

宝钢特钢有限公司
BAOSTEEL SPECIAL METALS CO., LTD.
 1269 Shuichan Road Shanghai 200940 China
 地址: 上海市宝山区水产路1269号
 邮编: 200940

电话TEL: 86-021-56679080
 传真FAX: 86-021-56670867

网址: <http://tg.baosteel.net.cn/>
 宝钢在线: <http://www.baosteel.net.cn>

国内贸易平台 Domestic

上海宝钢特殊金属材料有限公司
SHANGHAI BAOSTEEL SPECIAL METAL CO., LTD.
 TEL: 021-56113751
 FAX: 021-56126525

上海宝钢浦东国际贸易有限公司
SHANGHAI BAOSTEEL PUDONG INTERNATIONAL TRADE CO., LTD.
 TEL: 021-36014655
 FAX: 021-51266533

上海宝钢不锈钢贸易有限公司
SHANGHAI BAOSTEEL STAINLESS STEEL TRADING CO., LTD.
 TEL: 021-66933311
 FAX: 021-66932879

广州宝钢南方贸易有限公司
GUANGZHOU BAOSTEEL SOUTHERN TRADING CO., LTD.
 TEL: 020-32219999
 FAX: 021-32219555

武汉宝钢华中贸易有限公司
WUHAN BAOSTEEL CENTRAL CHINA TRADING CO., LTD.
 TEL: 027-84298800
 FAX: 027-84298938

成都宝钢西部贸易有限公司
CHENGDU BAOSTEEL WESTERN TRADING CO., LTD.
 TEL: 028-85335388
 FAX: 028-85335696

北京宝钢北方贸易有限公司
BEIJING BAOSTEEL NORTHERN TRADING CO., LTD.
 TEL: 010-56512000
 FAX: 010-56512199*6700

长春宝钢钢材贸易有限公司
CHANGCHUN BAOSTEEL STEEL TRADING CO., LTD.
 TEL: 0431-85981165
 FAX: 0431-85981113

沈阳宝钢钢材配送有限公司
SHENYANG BAOSTEEL STEEL DISTRIBUTION CO., LTD.
 TEL: 024-31391158
 FAX: 024-31391198

上海宝钢商贸有限公司
SHANGHAI BAOSTEEL TRADING CO., LTD.
 TEL: 021-60869800
 FAX: 021-60869804*790

上海宝钢钢材贸易有限公司
SHANGHAI BAOSTEEL STEEL TRADING CO., LTD.
 TEL: 021-50509696
 FAX: 021-68404618

东莞市宝特模具钢加工有限公司
DONGGUAN BAOTE MOULD STEEL PROCESSING CO., LTD.
 TEL: 0769-88516020
 FAX: 0769-88556033

亚澳地区 Asia and Australia

宝和通商株式会社
HOWA TRADING CO.,LTD.
 TEL: 0081-3-3237-9121
 FAX: 0081-3-3237-9123

宝和通商首尔事务所
HOWA TRADING CO., LTD.,SEOUL OFFICE
 TEL: 0082-2-5080893
 FAX: 0082-2-5080891

宝钢澳大利亚贸易有限公司
BAO AUSTRALIA PTY LTD.
 TEL:0061-8-94810535
 FAX:0061-8-94810536

宝钢新加坡贸易有限公司
BAOSTEEL SINGAPOER PTE LTD.
 TEL:0065-63336818
 FAX:0065-63336819

宝钢越南代表处
REPRESENTATIVE OFFICE IN VIETNAM
 TEL: 0084-8-39100126
 FAX: 0084-8-39100124

宝钢泰国代表处
REPRESENTATIVE OFFICE IN THAILAND
 TEL: 0066-2-6543008
 FAX: 0066-2-6543010

欧非地区 Europe and Africa

宝钢欧洲贸易公司
BAOSTEEL TRADING EUROPE GMBH
 TEL: 0049-40-41994101
 FAX: 0049-40-41994120

宝钢西班牙有限公司
BAOSTEEL RSPANIA,S.L
 TEL: 0034-93-4119325
 FAX: 0034-93-4119330

宝钢中东代表处
BAOSTEEL MIDDLE EAST REPRESENTATIVE OFFICE
 TEL: 00971-4-8810788
 FAX: 00971-4-8810789

宝钢意大利钢材集散中心有限公司
BAOSTEEL ITALIA DISTRIBUTION CENTER SPA
 TEL: 0039-010-5308881
 FAX: 0039-010-5308895

美洲地区 America

宝钢美洲贸易公司
BAOSTEEL AMERICA INC.
 TEL: 001-201-4571144
 FAX: 001-201-4570909

宝钢底特律代表处
REPRESENTATIVE OFFICE IN DETROIT
 TEL: 001-248-2089918
 FAX: 001-248-2080999

宝钢休斯顿代表处
REPRESENTATIVE OFFICE IN HOUSTON
 TEL: 001-281-4847333
 FAX: 001-281-4843655

宝钢洛杉矶代表处
REPRESENTATIVE OFFICE IN LOS ANGELES
 TEL: 001-949-7526789
 FAX: 001-949-7521234

宝钢里约代表处
BAOSTEEL DO BRAZIL LTDA.
 TEL:0055-21-25311363
 FAX:0055-21-25310298

宝钢特钢有限公司
 BAOSTEEL SPECIAL METALS CO., LTD.

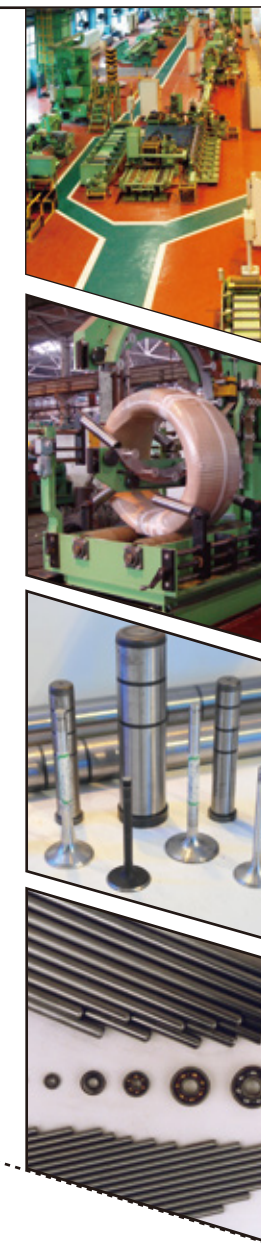
宝钢特钢银亮钢产品手册

Baosteel special metals silver steel product manual

Silver Steel Product Manual

宝钢特钢银亮钢产品

Baosteel special silver steel product manual
 宝钢特钢银亮钢产品手册





宝钢文化 Corporate Culture

严格苛求的精神
Spirit of strictness and demanding

学习创新的道路
Road of study and innovation

争创一流的目标
Striving for first-class target



核心价值 Core Value

诚信 Good Faith

协同 Synergy

宝钢特钢 Baosteel Special Metals

宝钢集团是中国最大、最现代化的国有钢铁联合企业，主要生产高技术含量、高附加值钢铁精品，已形成普碳钢、不锈钢、特钢三大产品系列。2012年，宝钢完成钢产量4383万吨，利润总额104亿元，居世界钢铁行业第二位。2013年，宝钢连续第十年进入美国《财富》杂志评选的世界500强榜单，位列第222位，并连续当选为“全球最受赞赏的公司”。

