CMAX®

CNBM International Corporation

SEAMLESS STEEL PIPE

CNBM

CNBM International Corporation

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ABOUT US

CNBM GROUP

Established in 1984, CNBM, China National Building Material Group Corporation is the largest company in China building material & equipment industry with 50,000 employees and total assets of 55 billion RMB. In 2006, China National Building Material Company Limited was listed on Hong Kong Stock Market with the stock code as 3323.

The business scope of CNBM covers from manufacturing and sales of a series of building materials to scientific research and design, machinery, import and export trade. In many of these fields, CNBM is playing the leading role.

CNBM International Corporation is one of the subordinating firms of China National Building Materials (Group) Corporation. It is among the leading manufacturers and suppliers specializing steel pipe products in China. Our main products include line pipes, tubing & casing, boiler tube, gas cylinder tube as well as various alloy tube according to a wide spectrum of different specification standards including API 5L, API 5CT,ASTM A53, ASTM A106, ASTM A213 & A213M, ASTM A192 & A192M, ASTM A210 & A210M, ASTM A519, ASTM A179 & A179M, DIN 17175, ASME SA213 & SA213M, ASME SA192 & SA192M, ASME SA120 & SA210M, ASME SA179 & SA179M, JIS G3461 & G3462 & G3454 & G3455 & G3456 and ISO3183 and etc. The available sizes range from minimum 1/2" to 24" with wall thickness as per SCH 10, SCH20, STD, SCH40, SCH 80, SCH160 as well as non-standardized thicknesses according to specific requirement.

We have been supplying high quality seamless steel pipes to a lot of regions around the globe, such as Middle East countries (Iran, UAE, Syria, Jordan, Saudi Arabia, Bahrain, Kuwait, Iraq), Africa (Egypt, South Africa, Sudan, Ghana, Angola, Nigeria, Mauritius, Kenya), Europe (Greek, France, Spain), South and North America (Chile, Argentina, Brazil, Venezuela, Mexico, Canada, America), etc.

ADVANTAGES

Professional teams ensure a high efficiency of your purchase

- Professional sales team
- Professional engineering and technology team
- Professional exportation and contract processing/management team
- Professional cooperators and partners

Full series of products provides an easier access for one stop purchase

- Line pipe
- Tubing and casing
- L & M & H boiler tube
- Gas cylinder tube & pipe
- Mechanical & Structural pipe
- Ship-building tube & pipe
- Automobile tube & pipe

All round supports ensure your business' safety & interest of all time

- CNBM is a state owned enterprise, which background ensures it of funds support and preferential policies provide by ministry of commerce.
- CNBM enjoys a sound reputation both at home and aboard. The company stands a first-rate credit status and has gained the access to preferential loans through a lot of international banking organizations.
- The company is renowned of it manufacturing capabilities and overall sourcing abilities. It has a long track proven record of strategic cooperation with leading players in steel industry.
- Brand name "CMAX" commit to the best quality products and high cost effectiveness which ensures your company a booming development & success.

Overseas branches & services

- Beijing Head office is in charge for sales, quoting, manufacturing and delivering.
- CNBM is willing to close the gap with customer. In past years it has set up 6 branches which located at UAE, US, KSA, INDIA, IRAN and RUSSIA with the purpose to attend to customers' demands more timely. Branch personnel are 24/7 ready for site-service, consultation service as well as other value-added services.

