can produce the different steel grade of casing and tubing according to API 5CT standard. Our products were supplied not only to the domestic like Petro China and Sinopec, but exported to Indonesia, Thailand, Egypt, Venezuela, Russia and Turkey etc. We had developed the series of heavy oil thermal recovery wells, pipes for high collapsing wells, pipes for H_2S resistance wells, pipes for CO_2 resistance wells recently by the advantage of Baiyuneboite rare earth mine and already applied to several oil fields in China. Meanwhile BT series special thread had been successfully developed and BT-1 special thread for Φ177.8x9.19mm P110 had passed the physical assessment test as design required.





管线管

包钢无缝钢管厂管线钢管产品已获得API 5L认证证书。X65以下钢级产品已批量供货，产品已成功出口德国、加拿大、巴西、新加坡、埃及、韩国、阿联酋等国家；X70Q钢级管线钢管已工业试制成功；X52钢级低温管线钢管已完成实验室研究工作。随着Φ159mm PQF机组和Φ460mm PQF机组相继投产，包钢已具备生产高钢级抗硫化氢腐蚀管线钢管和海上服役管线钢管的工艺条件，其中L290NS抗硫化氢腐蚀管线钢管已通过西安管材研究所性能评价试验，并批量供货；L360QS已完成实验室开发工作。

Line pipe

Seamless Tube Mill of Baotou Steel Union Co., Ltd had been already awarded with API 5L certificate for line pipe. The line pipe for grade under X65 had already been bulk supplied and exported to Germany, Canada, Brazil, Singapore, Egypt, Korea and United Arab Emirates etc. The trial production for line pipe Grade X70Q was successful and the laboratory research for line pipe X52 low temperature had been completed. With the production of Φ159mm PQF and Φ460mm PQF Mill, it is possible for us to produce high steel grade H_2S resistance pipeline and pipeline for marine service, where L290NS H_2S resistance line pipe passed the performance assessment experiment by Xi'an Tubular Goods Research Center and being bulk supplied. The laboratory development for L360QS had been completed.









车桥管

2009年包钢(集团)公司作为主要起草单位编写了《YB/T4203-2009汽车半挂车轴用无缝钢管》冶金行业标准。包钢无缝钢管厂生产的XCQ16和XCQ16-1车桥管受到了行业的普遍认可，产品成功供货广东富华集团有限公司等国内车桥企业；以热处理态供货的27Mn2QT车桥管成功出口美国市场。

Seamless pipe for trailer axles

Baogang Group, as the main drafter, compiled the metallurgical industry standard " seamless steel tube for use of YB/T 4203-2009 semi-trailer axle " in 2009. Our seamless pipe for trailer axles XCQ16 and XCQ16-1 had been widely recognized by clients and successfully supplied to domestic enterprises for trailer axles like; Guangdong Fuhua (Group) Co., Ltd etc. Also the seamless pipe for trailer axles 27Mn2QT in heat treatment condition had been exported into American market successfully. As required by the strategic transformation, we developed the hot-rolling square shaped pipe and rare-earth axle housing pipe in Φ400mm plug mill for grid structure, which had been bulk supplied to structural pipe and trailer axle market with good performance as design required. As the first production mill for square shaped pipe, we had complied the enterprise standard for square shaped pipe.

方矩管

无缝厂自主开发了网架结构用热轧无缝方矩管和热轧稀土桥壳管，在结构管市场和车桥市场批量供货，产品性能满足设计要求。作为国内首家以无缝热扎工艺生产方矩管的企业，编制了热轧无缝方矩管的企业标准。

Square shaped pipe

Hot-rolled square shaped pipe and RE axle pipe for network structure were developed by Seamless Tube Mill of Baotou Steel Union Co., Ltd as requested, which are bulk supplied on structural and trailer axle market. As Chinese first supplier of hot-rolled square shaped pipe, the mill had compiled its standard.