宝钢特钢有限公司是宝钢集团全资子公司，位于上海市宝山区吴淞工业区内，前身为上海第五钢铁厂、上海钢铁研究所和上海浦钢公司，创建于1958年，是我国最早的军工用特殊生产基地之一，1998年并入宝钢集团。

宝钢特钢有限公司拥有特种冶金，不锈钢、结构钢、高合金钢长材，合金板带及钢管等多条现代化的生产线，形成了以耐腐蚀合金、钛及钛合金、高温合金、精密合金、特殊不锈钢、特种结构钢六大类战略产品为核心，聚焦于航空航天、能源电站及交通运输等国民经济关键行业的战略产品群。产品有板、管、棒、丝、盘园、带、饼、环及异型材，广泛应用于航天、航空、核电、汽车、机械、电站、电子仪表和石油化工等行业。

宝钢特钢一直致力于向前沿技术市场、知名大公司、行业领导者、具有社会影响力的客户提供优质服务和开展广泛的合作。按照宝钢集团的发展规划，宝钢特钢将打造成为高端的新材料研发和制造基地。



Baosteel Group is China's largest, most modern state-owned iron and steel enterprises, mainly the production of high technology content, high value-added steel products, has formed the common carbon steel, stainless steel, special steel three product series. In 2012, Baosteel steel production of 43.83 million tons, a total profit of 10.4 billion yuan, ranking second in world steel industry. In 2013, Baosteel for tenth consecutive years to enter the American "fortune" magazine of the world's top 500 list, ranked 222nd, and was elected as a "global Most Admired Companies".

Baosteel Special Metals Co., Ltd. is a wholly owned subsidiary of Baosteel Group, located in Shanghai City, Baoshan District Wusong Industrial Area, formerly known as Shanghai the fifth steel plant, Shanghai iron and Steel Research Institute and the Shanghai Pu steel company, founded in 1958, is China's earliest military use of special steel production base, in 1998 into the Baosteel group.

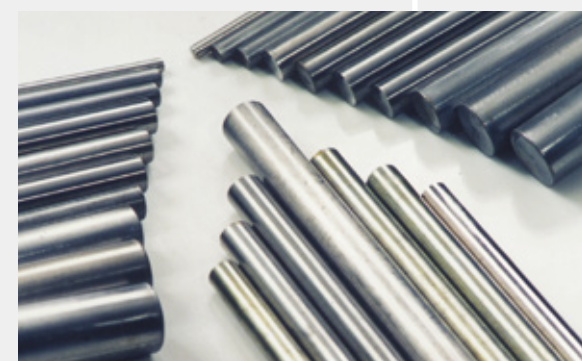
With more than 50-year experience, Baosteel Special Metals Co., Ltd. possesses advanced production lines for special metallurgy, stainless steel, structural steel and high alloy long products, alloy plate & sheet and strip and seamless tube, etc. Formed with corrosion resistant alloy, titanium and titanium alloy, high temperature alloy, precision alloy, special stainless steel, special steel class six strategic products as the core, focusing on the aerospace, energy, power stations and key industries of the national economy such as the transportation of the strategic product group. The products cover bar, wire, plate & sheet, strip, seamless tube, forging, etc. It focuses on applications in industries of aerospace, aviation, nuclear power, automobile, machinery, power stations, electronic instrumentation and petroleum chemical industry, etc.

Baosteel Special Metals Co., Ltd. has been devoting its efforts to providing quality service to customers among notable companies, industry leaders, social influential entities and frontier technology market. According to the development of Baosteel group planning, Baosteel Special Metals will be built into a high-end research and development of new materials and manufacturing base.



银亮钢产线简介 Silver Steel Product Overview

宝钢特钢供应能力与优势 Baosteel Special Steel's Capabilities and Advantages



- 现代化的装备能力
Modern Production Facilities
- 完善的质量控制体系
Comprehensive Quality Assurance System
- 市场驱动的材料设计理念
Market-driven Design Concepts for Materials
- 差异化的产品服务
Differentiated Products and Services

产线简介 Production Lines

银亮钢项目是经国家经贸委批准立项的“双高一优”技术改进项目，于2000年6月启动、2001年建成投产，年设计产量5万吨。2009年新增阀门钢生产线，不但满足了银亮产品的长期战略目标及国内汽车市场的优质气阀钢需求，而且填补了国内高品质阀门钢产品的空白，实现了阀门钢产品的跨越式发展。

银亮钢厂分为：银剥棒材、冷拉棒材和拉丝三条产线。按生产组织分为六条生产工艺流程线，其产品涵盖铁路、汽车制造、机械制造、液压配件、标准件、医疗器械、航天航空、国防工业等国民经济各行业。

银剥棒材产线由剥皮机、矫直碾光机、无芯外圆磨床和超声探伤机组成，产线通过不同工艺组合生产剥皮、剥皮碾光、剥皮磨光、剥皮磨光碾光四种交货状态的棒材。



Silver steel project, which is approved by the state economic and trade commission, is a "optimum" technical improvement project. It started in June 2000, completed and put into operation in 2001, in design and production of 50000 tons. In 2009, valve steel production line newly increased. This line not only meet the long-term strategic target and silver products domestic automobile market demand of high quality valve steel, but also fills the blank of domestic high-quality steel valve products, which realized the leap-forward development of valve steel products.

Silver steel mill is divided into three production lines: silver peeling bar, cold drawn bar and cold wire. According to production organization, it is divided into six production process line. The silver steel products cover railway, automobile manufacturing, machinery manufacturing, hydraulic parts, standard parts, medical equipment, aerospace, defense industry and other industries of national economy.

The production line of silver peeling bar is composed of peeling machine, straightening machine, no core cylindrical grinding machine and ultrasonic flaw-detecting machine. Through different process combination, four delivery states bar can be produced, like peeling, grinding, polishing, polishing grinding.



