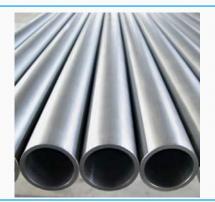


# Professional Stainless Steel Pipe Manufacturer









#### **HSE Announcements**

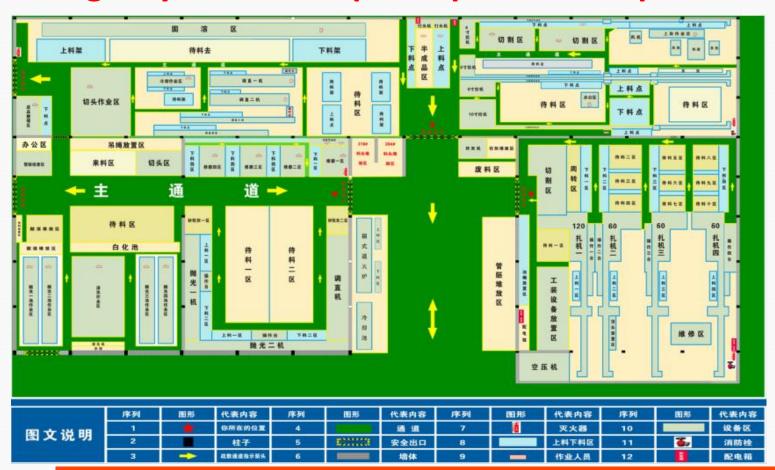


## **Emergency Exit & Escape Map—Workshop 1-Floor Plan**



## **HSE** Announcements

## **Emergency Exit & Escape Map - Workshop 1**





## **Piercing Workshop**



遺体

## **HSE** Announcements



# Emergency Exit & Escape Map –Testing center & Warehouse







- Company Profile
- **□** Company Superiority
- Company Qualification





# Part I

# **PROFILE**

- **■**Enterprise Overview
- **□**Company History

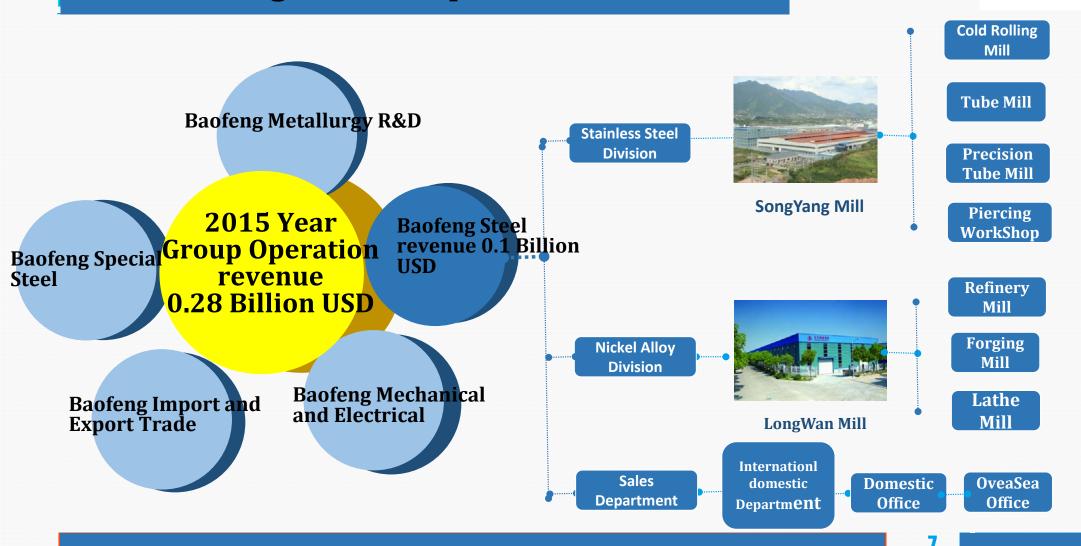
■ Main Products

**■**Sales Performance

■Application Fields



## Part I:Baofeng Steel Group Co.,Ltd Overview







Establish	2000 Year
Registered capital	22.4 Million USD
Employees	436
Quality Management System Certificate	ISO9001:2008
Environment Management System Certificate	ISO14001:2004
Occupational Health&Safty Management System Certificate	OHSAS18001:2007
Special equipment manufacturing license	A1,A2,B2Class,GermanTUVCertifi cate,PED97/23/EC European Union Certificate,Russian RTN and GOST Certificate
Main Products:	Industrial Austenitic Stainless Steel Pipe,Duplex Steel Pipe,Nickel Alloy Pipe
Floor space	Thiry Five thousand square meter
Output Ability/Year	Twenty-four thousand Ton/2000 tons