高压锅炉管

高压锅炉管产品是包钢无缝钢管厂的主打产品之一。Φ159mm机组和Φ460m机组配套建设的高压锅炉管光亮热处理线和精整线，取得了特种设备制造许可证，可按照GB5310-2008、ASTM A335/A335M、EN10216等标准生产15CrMoG、12Cr1MoVG、P1、P11、P12、P22、P5、P235GH、P265GH等承压系列产品；对外合作开发的P91钢级高压锅炉管已批量生产并供货。

HP boiler pipe

HP boiler pipe is one of main products of Seamless Tube Mill of Baotou Steel Union Co., Ltd. The bright heat treatment line and finishing line for HP boiler pipe were matched up forΦ159mm PQF line and Φ460 mm PQF line and had achieved the manufacture license for special equipment. The series of pressure resistance pipes for 15CrMoG,12Cr1MoVG,P1,P11,P12,P22,P5,P235GH, P265GH etc can be manufactured in accordance to the standard GB 5310-2008, ASTM A335/A335M and EN10216. P91 HP boiler pipe developed by co-operation had already been in bulk supply.


荣誉证书





液压支架管↙

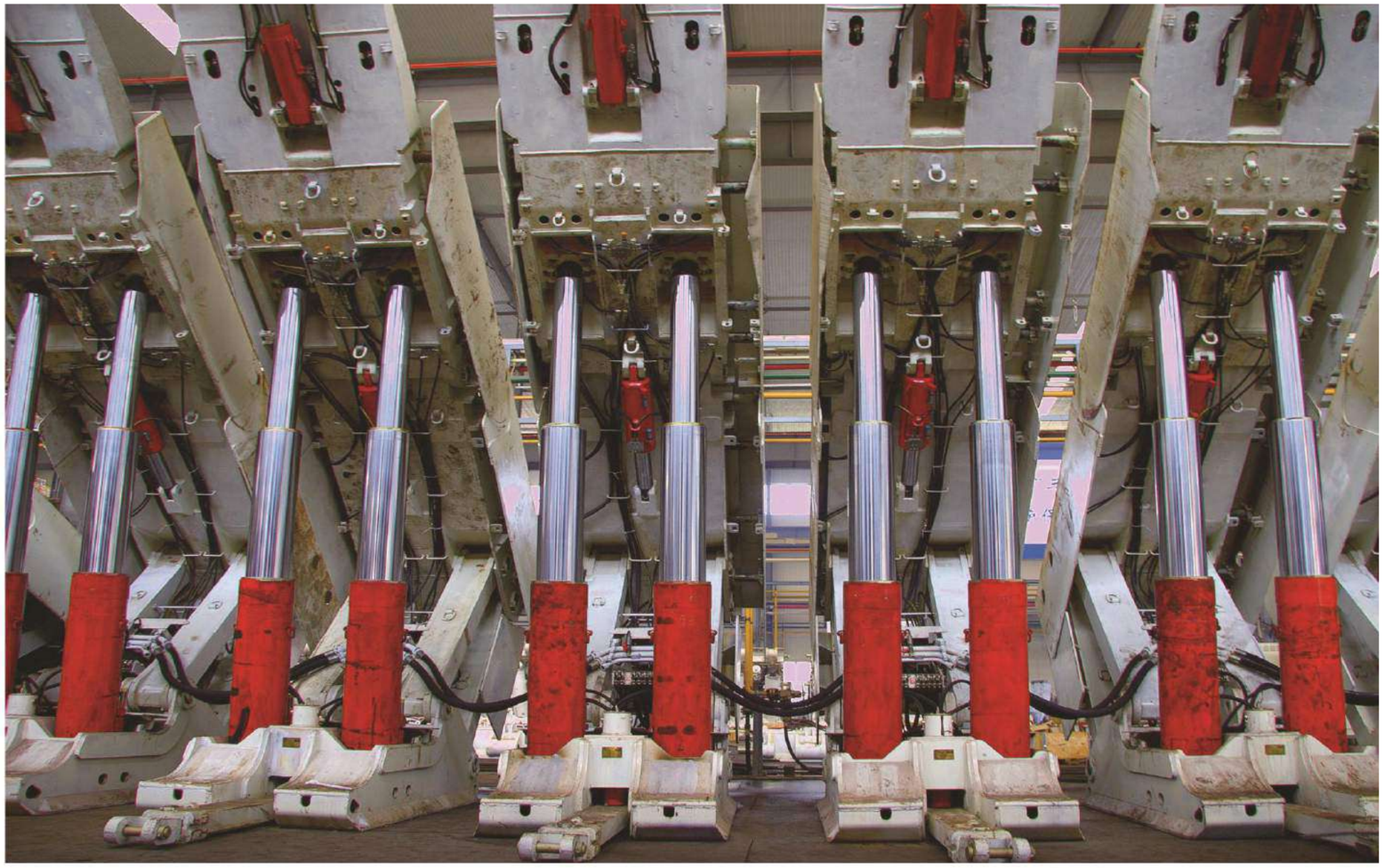
包钢无缝钢管厂一直致力于煤矿系统用液压支架管的开发工作，先后开发了以27SiMn为基础的各种系列产品，可满足标准或用户对液压支架管的各种需求；开发的冷拔用液压支架管产品可满足用户对最终产品的冷拔工艺要求。目前，包钢无缝钢管厂液压支架管产品已广泛应用于郑煤机、北煤机等国内各大煤矿机械制造企业。随着机组设备装备的提升和生产能力的提高，包钢无缝钢管厂已启动了油缸用管产品开发工作，并将油缸用管作为另一个主打产品。