冷拉棒材产线由连拔机组、轧头机、拉拔机、罩式退火炉、连续退火炉、悬臂式矫直机、双曲线矫直机等组成，连拔产品由盘卷和直条组成，其特点是坯料为大盘卷，产品表面光洁度高可达h9。棒拉产品精度在h11到h12。冷拉棒材产线特别适宜冷拉不退火的产品生产。

拉丝产线由单、双头盘圆拉丝机、盘圆矫直机、强对流退火炉、光亮连续退火炉、盘圆打包机组成，产品主要由盘圆、直条、银亮丝组成。

The production line of cold drawn bar is composed of drawing unit, chuck machine, drawbench, bell type annealing furnace, continuous annealing furnace, cantilever type straightening machine, hyperbolic straightening machine. Cold drawn products include wire rod and vertical bar. The characteristic is that its blank is barincoil and the surface finishment of products can reach h9. Meanwhile the dimensional accuracy of cold drawn bars can reach h11 to h12. The production line of cold drawn bar particularly produces such products whose delivery state is cold drawn and not annealing.

The production line of cold wire is composed of single-double head wire drawing machine, straightening machine, strong convective annealing furnace, bright continuous annealing furnace and wire rod packing machine. The products include wire rod, vertical bar and silver silk.

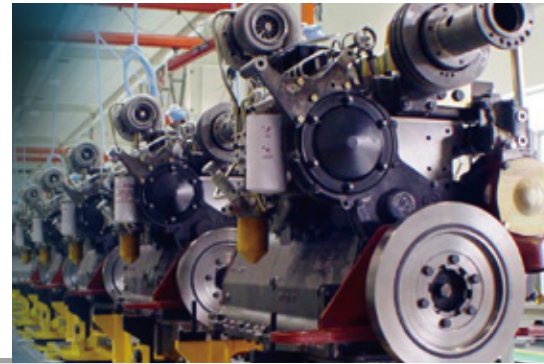


目录 Directory

工艺流程
Process 08

生产装备
Production Equipment 10

08



15

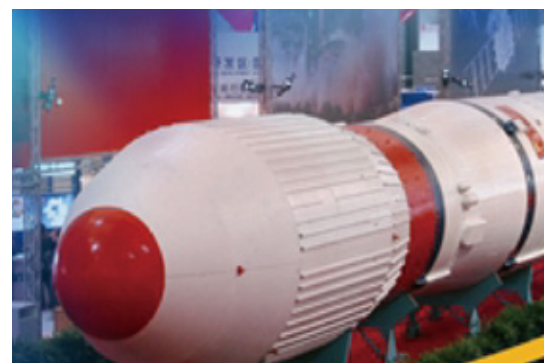
产品大纲
Product Outline 15

质量保证
Quality Assurance 21

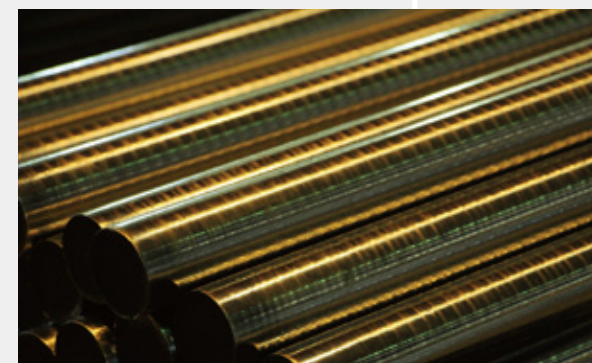


客户服务
Customer Service 29

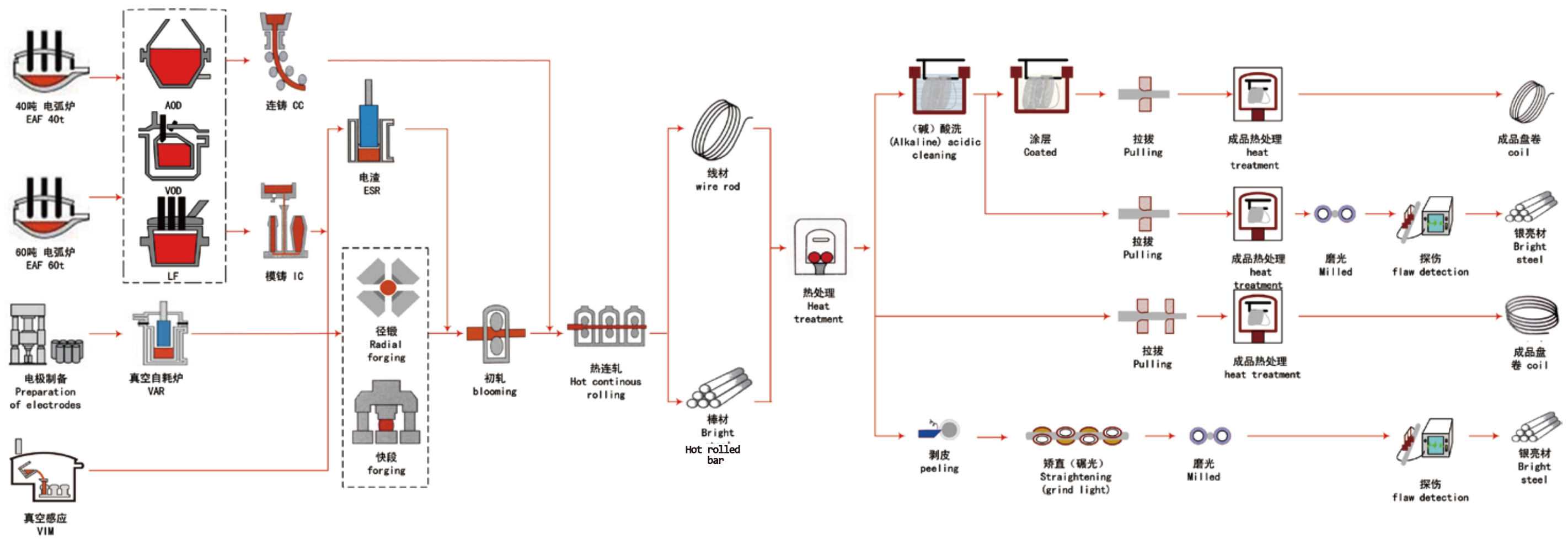
29



工艺流程 Process



银亮钢产品工艺流程 Silver steel Product Process





生产装备

Production Equipment



银亮钢产品生产装备

Silver steel Product Production Equipment

拉丝产线 production line of cold wire :



盘圆拉丝机 wire drawing machine :

盘圆拉丝机 wire drawing machine	XDR810+BC12-C1 单头盘圆拉丝机 single head wire drawing machine	DD610A×2H+BD4.65-C1 双头盘圆拉丝机 double head wire drawing machine
成品规格 trimmed size	4.0 ~ 13 mm	1.5 ~ 4.5 mm
盘重 weight	≤1.0 t	≤0.8 t
盘圆内径 wire rod diameter	700 ~ 1100 mm	500 ~ 1000 mm
加工精度 surface finishment	h9	h9