## Part I:Baofeng Steel Group Co.,Ltd Overview



#### 2000

Established Baofeng Special Steel annual output 25000 tons Stainless steel bar, steel ingot

#### 2002

Baofeng piercing start produce 1800 tons mother pipe/Year

#### 2006

Baofeng move and rebuild new SongYang production workshop,2000 ton cold rolled/drawn stainless steel seamless pipe/annual output

#### 2007

Changed Name:Baofeng Steel Group Co.,Ltd

#### 2009

Baofeng applied Seven Shipyard certificates, products successed used in Shipbuidling/Military field **2010** 

Baofeng facility reforming, established
Baofeng special material
division, produce High Nickel Alloy

#### 2014

Baofeng completed 5S system reform, full implementation precise standardization production control system

#### 2015

Baofeng completed Natural gas solid solution furnace transformation, products online tracking system, was named National High-Tech Enterprise

HISTORY 2000

2005

2010

2015

#### 2003

Baofeng seamless mill start produce annual output 6000 ton stainless steel seamless pipe

#### 2005

Established Baofeng import&Export Co.,Ltd,export 2000 tons to worlds.

#### 2008

Approved PED Certificate, Products
export European market, 630mm
hydraulic cold drawing production line
start produce, build inspection
workshop

#### 2011

Baofeng High Nickel Alloy:N04400、N06600、N06625、 N08800、N08825 through National Iron and steel material testing center and SGS Inspection.

#### 2012

Baofeng High Nickel Alloy:Hastelloy C276、B、B2 through National Iron and steel material testing center and SGS Inspection

# **Part I: Main Steel Grade and Size Range**

主主权业集团 BAOFENG STEEL GROUP
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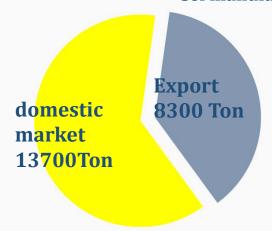
Steel Grade:	Material:	Size Range:
Austenitic Stainless Steel	304/L/H/LN、316/L/H/LN/Ti、321/H、 317/L/LN、 347/H、310S/H、309S	OD:6-711,WT:0.5-60
Nickel Alloy Pipe	N02200、N02201、N04400、N06600、 N06690、N06625、N06985(G3)、 N08028、N08800、N08810、N08811、 N08825、N10276、N10624、N10629、 N10675	OD:12-325,WT:0.8-20
Super Austenitic Stainless Steel	N08904 (904L)、S31254、S30432、 S31042、N08367(6Mo)	OD:12-325,WT:0.8-20
Super/Duplex Stainless Steel	S31500、S32101、S32003、S32304、 S31803、S32205、S32750、S32760	OD:12-426,WT:0.8-30



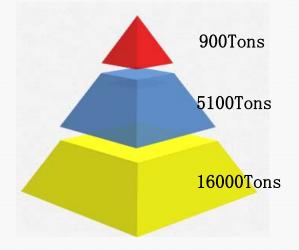
#### Part I: Sales Volume



Baofeng steel pipe have been exported to North America, Europe, the Middle East, Southea st Asia, more than 50 countries. Product sales increase year by year. 2014 year sale volum e has reached 22000 tons. Products covering oil and gas,transporting,refining, chemical i ndustry,coal chemical Plant,electric power,nuclear power,shipbuilding,Marine engineerin g,Sea water desalination and water treatment,instrument& instrumentation,pressure ves sel manufacturing,machinery manufacturing and other fields