Hydraulic pillar pipe

We had been committed to develop hydraulic pillar pipe for coal mine system and 27SiMn product as basis for various series of pipe, which can meet the standard or different demands by client. The hydraulic pillar pipe for cold drawing can meet the requirements for cold drawing process by users. Now our hydraulic pillar pipe had been widely applied for Zhengzhou Coal Mining Machinery Group Co. Ltd, North Coal Mining Machinery Group Co., Ltd and other domestic large coal mine machinery enterprises. As equipment and capacity improved, we had already started the development for oil cylinder pipe and will make it as our anther main product.









网架结构用无缝钢管↙

网架结构用管具有强度高、自重轻、施工速度快、地基占用面积少、工业化程度高等一系列优点。包钢无缝钢管厂可以生产外径为Φ38-457mm、壁厚为2.9-60mm的各类网架结构用无缝钢管，尤其在大规格中厚壁低合金网架结构用管上具有设备优势和资源优势。2013年包钢无缝钢管厂网架结构用无缝钢管被内蒙古自治区政府评为“内蒙古名牌产品”。目前产品已广泛应用于如上海浦东国际机场、南京国际会展中心、海南大剧院等大型建筑领域。

Grid structure pipe

Grid structure pipe had a series of advantages as high strength, light weight, high speed of construction , the foundation occupied less area and high degree of industrialization. Our grid structure pipe is OD from Φ38-457mm and WT from 2.9-60mm.Especially for the big medium-thickness low-alloy grid structure pipe, we had the advantage from the equipment and resource. The grid structure pipe made by Seamless Tube Mill of Baotou Steel Union Co., Ltd. was awarded as "The Famous Products of Inner Mongolia" by the autonomous region government and widely applied in the large construction building like Shanghai Pudong International Airport, Nanjing international exhibition center and Hainan opera etc.





产品规格
Specification

| 直径 Diameter | 壁厚 Wall thickness | | |

产品标准
Standard

Φ400mm 自动轧管机组

序号	品 种	规 格	材质（钢级）	标 准	备 注
1	石油套管及 石油套管接箍料	Φ269.9~Φ406.4	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT	长度R1、 R2、R3
2	管线用无缝钢管	Φ273~Φ426	B级 X42 X46 X52 X56 X60 X65	API 5L	长度≥6米
3	高压锅炉用无缝钢管	Φ273~Φ426	20G 15CrMoG 12Cr1MoVG等	GB5310	长度≥6米
4	低中压锅炉用无缝钢管	Φ273~Φ426	20	GB 3087	长度≥6米
5	结构用无缝钢管	Φ273~Φ426	15-45 Q345	GB/T 8162	长度≥6米
6	输送流体用无缝钢管	Φ273~Φ426	20 Q345	GB/T 8163	长度≥6米
7	液压支柱用无缝钢管	Φ273~Φ426	30MnNbRe 27SiMn	GB/T 17396	长度≥6米
8	气瓶用无缝钢管	Φ273~Φ426	30CrMo 35CrMo 37Mn 34Mn2V 34CrMo4	GB 18248	长度≥6米
9	高温用无缝碳钢钢管	Φ273~Φ426	A106B	ASME A106	长度≥6米
10	压力用无缝钢管 （非合金室温特性）	Φ273~Φ426	P195TR2（1.0108） P235TR2（1.0255） P265TR2（1.0259）	EN10216-1	长度≥6米
11	压力用无缝钢管 (非合金和合金高温特性)	Φ273~Φ426	P235GH（1.0345） P265GH（1.0425）	EN10216-2	长度≥6米