强对流退火炉 strong convective annealing furnace :

项 目 item	单 位 unit	技术指标 technical data
最高退火温度 Highest temperature of annealing	℃	850
炉温均匀性 Furnace temperature uniformity	℃	±3℃



银亮钢产品生产装备 Silver steel Product Production Equipment

冷拉棒材产线 production line of cold drawn bar :



连拔机 drawing unit :

设备名称 name	连拔机 drawing unit
成品规格 trimmed size	Φ4 ~ 20 mm
最大拉拔力 draft	2~8 t
产品外形 product shape	圆形、六角、方形 roundness, hexagonal, square
成品长度 length	2000 ~ 5500mm或盘圆
尺寸精度 dimensional accuracy	h9-h11

在线涡流探伤机
online eddy current testing machine:

探伤规格 Inspection specifications	4 ~ 13mm
信噪比 Signal to Noise Ratio	≥10dB
稳定性 stability	≤2dB
周向灵敏度差 sensitivity	≤3dB

银剥产线 production line of silver peeling bar :



棒材剥皮机 peeling machine :

成品规格 trimmed size	Φ 15 ~ 80mm
生产长度范围 length	3 ~ 6m
成品直径公差等级 finished diameter tolerance grade	h11
成品表面粗糙度 finished surface roughness	Ra ≤ 3.2 μm

NUKEN探伤机
UNKEN flaw-detecting machine :

探伤规格 Inspection specifications	15 ~ 80 mm
结构形式 structural style	旋转、超声 rotation, ultrasonic
稳定性 stability	≤2dB
周向灵敏度差 sensitivity	≤3dB
标记精度 mark precision	± 30mm

银亮钢产品生产装备 Silver steel Product Production Equipment

气阀钢产线 production line of valve steel :



开卷矫直机 straightening machine :

项 目 items	参 数 parameters
生产规格 trimmed size	5 ~ 13mm
矫直方式 Straightening mode	一组倒置悬臂式预矫, 两组回转式精矫 horse cantilever, rotation
矫直后钢材弯曲度 tortuosity	≤0.3‰
定尺长度偏差 length deviation	± 5mm
剪切压扁 shear squashed	≤0.15mm
表面压痕或擦伤 surface indentation or scratch	深度 depth ≤0.10mm

涡流探伤机
eddy current testing equipment:

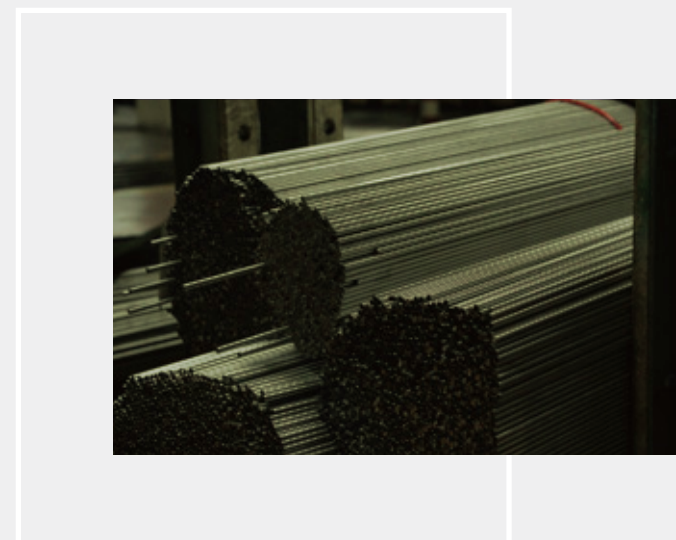
探伤规格 Inspection specifications	4 ~ 35mm
周向灵敏度差 sensitivity	≤3dB
信噪比 Signal to Noise Ratio	≥10dB
稳定性 stability	≤2dB

高速磨床
high-speed grinder:

生产规格 trimmed size	Φ5 ~ 30mm	
磨削方式 grinding mode	磨床连线贯通 粗磨+精磨 Grinding machine attachment through coarse grinding + accurate grinding	磨床贯通磨削 Grinding machine through grinding
磨削精度及椭圆度 Precision and ovality	h9, 公差之半 half of tolerance	
磨削后钢材 表面粗糙度 surface roughness	精磨 Ra ≤ 0.8 μm	



产品大纲 Product Outline





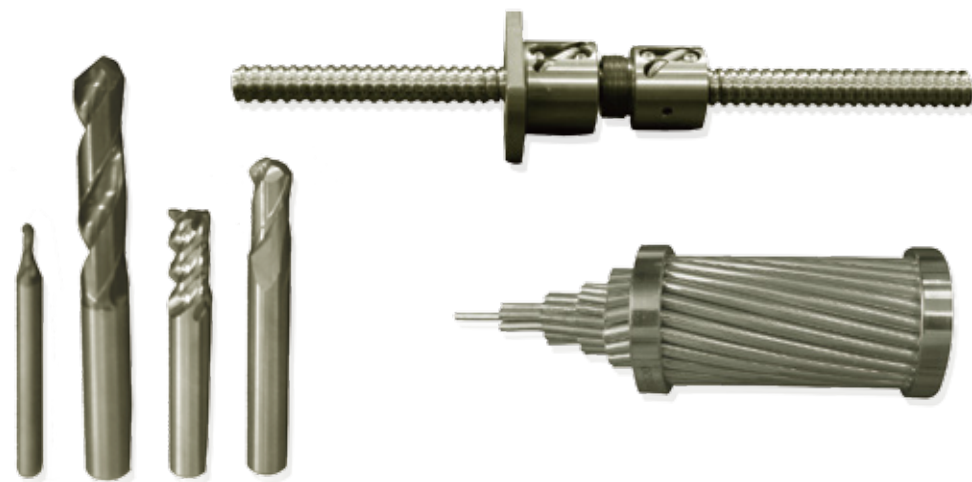
银亮钢产品大纲 Silver Steel Product Outline

冷拉棒材产线 production line of cold drawn bar

产线特点：由连拔产线与棒拉产线组成,主要生产 轴承、各类工具、标准件、航天航空和核电用各类紧固件等钢材。

Characteristic:from the production line and even pull pull rod production line composed mainly produces bearings, all kinds of tools, standard parts, aerospace and nuclear power with all kinds of fasteners and other steel products.