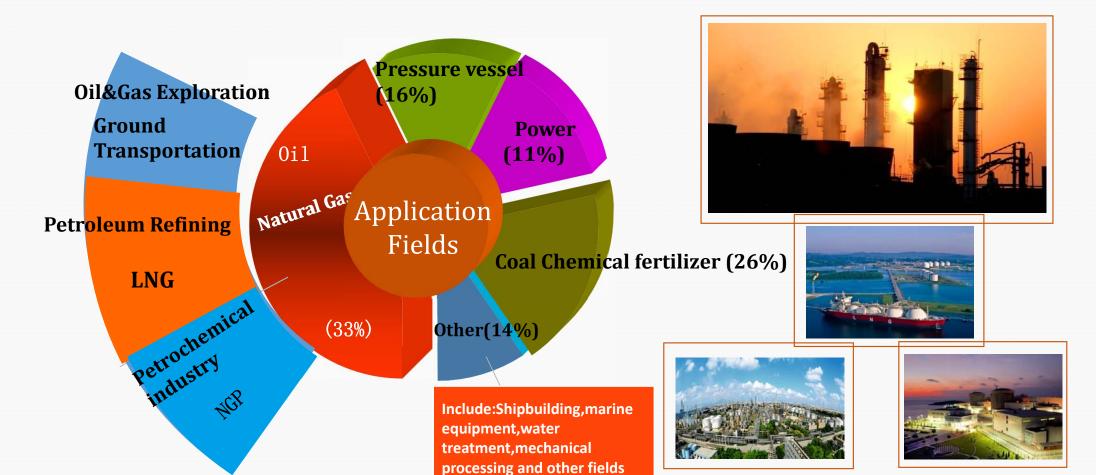


Products Sale Volume proportion:
Export:40%
Other Special Material:4%
(Super)Duplex Stainless Steel:23%
Austenitci Stainless steel:73%



# **Part I: Application Fields**







# Part II:

# **Superiority**

- □ Products Superiority
- ☐ Technical Equipment Superiority
- **□** Quality Guarantee
- Service Guarantee

#### **Part II: Four Guarantee**



- 1 Products Superiority
- Technical Equipment Superiority
- **3** Quality Guarantee
- 4 Service Guarantee







## **Part II: Products Superiority**





**Heat Exchanger Tube** 



**Xygen Pipeline** 



**Low Temperature LNG Pipe** 



**Nickel Alloy Pipe** 



ShipBuilding/Yard Pipe



Sanitary Pipe/Tube



**Precision Instrument tube** 



**Hydrogenation Furnace tube** 



Rectangular pipe

1.Complete product variety, complete steel grade specification coverage widely
2.Diameter 6~38mm Longest length 32 m,diameter 38-168mm longest length
24m,219-630mm longest length
14m,meet special equipment manufacturing require and decrease field installation welding,improve process pipeline safety
3.Long-term retention raw material inventory 2000 tons,Semi-finished products inventory 2000 tons,finished products inventory 1000 tons,improve production efficiently and ensure

delivery time

## Part II: Advantage Products1

## **High Temperature Nickel Alloy Pipe**

- √ more than 20 Key technology,11 national patents
- ✓N02200,N04400,N06600,N06625N08028,N08800,N088

10,N08825,N10276 material alloy pipe through national material test center and SGS Inspection Center

Material chemical composition, purity and uniformity index reached the international level;

Refined surface treatment;

Precision heat treatment technology;

- **✓ Deliveried USA Schlumberger**;
- **✓ Deliveried ZheJiang SanJing Petroleum Company.**









## **Part II: Advantage Products2**

## (Super) Duplex Stainless Steel

- ✓ Superior (Cl-) corrosion resistance, Excellent stress corrosion resistance ability;
- ✓ Excellent Pitting corrosion and Crevice corrosion performance.Comprehensive mechanical properties;
- **√** Good welding performance;
- **✓**Key technology:
- Heat Treatment Pipe making technology, make pipe metal tissue density, grain refining.
- Good surface quality, comprehensive performance better, uniform performance,
- ✓ Deliveried Saudi Arabia National water company Seawater desalination Project,
- ✓ Deliveried CGNPC Namibia Project.







## Part II: Advantage Products3



# LNG Project Middle&large diameter thick wall pipe(LNG,LPG PipeLine)

#### **✓ Key Technology:**

Breakthrough of Middle&Large diameter thick wall pipe length

12m,reduce installation welded seam;

Solved the heat treatment difficulties;

- **√Wall Thickness**;
- **√High Pressure**;
- ✓ Ultra-low temperature environment;
- **✓ CNOOC FangCheng LNG Project;**
- **✓** XinYangZi LNG Ship Productive Nationalization;
- ✓ LNG receiving station:711mm\*Wall Thickness 12.7mm DRL 12m Pipe







#### **Part II: Four Guarantee**



- 1 Products Superiority
- 2 Technical Equipment Superiority
- **3** Quality Guarantee
- 4 Service Guarantee