油套管加工线

序号	品 种	规 格	材质（钢级）	标 准	备 注
1	石油套管	Φ114.3~Φ406.4	J55 K55 N80 L80-1 C90 R95 P110 BT110T BT110H Q125	API Spec 5CT API Spec 5B	长度R1、R2、R3 扣型STC、LC、BTC
2	石油油管	Φ60.3~Φ114.3	J55 N80 L80 C90 P110	API Spec 5CT API Spec 5B	可生产加厚油管EU

Φ400mm plug mill line

No	Variety	Size	Typical steel grade or code	Standard	Note
1	Casing and Coulping Srock	Φ269.9~Φ406.4	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT	LengthR1、 R2、R3
2	Line Pipe	Φ273~Φ426	B X42 X46 X52 X56 X60 X65	API 5L	Length≥6M
3	HP Boiler Pipe	Φ273~Φ426	20G 15CrMoG 12Cr1MoVG	GB5310	Length≥6M
4	LP and MP Boiler Pipe	Φ273~Φ426	20	GB 3087	Length≥6M
5	Seamless steel pipe for structure use	Φ273~Φ426	15-45 Q345	GB/T 8162	Length≥6M
6	Seamless steel pipe for fluid conveying	Φ273~Φ426	20 Q345	GB/T 8163	Length≥6M
7	Seamless steel pipe for hydraulic pillar	Φ273~Φ426	30MnNbRe 27SiMn	GB/T 17396	Length≥6M
8	Seamless steel pipe for gas bottle	Φ273~Φ426	30CrMo 35CrMo 37Mn 34Mn2V 34CrMo4	GB 18248	Length≥6M
9	Seamless steel pipe for high temperature	Φ273~Φ426	A106B	ASME A106	Length≥6M
10	Seamless steel pipe for pressure (Unalloyed room- temperature property)	Φ273~Φ426	P195TR2（1.0108） P235TR2（1.0255） P265TR2（1.0259）	EN10216-1	Length≥6M
11	Seamless steel pipe for pressure (Unalloyed and alloyed high temperature property)	Φ273~Φ426	P235GH（1.0345） P265GH（1.0425）	EN10216-2	Length≥6M

OCTG threading lines

No	Variety	Size	Typical steel grade or code	Standard	Note
1	Casing	Φ114.3~Φ406.4	J55 K55 N80 L80-1 C90 R95 P110 BT110T BT110H Q125	API Spec 5CT API Spec 5B	LengthR1,R2,R3 Thread Type: STC、LC、BTC
2	Tubing	Φ60.3~Φ114.3	J55 N80 L80 C90 P110	API Spec 5CT API Spec 5B	EU for Pipe Ending Could be Produced