	钢类 Type of steel	钢种 grade	标准 standard	产品规格 diameter	尺寸精度 dimensional accuracy
连拉 continuous pull product	低合金 Low-alloy structure steel	SAE1141	协议agreement	圆棒round bar:4 ~ 20 mm 六角棒 hexagon bar:3 ~ 10 mm Wire rod:4 ~ 20 mm	h9 ~ h11
		SAE1144			
		SS490			
	合金钢 Alloy tool steel	9SiCr	GB/T 1299-2000		
		S2M	协议agreement		
		16MnCr5	协议agreement		
		20Cr	GB/T 3078-2008		
		40Cr	协议agreement		
		42CrMoS4	协议agreement		
		R18CrNi8	协议agreement		
		SAE5140H	协议agreement		
	碳结钢 Carbon structure steel	SAE1015	协议agreement		
	轴承钢 Bearing steel	GCr15	协议agreement		
			Q/OAPD 2731-2012		
		Grade3S	协议agreement		
SAE52100SF		协议agreement			



	钢类 Type of steel	钢种 grade	标准 standard	产品规格 diameter	尺寸精度 dimensional accuracy		
冷拔 Cold draw products	不锈钢 Stainless steel	0Cr18Ni9	GJB 2294-95	圆棒 round bar:8 ~ 45 mm 六角棒 hexagon bar:8 ~ 36 mm 方棒 square rod:9 ~ 30 mm	h10 ~ h12		
		1Cr17Ni2					
		1Cr18Ni9Ti					
		2Cr17Ni3(S80)	WS9-S80-96				
		3Cr13(S/S)	WS9-6602-96				
	6Cr4Ni12Mn5A	协议agreement					
	高工钢 High-speed tool steel		W6Mo5Cr4V2			GB/T 9943-2008	
	高温合金 High temperature alloy steel	GH2036	GH2132			GB/T 14994-1994	
						协议agreement	
						GB/T 14994-1994	
						GJB 2611A-2006	
							YB/T 5249-1993
		GH3030	GH4033			GB/T 14994-1994	
		GH4033					
		GH696	协议agreement				
		GH80A	协议agreement				
		UNSS66286	协议agreement				
	YZGH2132	协议agreement					
	合金钢 Alloy tool steel		9SiCr			GB/T 1299-2000	
	合金结构钢 Alloy structure steel		15Cr			GB/T 3078-2008	
			18CrNi8			协议agreement	
			27SiMnMoVA			协议agreement	
			30CrMnSiA			GJB 1951-94	
40Cr			协议agreement				
42CrMoS4			协议agreement				
R18CrNi8			协议agreement				
SAE5140H			协议agreement				
耐热钢 heat resistant steel		1Cr11Ni2W2MoV	GJB 2294-95				
		1Cr11Ni2W2MoV					
		1Cr12Ni2WMoVNb	协议agreement				
		1Cr12Ni3MoVN(S/SJ2)					
轴承钢 Bearing steel		8Cr4Mo4V	YB 4105-2000				
		Cr4Mo4V	YB/T 688-1976				
		G95Cr18	GB/T 3086-2008				
		GCr15	协议agreement				
			Q/OAPD 2731-2012				
		W9Cr4V2Mo	协议agreement				



银亮钢产品大纲 Silver Steel Product Outline

拉丝产线 production line of cold wire

产线特点：拉丝生产线主要生产产品用于军工、航天航空、舰船、核电、化工、机电、汽车、铁路、电子、医疗、轻工、食品等行业。

Characteristic: production line of cold wire mainly produces products are used in military industry, aviation, ships, nuclear power, chemical, electrical, automotive, railway, electronic, medical, light industry, food industry, etc.

	钢 类 Type of steel	钢 种 grade	标 准 standard	产品规格 diameter	尺寸精度 dimensional accuracy
优 丝 High quality wire	合金钢 Alloy tool steel	9SiCr	YB/T 095-1997	规格diameter : Φ0.10 ~ Φ 14mm 形态form: 盘 圆wire rod、 直条vertical bar、银亮钢 丝silver steel wire	h9-h11
		8Cr4Mo4V	YB 4105-2000		
	轴承钢 Bearing steel	Cr4Mo4V	YB/T 688-1976		
		GCr15	协议agreement Q/OAPD 2531-2012		
		SAE52100	协议agreement		
		SWP52100	协议agreement		
		W9Cr4V2Mo	协议agreement		
特 丝 Special quality wire	不锈钢 Stainless steel	04Cr18Ni9Ti	Q/BQB 2552-2009		
		0Cr12Mn5Ni4Mo3Al	Q/HYAD837-2005		
		1Cr12Ni3MoVN	协议agreement		
		1Cr17Ni2	GJB 2294-95		
		1Cr18Ni9Ti	GB/T 4240-1993		
		1Cr18Ni9Ti	GJB 2294-95		
	高工钢 High-speed tool steel	W6Mo5Cr4V2	YB/T 5302-2006		
			协议agreement		
	高温合金 High temperature alloy	GH2132	GB/T 14994-1994		
			GJB 2611A-2006		
			YB/T 5249-1993		
			协议agreement		
	合金钢 Alloy structural steel	H10Cr3SiNiMoVA	协议agreement		
H10SiMnCrNiMoV		GJB 3323-98			
精密合金 Precision alloy	H36	协议agreement			
		协议agreement			
耐热钢 Heat resistant steel	1Cr11Ni2W2MoV	GJB 2294-95			
		1Cr12Ni2W2MoV	GJB 2294-95		

银剥产线 production line of silver peeling bar

产线特点：产线通过对热轧、热轧退火（或固溶）钢材的高效切削加工，使热轧、热轧退火（或固溶）钢材一些常见表面缺陷（如裂纹、脱碳等）得到清除，又通过表面全复盖方式的矫直碾光使棒材表面粗糙度得到改善，且全复盖方式的矫直碾光使棒材弯曲度严格控制在1‰以内，因此产品适应了加工自动化程度高的用户特殊需要

对剥皮矫直棒材进一步作磨光处理，可使钢材表面的切削加工微缺陷得到清除，从而使钢材的疲劳性能得到提升。

银剥产线采用非压力加工方式，而是采用了切削、磨削加工来清除压力加工产品的表面缺陷，是通过传统意义“钢材”的深加工来提升钢材品质，适应了现代化机加工行业的精料趋势。

Characteristic: production line uses efficient machining technology to remove some common surface defects (such as cracks, decarburization, etc.) of hot roll and annealing (or solution) bars. This line also improves surface roughness through all cover straightening and lighting and strictly control the tortuosity within 1 ‰, which adapt to the user's special needs of processing a high degree of automation.

Through the further polishing processing for peeling straightening bar, the micro machining defects on the surface of the steel are removed, so that the fatigue property of steel is improved.

Production line of silver peeling bar uses machining and abrasive machining to remove the surface defects of products and improve the quality through further processing, which adapt to the modern machining industry trend of concentrate.