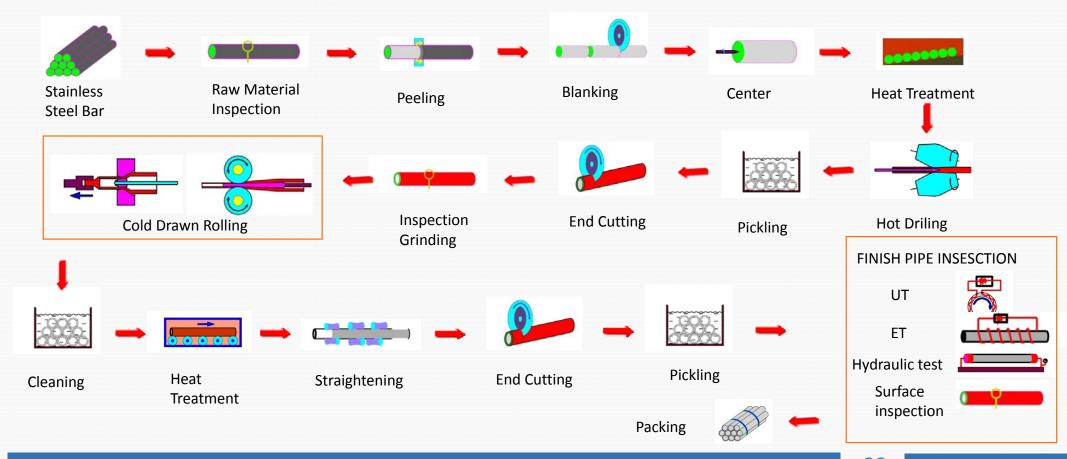




#### Part II: Technical Equipment Superiority-I



#### **Piercing Processes of Seamless Pipes / Tubes**



## Part II: Technical Equipment Superiority-II





Four Automatic hydraulic cold drawing production line



**Four Automatic Natural Gas Annealing Furnace** 



**Four Straightening machine** 



24 Precision cold rolling production line



28 semi-automatic Cold drawn production line



4 Automatic hot Piercing production line

## Part II:Technical Equipment Superiority-III



630mm Large diameter super-long hydraulic cold drawn stainless steel pipe production line



280mm Cold Rolling Produce Line



32m Automatic continuous solid solution annealing furnace



630mm Large Diameter Automatic straightening machine





Automatic temperature control pickling passivation equipment

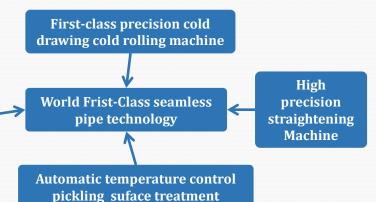
**Automatic** 

temperature

control

**Annealing** 

**Furnace** 



#### Part II: Technical Equipment Superiority-IIII

#### **Raw Materil Inspection**

BaoFeng has stricly requirements for raw material quality and stability, therefor, it's necessary to control raw material quality in advance. Integrated survey suppliers production equipment, production quality, supply ability, testing instruments, quality assurance system and so on ensure raw material safe and reliable.

#### **Technical Flow Control**

Baofeng according to different steel grade material performance characteristics rule machining process, strictly regulate the operation procedures, operating procedure ERP tracking system, guarantee products quality and product traceability system. Baofeng adopts combination of cold rolling cold drawing process, improve product processing efficiency at the same time guarantee each batch products quality.

#### **Site 5S management**

15 years experience, let BaoFeng people Summarizes

humanism, systematic, institutionalized, specialization, intensification management principle. SEIRI、SEITON、SEISO、SEIKETSU、SHITSUKE 5S management system, developed staff seriously, careful, responsible working attitude, ensure each product let customer trust.







## **Part II: Four Guarantee**



- 1 Products Superiority
- Technical Equipment Superiority
- **3** Quality Guarantee
- 4 Service Guarantee