产品标准
Standard

Φ180mm MPM两辊限动芯棒连轧管机组

序号	品 种	规 格(mm)	材质（钢级）	标 准	备 注
1	石油套管、接箍	Φ114.3~Φ244.5	J55 K55 N80 L80-1 C90 R95 P110 BT110T BT110H Q125	API Spec 5CT	长度R1 R2、R3
2	石油油管	Φ88.9~Φ114.3	J55 N80 L80-1 C90 P110	API Spec 5CT	长度R1 R2、R3
3	管线用无缝钢管	Φ89~Φ245	B级 X42 X46 X52 X56 X60 X65	API 5L	长度≥6米
4	石油天然气工业管线输送系统用钢管	Φ89~Φ245	L320A	GB/T 9711	长度≥6米
5	高压锅炉用无缝钢管	Φ89~Φ245	20G 15CrMoG 12Cr1MoVG T11 T12 P11 P12等	GB5310 ASTM A335 ASTM A213	长度≥6米
6	低中压锅炉用无缝钢管	Φ89~Φ245	20	GB 3087	长度≥6米
7	结构用无缝钢管	Φ89~Φ245	15-45 Q345	GB/T 8162	长度≥6米
8	输送流体用无缝钢管	Φ89~Φ245	20 Q345	GB/T 8163	长度≥6米
9	液压支柱用无缝钢管	Φ89~Φ245	45 30MnNbRe 27SiMn	GB/T 17396	长度≥6米
10	气瓶用无缝钢管	Φ89~Φ245	30CrMo 35CrMo 37Mn 34Mn2V 34CrMo4	GB 18248	长度≥6米
11	汽车半挂车轴用无缝钢管	Φ89~Φ245	LZ20Mn2 LZ27Mn2	YB/T 4203	长度≥6米
12	高压化肥设备用无缝钢管	Φ89~Φ245	20 16Mn 12CrMo 15CrMo	GB 6479	长度≥6米
13	石油裂化用无缝钢管	Φ89~Φ245	20 12CrMo 15CrMo 1Cr5Mo	GB 9948	长度≥6米
14	低温管道用无缝钢管	Φ89~Φ245	16MnDG 10MnDG 09DG 09Mn2VDG	GB/T 18984	长度≥6米
15	船舶用碳钢和碳锰钢无缝钢管	Φ89~Φ245	410	GB/T 5312	长度≥6米
16	高温用无缝碳钢钢管	Φ89~Φ245	A106B	ASME A106	长度≥6米
17	压力用无缝钢管（非合金室温特性）	Φ89~Φ245	P195TR2（1.0108）P235TR2（1.0255）P265TR2（1.0259）	EN10216-1	长度≥6米
18	压力用无缝钢管(非合金和合金高温特性)	Φ89~Φ245	P235GH（1.0345）P265GH（1.0425）	EN10216-2	长度≥6米

Φ180mm MPM mill line

No	Variety	Size（mm）	Typical steel grade or code	Standard	Note
1	Petroleum Casing	Φ114.3~Φ244.5	J55 K55 N80 L80-1 C90 R95 P110 BT110T BT110H Q125	API Spec 5CT	LengthR1 R2、R3
2	Petroleum Tubing	Φ88.9~Φ114.3	J55 N80 L80-1 C90 P110	API Spec 5CT	LengthR1 R2、R3
3	Line Pipe	Φ89~Φ245	B X42 X46 X52 X56 X60 X65	API 5L	Length≥6M
4	Petroleum and natural gas industries—Steel pipe for pipeline transportation systems	Φ89~Φ245	L320A	GB/T 9711	Length≥6M
5	HP Boiler Pipe	Φ89~Φ245	20G 15CrMoG 12Cr1MoVG T11 T12 P11 P12	GB5310 ASTM A335 ASTM A213	Length≥6M
6	LP and MP Boiler Pipe	Φ89~Φ245	20	GB 3087	Length≥6M
7	Seamless steel pipe for structure use	Φ89~Φ245	15-45 Q345	GB/T 8162	Length≥6M
8	Seamless steel pipe for fluid conveying	Φ89~Φ245	20 Q345	GB/T 8163	Length≥6M
9	Seamless steel pipe for hydraulic pillar	Φ89~Φ245	45 30MnNbRe 27SiMn	GB/T 17396	Length≥6M
10	Vessel	Φ89~Φ245	30CrMo 35CrMo 37Mn 34Mn2V 34CrMo4	GB 18248	Length≥6M
11	Seamless Tubes for Cardan Shaft of Semi-trailer	Φ89~Φ245	LZ20Mn2 LZ27Mn2	YB/T 4203	Length≥6M
12	Seamless Tubes for HP Fertilizer Conveying	Φ89~Φ245	20 16Mn 12CrMo 15CrMo	GB 6479	Length≥6M
13	Cracking Tubes	Φ89~Φ245	20 12CrMo 15CrMo 1Cr5Mo	GB 9948	Length≥6M
14	Seamless steel pipe for low temperature piping	Φ89~Φ245	16MnDG 10MnDG 09DG 09Mn2VDG	GB/T 18984	Length≥6M
15	C and Mn Steel Tubes for Ship	Φ89~Φ245	410	GB/T 5312	Length≥6M
16	Carbon Steel Tube for High Temperature	Φ89~Φ245	A106B	ASME A106	Length≥6M
17	Seamless steel pipe for pressure（Unalloyed room-temperature property）	Φ89~Φ245	P195TR2（1.0108） P235TR2（1.0255） P265TR2（1.0259）	EN10216-1	Length≥6M
18	Seamless steel pipe for pressure (Unalloyed and alloyed high temperature property)	Φ89~Φ245	P235GH（1.0345） P265GH（1.0425）	EN10216-2	Length≥6M