钢 类 Type of steel	钢 种 grade	标 准 standard	产品规格 diameter
碳结钢 Carbon structure steel	XC45	协议agreement	Φ 15 ~ 80mm
	UC2	协议agreement	
合结钢 Alloy structure steel	37CrS4HL	协议agreement	
	38B3	协议agreement	
	40Cr	协议agreement	
		GB/T 3078-1994	
40CrAH	协议agreement		
	SAE5120H-M	协议agreement	
模具钢 Die steel	H13	Q/OAPD 2741-2012	
轴承钢 Bearing steel	100Cr6	协议agreement	
	GCr15	协议agreement	
	SUJ2S	协议agreement	
高温合金 High temperature alloy	N80A	协议agreement	
耐蚀合金 corrosion resistant alloy	Inconel751	协议agreement	





产品大纲 Product Mix

气阀钢专用产线 production line of valve steel

产线特点：气阀钢生产线主要生产高精度气阀钢磨光棒材，气阀钢产线通过对热轧（固溶或退火）气阀钢盘卷坯开卷矫直、磨光和对热轧气阀钢（固溶或退火）棒材坯矫直、磨光加工去除钢材表面缺陷，为气阀制造企业提供高质量原材料。

Characteristic: production line of valve steel mainly produces high precision valve steel polished rod. This line provides high quality materials through straightening, polishing, removing surface defects for hot rolled (solution or annealing) valve steel.

类型 Type	国标牌号 GB	美标牌号 SAE	日标牌号 JIS	德国牌号 DIN	规格 diameter	尺寸精度 dimensional accuracy
马氏体型 Martensitic	42Cr9Si2				Φ5 ~ 80mm	h9-h12 表面粗糙度surface roughness: 电镀锌electric upsetting: Ra ≤ 1.6 μm 热挤压hot extrusion: Ra ≤ 2.2 μm
	45Cr9Si3	HNV3	SUH1	X45CrSi9-3,1.4718		
	51Cr8Si2		SUH11			
	40Cr10Si2Mo	HNV1	SUH3	X45CrSiMo10-2,1.4731		
	85Cr18Mo2V			X85CrMoV18-2,1.4748		
奥氏体型 Austenitic	55Cr21Mn8Ni2N	EV12		X55CrMnNiN20-8,1.4875		
	53Cr21Mn9Ni4N	EV8	SUH35	X53CrMnNiN21-9,1.4871		
	50Cr21Mn9Ni4Nb2WN			X50CrMnNiNbN21-9,1.4882		
	3Cr23Ni8Mn3N	EV16		X33CrNiMnN23-8,1.4866		
	2Cr21Ni12N	EV4	SUH37			
	4Cr14Ni14W2Mo		SUH31			
合金型 Alloy type	GH4080A	HEV5		Nimonic80A,NiCr20TiAl		
	GH4751	HEV3		Inconel751,NiCr15Fe7TiAl		



质量保证 Quality Guarantee





质量保证 Quality Certification

- 宝钢特钢从1995年开始逐步按照ISO9001、AS9100B、GJB9001A、HAF003、ISO/TS16949标准以及顾客的特殊要求，建立航空航天、军工、核电及汽车质量管理体系，并形成一整套质量体系文件。
- 宝钢特钢确定并运行的质量体系过程共有21个，包括：管理策划过程、管理评审过程、内部审核过程、纠正预防措施改进过程，数据分析和利用过程、顾客满意度监视和测量过程、需求识别和评审过程、设计过程、交付过程、服务过程、生产计划过程、设备和工装管理过程、文件管理过程、人力资源管理过程、采购和供方管理过程、产品防护过程、检验和试验管理过程、测量设备管理过程、标识和可追溯性管理过程、不合格品控制过程。
- 宝钢特钢通过制定和落实质量目标、定期开展内部质量审核和管理评审，持续改进质量体系。
- 宝钢特钢的各类质量体系均通过第三方认证。

Since 1995, Baosteel has established aviation and aerospace, military, nuclear and automotive quality management system and formed a complete set of quality system documents in accordance with ISO9001, AS9100B, GJB9001A, HAF003, ISO/TS16949 standard and specific requirements of customer

Baosteel also determines and runs a quality system which has totally 21 processes, including: Management planning process, management review process, internal checking process, corrective and preventive measures to improve the process, data analysis and use processes, customer satisfaction monitoring and measurement process, needs identification and assessment process, the design and development process, production process, delivery process, service process, production planning process, equipment and tooling management processes, document management process,

human resource management processes, procurement and supplier management processes, product protection, process, inspection and test management processes, measuring equipment management processes, identification and traceability management process and nonconforming product control process.

Through the development and implementation of quality objectives, regularly carrying out internal quality checking and management reviews, etc., Baosteel continues to improve the quality system

All kinds of quality system had gotten certificates given by the third-party.



CQC中国质量认证中心ISO9001:2008质量管理体系认证
CQC China Quality Certification Center ISO9001:2008 quality management system certification



航空航天质量体系认证
Aerospace Quality System Certification



CNAL中国合格评定国家认可委员会 实验室认可证书ISO/IEC17025:2005
CNAL China National Accreditation Board for Laboratories Accreditation Certificate ISO/IEC17025: 2005

质量保证 Quality Certification



GHC中国冶金工业质量体系认证中心GB/T9001:2008—ISO9001:2008
GHC China Metallurgical Industry Quality System Certification Center GB/T9001:2008 - ISO9001:2008



CMS中启计量体系认证中心
ISO10012:2003测量管理体系认证
CMS Measurement Management System Certification Center
ISO10012: 2003
Measurement Management System Certification



中国新时代认证中心
GJB9001A-2001军工质量管理体系认证
China Xinshidai Certification Center
GJB9001A-2001
quality management system certification of military

质量检测 Quality Inspection

化学检测 Chemical Analysis



PW2404 X射线荧光光谱仪
PW2404 X-ray fluorescence spectrometer



ARL4460光电直读光谱仪
ARL4460 photoelectric direct-reading spectrometer



EMIA-820V红外碳硫分析仪
EMIA-820V infrared carbon and sulfur analyzer



EMGA-620W氧氮联测仪
EMGA-620W oxygen and nitrogen analyzer



EMGA-621W氢分析仪
EMGA-621W hydrogen analyzer



电感耦合等离子体发射光谱仪
inductively coupled plasma emission spectrometer



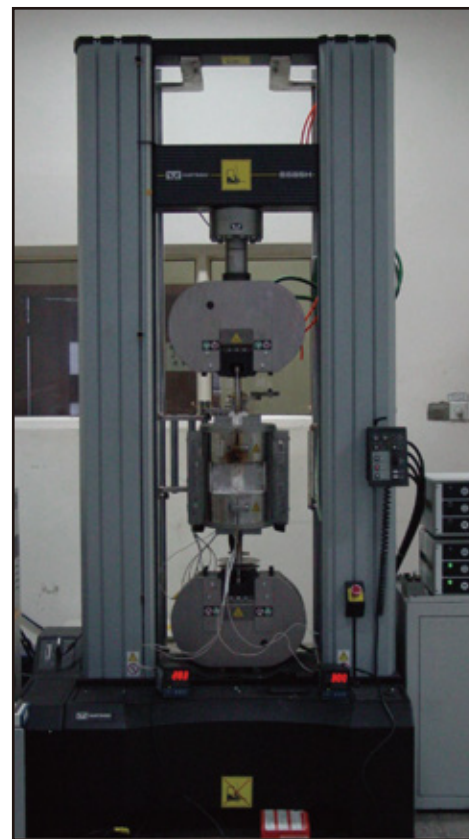
石墨炉原子吸收光谱仪
graphite oven atomic absorption spectrometer