## Part II: Quality Guarantee-I



#### **NDT Inspection**

**PMI** Inspection

**Eddy Current Detection** 

**Ultrasonic Flaw Detection** 

X-Ray Flaw Inspection

Water Pressure Test

Air Pressure Test

Dimension measurement

Internal and external surface Inspection

Liquid penetrant Inspection

# Physical and chemical properties Inspection

Metallographic structure and microscopic analysis

High temperature lasting creep Test

Tensile test high/normal temperature

High/ Low Impact Test

**Technical Performance Test** 

**IGC Test** 

**SCC Test** 

Pitting Index

Crevice corrosion test

#### **National High-Tech Enterprise**



## **Part II: Quality Guarantee-II**



#### **NDT Inspection**



**Dimension measurement** 



**PMI Inspection** 



**Ultrasonic Flaw Detection (UT)** 



**Water Pressure** 





X-Ray Inspection



**Eddy Current Test(ET)** 



**Air Pressure Test** 

## **Part II: Quality Assurance-III**



#### **Non Destructive Testing**



NCS Oxygen -Nitrogen Analyzer



Leco carbon-sulfur analyzer



NCS carbon-sulfur analyzer



Leco Oxygen Nitrogen Analyzer



Direct-reading spectrometer



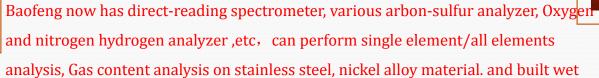
Impact testing machine



Sample



Laboratory





## **Part II: Quality Assurance-IIII**



**Non Destructive Testing** 



**Sclerometer** 





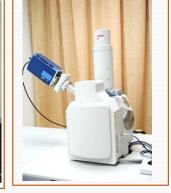
**Metallography analysis** 



**H2S Stress corrosion testing**,

 $Intercrystalline\ Corrosion_{Separate\ stress\ loop\ test\ system}$ 0~150 thousand psi 250ml





300 thousand timesscanning electron mi croscope+ **Energy Disperse Spe** ctroscopy

#### **Universal Testing Machine**

**Baofeng now has Universal Testing Machine** 

,Metallurgical Microscope,Punching Test machine, electron microscope+ Energy Dispersive System, can perform tests like mechanical property, microstructure, intergranular corrosion and Fracture failure analysis, etc on stainless steel and nickel alloy material. Know comprehensive material function and failure cause ,ensure quality of each batch of goods by Fracture failure analysis.

#### **Part II: Four Guarantee**



- 1 Products Superiority
- Technical Equipment Superiority
- **3** Quality Guarantee
- 4 Service Guarantee







#### **Part II: Service Assurance**







Baofeng provides many kinds of packing to meet clients requirement, including hexagon packing, wooden frame packing, wooden case packing etc, make sure every product is well kept and stored and protected during the transit.







Warehouse	1#
floor area	14,000 m²
inventory capacity	6,000 ton
number of drive	12

Baofeng provides safe, fast and convenient logistics solution, performing strict qualification and credit checks on logistics enterprise and sign a long-term cooperation agreement. Meanwhile we focus on process supervision of each batch, make sure the goods delivered safe and prompt.

#### **Part II: Service Assurance**





Baofeng has advanced sales network designated responsible in every province, autonomous regions and municipalities all over the country, can serve clients closely.

Baofeng has U.S Representative Office Baofeng Xinjiang Representative Office Baofeng Chengdu representative Office Provide convenient and service to clients

24-hour service to domestic clients.

Arrive at site with 48 hours 48.



## **Part III:**

# Qualification

- Qualification and Honor Certificate
- Patented Technology assurance
- Supplier Network Member Certificate
- ☐ Customer Recognition

## **Part III: Qualification and Credit Certificate**



#### Baofeng improves the quality system management continuously ,ensures providing high quality, safe and reliable



#### 1.ISO9001;ISO14001;OHSAS18001;

- 2. PED 97/23/EC & ADW2000 European Union Pressure-bearing Equipment Manufacturing License Certificate
- 3. Russian GOST Steel Pipe Manufacturing License Certificate
- 4. classification society: LR, GL, ABS, DNV, CCS, BV;
- **5. Special Equipment Manufacturing Certificate(Pressure Piping Components)**





#### Part III: Patented Technology assurance



Baofeng carries on technological and process innovation constantly, improving product quality

and creating value for customers



Baofeng owns 11 national patents by taking on independent research and development

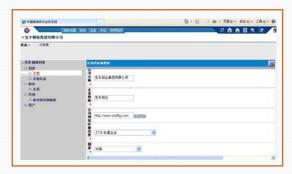
#### **Part III: Supplier Network Member Certificate**



#### Listed in random order







**CNOOC** 

**Sinopec** 



**Sedin Engineering** 

**CNPC** 



**CNNC** 



**Huadian Group** 



**HFEC** 

Supplier of:
CGNPC
Three Gorges
Huaneng Group
CPI
Datang Group
Dongfang Electric
Hualu Engineering
ECPC
Yankuang Group
Yangquan Coal Industry
Jin-mei group

#### **Part III: Client Reference**



































































Baofeng Served hundreds domestic key projects, rely on high-quality products and excellent service, has been the qualified supplier of lots of top five hundred companied both domestic and abroad, such as CNOOC, Three Gorges, petrobras, Schlumberger, Saudi Aramaco etc, supply global industrial equipment with safe and reliable stainless steel pipes.

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