产品标准
Standard

Φ159mm PQF三辊限动芯棒连轧管机组

序号	品 种	规 格	材质（钢级）	标 准	备 注
1	石油套管管体料	Φ 114.3~168.3	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT API Spec 5B	长度R1、R2、R3 扣型STC、LC、BTC
2	石油套管接箍料	Φ 127~153.7	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT API Spec 5B	长度R1、R2、R3 扣型STC、LC、BTC
3	石油油管管体料	Φ 48.26~114.3	J55 N80 L80-1 C90 P110	API Spec 5CT API Spec 5B	长度R1、R2、R3 扣型STC、LC、BTC
4	石油油管接箍料	Φ 63.5~141.3	J55 N80 L80-1 C90 P110 Q125	API Spec 5CT API Spec 5B	长度R1、R2、R3 扣型STC、LC、BTC
5	石油钻杆料	Φ 60.3 ~168.3	E75 X95 G105 S135	API Spec 5D	长度≥6m
6	管线用无缝钢管	Φ 48.3 ~168.3	A B X42 ~X65	API Spec 5L	长度≥6m
7	高压锅炉用无缝钢管	Φ 38 ~168	20G 12Cr1MoVG 15CrMoG T11 T12 T22 P91	GB 5310 ASTM A213	长度≥6m
8	低中压锅炉用无缝钢管	Φ 38 ~168	20	GB 3087	长度≥6m
9	结构用无缝钢管	Φ 38 ~168	10~45 Q345	GB/T 8162	长度≥6m
10	输送流体用无缝钢管	Φ 38 ~168	20 Q345	GB/T 8163	长度≥6m
11	船舶用碳钢和碳锰钢无缝钢管	Φ 38 ~168	320 410	GB/T 5312	长度≥6m
12	石油裂化用无缝钢管	Φ 38 ~168	20 12CrMo 15CrMo	GB 9948	长度≥6m
13	液压支柱用无缝钢管	Φ 38 ~168	45 30MnNbRe 27SiMn	GB/T 17396	长度≥6米
14	气瓶用无缝钢管	Φ 38 ~168	30CrMo 35CrMo 37Mn 34Mn2V 34CrMo4	GB 18248	长度≥6米
15	汽车半挂车轴用无缝钢管	Φ 38 ~168	LZ20Mn2 LZ27Mn2	YB/T 4203	长度≥6米
16	高压化肥设备用无缝钢管	Φ 38 ~168	20 16Mn 12CrMo 15CrMo	GB 6479	长度≥6米
17	低温管道用无缝钢管	Φ 38 ~168	16MnDG 10MnDG 09DG 09Mn2VDG	GB/T 18984	长度≥6米
18	高温用无缝碳钢钢管	Φ 38 ~168	A106B	ASME A106	长度≥6米
19	压力用无缝钢管（非合金室温特性）	Φ 38 ~168	P195TR2（1.0108） P235TR2（1.0255）	EN10216-1	长度≥6米
20	压力用无缝钢管（非合金和合金高温特性）	Φ 38 ~168	P235GH（1.0345） P265GH（1.0425）	EN10216-2	长度≥6米