质量检测 Quality Inspection

物理检测 Physical Test



ZOOMTESTOR布、洛、维三用硬度计
ZOOMTESTOR
Brinell, Rockwell, Vickers
hardness tester



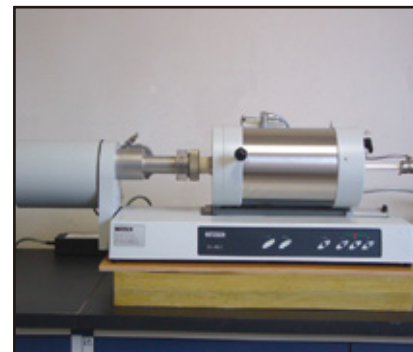
Z150电子式高温拉伸试验机
Z150 electronic elevated temperature tensile tester



YAW6106液压压力试验机
YAW6106 hydraulic pressure testing machine



疲劳试验机
Fatigue test



DIL402C膨胀仪
DIL402C dilatometer



电子蠕变试验机
Creep testing machine

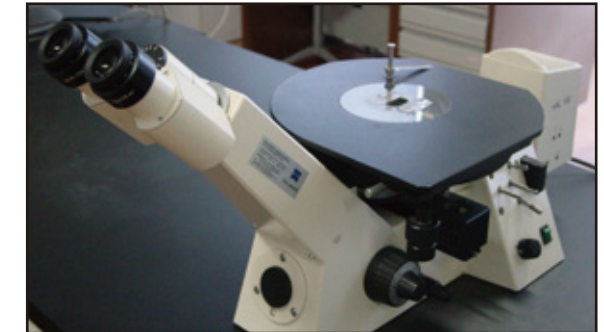
金相分析 Metallographic Test



Axioplan-2正置式金相显微镜
Axioplan-2 metallographic microscope for
specimens upward-mounted



NEOPHOT32卧式金相显微镜
NEOPHOT32 horizontal metallographic microscope



AXIOVERT25CA金相显微镜
AXIOVERT25CA
metallographic microscope



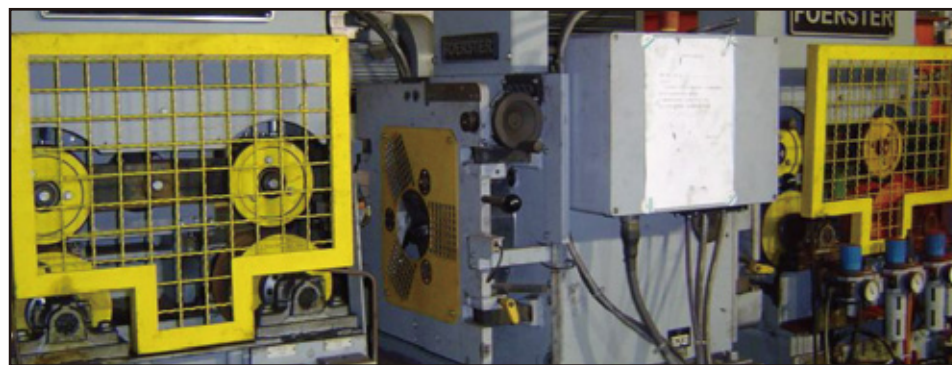
显微硬度计FM-700D
FM-700D microhardness tester

质量检测 Quality Inspection

物理检测 Physical Tesx



银亮棒材超声探伤设备
ultrasonic flaw detection equipment for bright bars



A、B、C、D线棒材漏磁探伤设备
magnetic flux leakage testing
equipment for wire and bar installed in
Line A, Line B, Line C and Line D



棒材涡流探伤设备
eddy current flaw detection equipment for bars



用户服务 Customer Service





技术支撑 Technical Support

客户代表

是用户使用宝钢特钢产品的技术联络人，负责为用户提供选材咨询、订货、物流跟踪、货款结算、质量异议处理、使用技术指导、信息沟通等全方位服务。

产品工程师

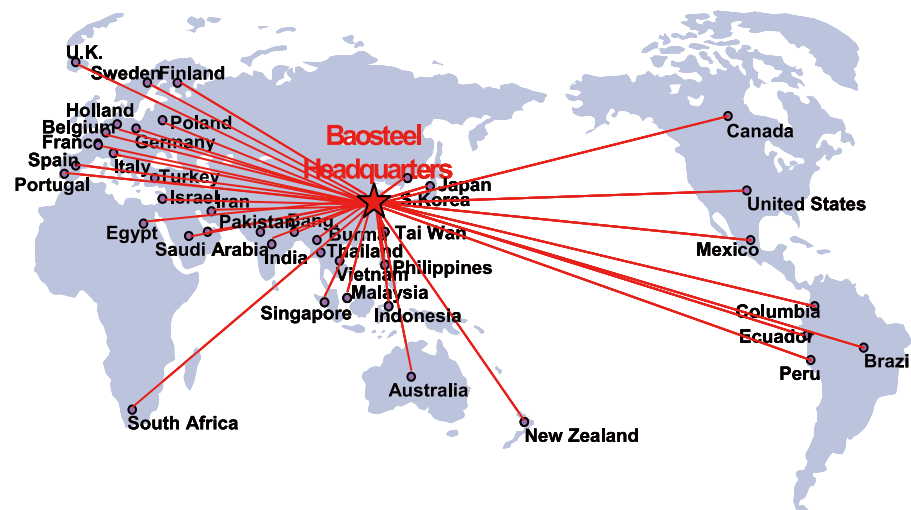
宝钢特钢的资深工程师，为用户提供各类产品的生产、使用技术服务，并根据用户的特殊需求进行个性化的质量设计，与客户代表共同解决技术难题，必要时提供现场服务。