Φ159mm PQF mill line

No	Variety	Size	Typical steel grade or code	Standard	Note
1	Petroleum Casing	Φ114.3~168.3	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT API Spec 5B	LengthR1、R2、R3 Thread Type STC、LC、BTC
2	Coupling Stock for Petroleum Casing	Φ127~153.7	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT API Spec 5B	LengthR1、R2、R3 Thread Type STC、LC、BTC
3	Petroleum Tubing	Φ48.26~114.3	J55 N80 L80-1 C90 P110	API Spec 5CT API Spec 5B	LengthR1、R2、R3 Thread Type STC、LC、BTC
4	Coupling Stock Petroleum Tubing	Φ63.5~141.3	J55 N80 L80-1 C90 P110 Q125	API Spec 5CT API Spec 5B	LengthR1、R2、R3 Thread Type STC、LC、BTC
5	Drill Pipe	Φ60.3 ~168.3	E75 X95 G105 S135	API Spec 5D	Length≥6m
6	Line Pipe	Φ48.3 ~168.3	A B X42 ~X65	API Spec 5L	Length≥6m
7	HP Boiler Pipe	Φ38 ~168	20G 12Cr1MoVG 15CrMoG T11 T12 T22 P91	GB 5310 ASTM A213	Length≥6m
8	LP and MP Boiler Pipe	Φ38 ~168	20	GB 3087	Length≥6m
9	Seamless steel pipe for structure use	Φ38 ~168	10~45 Q345	GB/T 8162	Length≥6m
10	Seamless steel pipe for fluid conveying	Φ38 ~168	20 Q345	GB/T 8163	Length≥6m
11	Seamless Tubes for Ship	Φ38 ~168	320 410	GB/T 5312	Length≥6m
12	Cracking Tube	Φ38 ~168	20 12CrMo 15CrMo	GB 9948	Length≥6m
13	Seamless steel pipe for hydraulic pillar	Φ38 ~168	45 30MnNbRe 27SiMn	GB/T 17396	Length≥6m
14	Vessel	Φ38 ~168	30CrMo 35CrMo 37Mn 34Mn2V 34CrMo4	GB 18248	Length≥6m
15	Seamless Tubes for Cardan Shaft of Semi-trailer	Φ38 ~168	LZ20Mn2 LZ27Mn2	YB/T 4203	Length≥6m
16	Seamless Tubes for HP Fertilizer Conveying	Φ38 ~168	20 16Mn 12CrMo 15CrMo	GB 6479	Length≥6m
17	Seamless steel pipe for low temperature piping	Φ38 ~168	16MnDG 10MnDG 09DG 09Mn2VDG	GB/T 18984	Length≥6m
18	Seamless steel pipe for high temperature	Φ38 ~168	A106B	ASME A106	Length≥6m
19	Seamless steel pipe for pressure（Unalloyed room -temperature property）	Φ38 ~168	P195TR2（1.0108） P235TR2（1.0255）	EN10216-1	Length≥6m
20	Seamless steel pipe for pressure(Unalloyed and alloyed high temperature property)	Φ38 ~168	P235GH（1.0345） P265GH（1.0425）	EN10216-2	Length≥6m

产品标准
Standard

Φ460mm PQF三辊限动芯棒连轧管机组

序号	品 种	规 格	材质（钢级）	标 准	备 注
1	石油套管管体料	Φ244.5~406.4	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT API Spec 5B	长度R1、R2、R3扣型STC、LC、BTC
2	石油套管接箍料	Φ244.5 ~406.4	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT API Spec 5B	长度R1、R2、R3扣型STC、LC、BTC
3	管线用无缝钢管	Φ244.5 ~457	A B X60-X65	API Spec 5L	长度R1、R2、R3扣型STC、LC、BTC
4	高压锅炉用无缝钢管	Φ245 ~457	20G 12Cr1MoVG 15CrMoG 1Cr5Mo 10Cr9Mo1VNb P11 P12 P22 P91 P92 P122	GB 5310 ASTM A335	长度R1、R2、R3扣型STC、LC、BTC
5	气瓶用无缝钢管	Φ245 ~457	30CrMo 35CrMo 37Mn	GB 18248	长度≥6m
6	结构用无缝钢管	Φ245 ~457	20 45 Q345 16Mn 27SiMn 12CrMoV	GB/T 8162	长度≥6m
7	高压化肥设备用无缝钢管	Φ245 ~457	20 16Mn 12CrMo 15CrMo 1Cr5Mo	GB 6479	长度≥6m
8	输送流体用无缝钢管	Φ245 ~457	20 45	GB/T 8163	长度≥6m
9	船舶用碳钢和碳锰钢无缝钢管	Φ245 ~457	360 410 460	GB/T 5312	长度≥6m
10	液压支架用无缝钢管	Φ245 ~457	45 27SiMn 30MnNbRe	GB/T 17396	长度≥6m
11	石油裂化用无缝钢管	Φ245 ~457	20 12CrMo 15CrMo 1Cr5Mo	GB 9948	长度≥6m
12	汽车半挂车轴用无缝钢管	Φ245 ~457	LZ20Mn2 LZ27Mn2	YB/T 4203	长度≥6m
13	低温管道用无缝钢管	Φ245 ~457	16MnDG 10MnDG 09DG 09Mn2VDG	GB/T 18984	长度≥6米
14	高温用无缝碳钢钢管	Φ245 ~457	A106B	ASME A106	长度≥6米
15	压力用无缝钢管（非合金室温特性）	Φ245 ~457	P195TR2（1.0108）P235TR2（1.0255）P265TR2（1.0259）	EN10216-1	长度≥6米
16	压力用无缝钢管(非合金和合金高温特性)	Φ245 ~457	P235GH（1.0345）P265GH（1.0425）	EN10216-2	长度≥6米
17	低中压锅炉用无缝钢管	Φ245 ~457	20	GB 3087	长度≥6米
18	石油天然气工业管线输送系统用钢管	Φ245 ~457	L320A	GB/T 9711	长度≥6米