技术专家与首席工程师

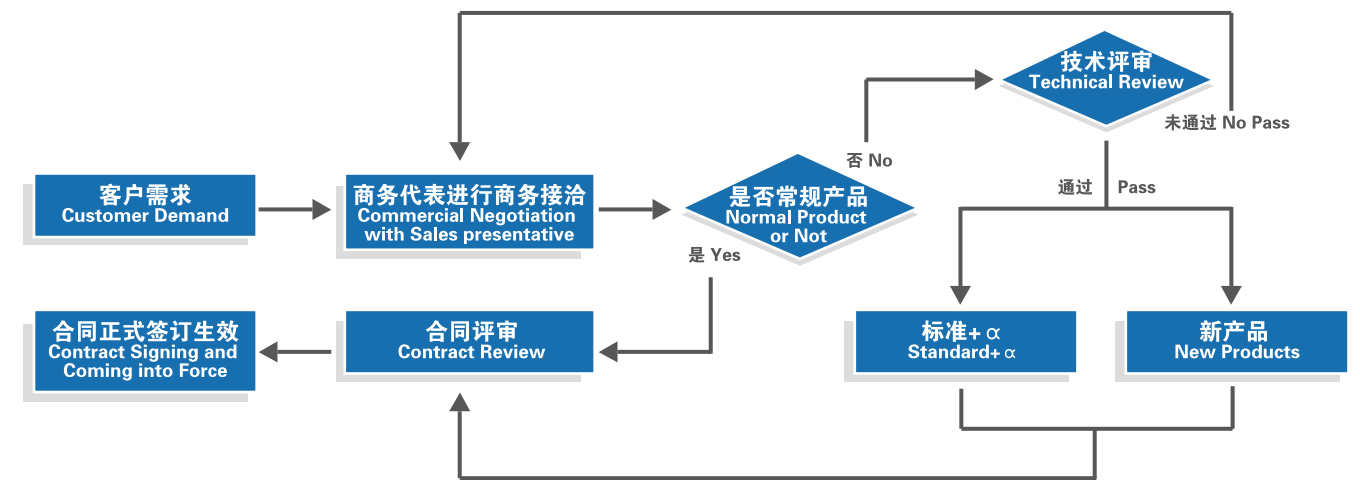
来自宝钢研究所、制造部门的专业技术专家与首席工程师，针对用户和市场的需要，研发特殊钢新产品，并提供产品检测、腐蚀、焊接、热处理等用户技术服务。

产销研一体化小组

由宝钢特钢制造、销售、研发等各单元的骨干力量组成，以专业的团队方式解决用户使用及生产、研发方面的问题，提高宝钢特钢产品的市场竞争力。



合同签订流程与异议处理 Procedure of Contract Signig & Claims Handling



Sales representative

Technical contact person, to provide customer service concerning products advisory, order placing, logistic tracing, loan and accounts, objection handling, operation guide etc.

Production engineer

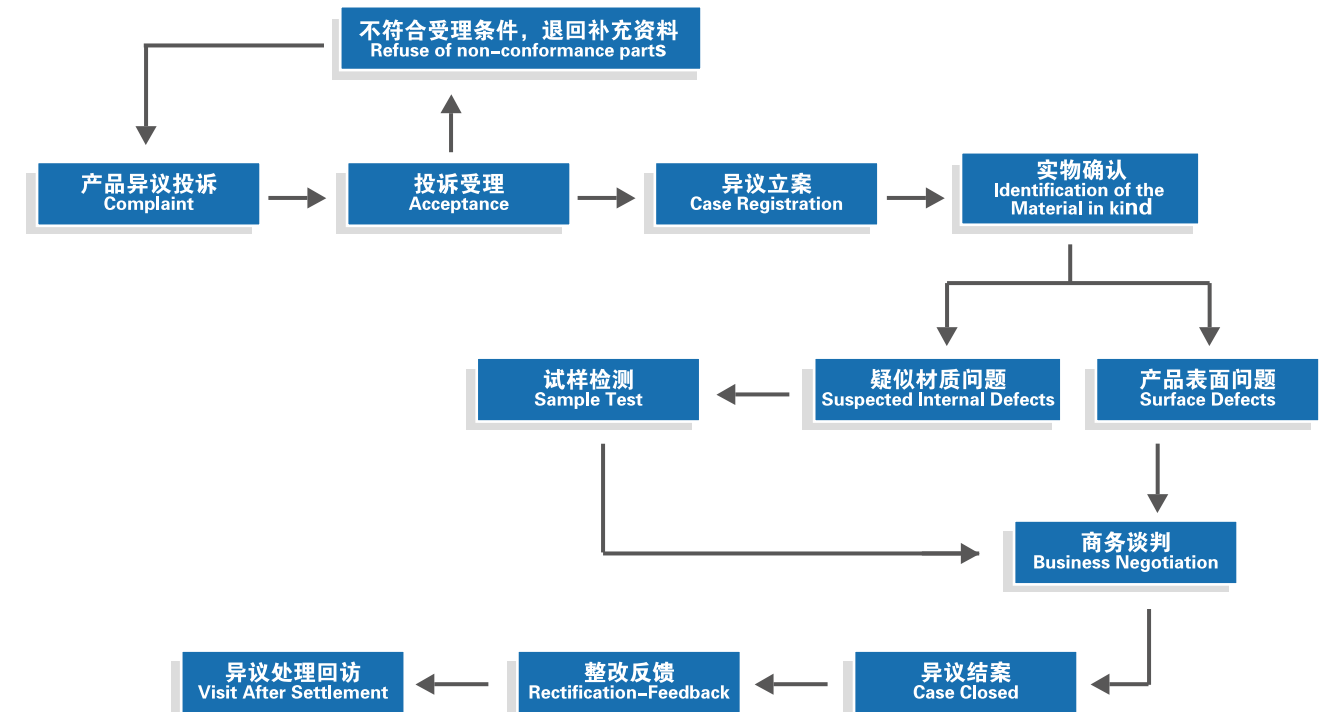
Baosteel special metals Steel's senior engineer, to provide technical support concerning production and quality design; onsite service available if necessary.

Technique experts and chief engineer

Researching on developing of new products to meet the requirements of the market; provide post service such as inspection, corrosion test, welding, heat treatment etc.

Production, sales, research team (PSRT)

Consist of people from different departments of Production, sales, research; the team is to solve the problems of the customers on using, production and researching.





环境方针 Environmental Policy

节约资源，减少排放，实行过程污染控制，不断减轻环境负荷。持续改进，遵法守约，推行全方位清洁生产，能力建设绿色特钢。

Saving resources, Reducing emissions, Carrying out pollution control through the process, Reducing environmental load consistently. Continuously improving, Persistently observing the law, Pursuing "clean production", Striving for "Green Special metals Steel".

环境目标 Environment Objective

推行清洁生产审计，建设“绿色特钢”，“实现世界一流清洁钢铁企业”。

Carrying out clean production audits, Building "Green Special metals Steel", Being a "world-class clean iron and steel enterprise."



OHSAS 18001:2007 职业健康和安全管理体认证
OHSAS 18001:2007 Certification



ISO 14001:2004 环境体系认证
ISO 14001:2004 Certification