Φ460mm PQF mill line

No	Variety	Size	Typical steel grade or code	Standard	Note
1	Petroleum Casing	Φ244.5~406.4	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT API Spec 5B	LengthR1、R2、R3 Thread Type STC、LC、BTC
2	Coupling Stock for Petroleum Casing	Φ244.5 ~406.4	J55 K55 N80 L80-1 C90 R95 P110 BT110T Q125	API Spec 5CT API Spec 5B	LengthR1、R2、R3 Thread Type STC、LC、BTC
3	Line Pipe	Φ244.5 ~457	A B X60-X65	API Spec 5L	LengthR1、R2、R3 Thread Type STC、LC、BTC
4	HP Boiler Pipe	Φ245 ~457	20G 12Cr1MoVG 15CrMoG 1Cr5Mo 10Cr9Mo1VNb P11 P12 P22 P91 P92 P122	GB 5310 ASTM A335	LengthR1、R2、R3 Thread Type STC、LC、BTC
5	Vessel	Φ245 ~457	30CrMo 35CrMo 37Mn	GB 18248	Length≥6m
6	Seamless steel pipe for structure use	Φ245 ~457	20 45 Q345 16Mn 27SiMn 12CrMoV	GB/T 8162	Length≥6m
7	Seamless Tubes for HP Fertilizer Conveying	Φ245 ~457	20 16Mn 12CrMo 15CrMo 1Cr5Mo	GB 6479	Length≥6m
8	Seamless steel pipe for fluid conveying	Φ245 ~457	20 45	GB/T 8163	Length≥6m
9	Seamless Tubes for Ship	Φ245 ~457	360 410 460	GB/T 5312	Length≥6m
10	Seamless steel pipe for hydraulic pillar	Φ245 ~457	45 27SiMn 30MnNbRe	GB/T 17396	Length≥6m
11	Cracking Tube	Φ245 ~457	20 12CrMo 15CrMo 1Cr5Mo	GB 9948	Length≥6m
12	Seamless Tubes for Cardan Shaft of	Φ245 ~457	LZ20Mn2 LZ27Mn2	YB/T 4203	Length≥6m
13	Seamless steel pipe for low temperature piping	Φ245 ~457	16MnDG 10MnDG 09DG 09Mn2VDG	GB/T 18984	Length≥6M
14	Seamless steel pipe for high temperature	Φ245 ~457	A106B	ASME A106	Length≥6M
15	Seamless steel pipe for pressure（Unalloyed room-temperature property）	Φ245 ~457	P195TR2（1.0108）P235TR2（1.0255）P265TR2（1.0259）	EN10216-1	Length≥6M
16	Seamless steel pipe for pressure (Unalloyed and alloyed high temperatureproperty)	Φ245 ~457	P235GH（1.0345）P265GH（1.0425）	EN10216-2	Length≥6M
17	LP and MP Boiler Pipe	Φ245 ~457	20	GB 3087	Length≥6M
18	Petroleum and natural gas industries—Steel pipe for pipeline transportation systems	Φ245 ~457	L320A	GB/T 9711	Length≥6M

质量管理
Quality management

质量理念：

以诚信赢得市场 以质量铸造品牌

Quality concept: To win the market by credibility and to make the brand by first-class quality.









NCLS-V5002试样加工中心

NCLS-V5002 sample machining center



硫化氢应力腐蚀试验系统

Hydrogen sulfide stress corrosion test system



高温电子拉伸试验机

High temperature electronic tensile tester



钢管扩径、扩口试验机

Pipe expanding machine





