CNBM SEAMLESS STEEL PIPE SERIES

PRODUCT	SIZE RANGE	STANDARD	STEEL GRADE
Line pipes	1/2"-24"	API 5L, ASTM A 106/53, ISO3183,IPS， etc	A,B,X42,X46,X52,X56,X60,X65,X70
Tubing	1.900"-4 1/2"	API 5CT, API 5B,ISO11960	J55,K55,N80-1,N80Q,M65,L80-1,C90-1,C90-2,C95,T95-1,T95-2,P110
Casing	4 1/2"-16"	API 5CT, API 5B,ISO11960	J55,K55,N80-1,N80Q,M65,L80-1,C90-1,C90-2,C95,T95-1,T95-2,P110
L&M&H Boiler tube	10mm-159mm	DIN17175,EN10216,ASME SA213 & SA213M & SA210 & SA210M & SA192 & SA192M & SA106 & SA209M & SA335M,ASTM A210 & A210M & A179 & A179M & A192 & A192M & A213 & A213M,JIS G3429 & G3461/3462, GB 3087 & 5310	St35.8, St45.8, 17Mn4,19Mn5,15Mo3,13CrMo910,SA-192,A1,B,C,T1,T1a,T2/P2,T11/P11,T12/P12,T22/P22,T23/P23,T24,T91/P91,STB340,STB410, A179,A192,P195TR1, P195TR2, P235TR1, P235TR2, P265TR1, P265TR2,
Gas cylinder tube & pipe	60mm-273mm	GB18248, JIS G3429, EN10297,EN10083,ASTM A519	30CrMo,34Mn2V,35CrMo,37Mn,34CrMo4,4135,4130,STH11,STH12,STH21,STH22
Mechanical & Structure pipe	1/2"-20"	ASTM A519,EN10297, EN10210,JIS G3445,GB/T8163	1010,1020,1026,1045,1518,4130,E235, E275,E315,E355,E470,C22E,S235JRH,S275JOH,S275J2H,S355JOH,S355J2H,S355K2H, STKM11A,STKM12A,STKM12B,STKM12C, STKM13A,STKM13B,STKM13C,STKM14A, STKM14B,STKM14C
Ship-building tube & pipe	1/2"-20"	CCS,GL,LR,BV,ABS,DNV,NK,KR,RINA	320, 360, 410, 460, 490, GL-R410, 37Mn, 34CrMo4, A53B, 410HB, RST138 &142 & 238 & 242 & 249 & 338 & 342, 00Cr17Ni14Mo2, 0Cr18Ni9Ti
Automobile semi-shaft casing	77mm，83mm	YB/T5035，SAE	25MnCr，20Mn2，30Mn2，SAE1527，45，45Mn2，40MnB，40Cr

PRODUCT INTRODUCTION

LINE PIPE

Standard: API SPEC 5L

- Application: To be used for conveying gas, water, and petroleum for oil and natural gas industries
- Technical data:

Tolerance on Dimension:

Standard	Outside Diameter		Wall Thickness Tolerance
	Tolerance		Tolerance
API SPEC 5L	D＜60.3	+0.41mm,-0.40mm	+15%,-12.5%
API SPEC 5L	D≥60.3	+0.75%D,-0.40mm	

Mechanical Properties:

Standard	Grade	(MPa)		(MPa)		(%)	(J)
		Yield strength		Tensile Strength		Elongation	Impact Energy
API SPEC 5L	PSL1					See table 3 of API SPEC 5L	
	B	⩾241		⩾414			
	×42	⩾290		⩾414			
	×46	⩾317		⩾434			
	×52	⩾359		⩾455			
	×56	⩾386		⩾490			
	×60	⩾414		⩾517			
	×65	⩾448		⩾531			
	×70	⩾483		⩾565			
	PSL2						
		Min	Max	Min	Max		Min
	B	241	448	441	758		41(27)
	×42	290	496	414	758		41(27)
	×46	317	524	434	758		41(27)
	×52	359	531	455	758		41(27)
	×56	386	544	490	758		41(27)
	×60	414	565	517	758		41(27)
	×65	448	600	531	758		41(27)
	×70	483	621	565	758		41(27)

Note: Transverse impact energy requirements are shown in brackets.

Chemical Composition (%)

Standard	Grade	C	Mn	P		S
		Max	Max	Min	Max	Max
API SPEC 5L	PSL1					
	B	0.28	1.2		0.03	0.03
	×42	0.28	1.3		0.03	0.03
	×46, ×52, ×56	0.28	1.4		0.03	0.03
	×60, ×65, ×70	0.28	1.4		0.03	0.03
	PSLS2					
	B	0.24	1.2		0.025	0.015
	×42	0.24	1.3		0.025	0.015
	×46, ×52, ×56	0.24	1.4		0.025	0.015
	×60, ×65, ×70	0.24	1.4		0.025	0.015

ASTM A106, ASTM A53, ISO3183-2-1996

- Application: To be used for conveyance of petroleum, gas and conveyance of other fluid.
- Technical data:

Standard	Grade	Chemical Composition (%)									Mechanical Properties	
		C	Si	Mn	P.S	Cr	Mo	Nl	Cu	V	(MPa) Tensie Strength	(MPa) Yeid Strength
ASTM A106	A	≤0.25	≥0.10	0.27~0.93	≤0.035	≤0.40	≤0.15	≤0.40	≤0.40	≤0.08	≥330	≥205
	B	≤0.30	≥0.10	0.29~1.06	≤0.035	≤0.40	≤0.15	≤0.40	≤0.40	≤0.08	≥415	≥240
	C	≤.035	≥0.10	0.29~1.06	≤0.035	≤0.40	≤0.15	≤0.40	≤0.40	≤0.08	≥485	≥275

Standard	Grade	Chemical Composition (%)									Mechanical Properties	
		C	Si	Mn	P	S	Cu	Ni	Mo	Cr	V	(MPa) Tensie Strength	(MPa) Yeid Strength
ASTM A53	A	≤0.25	/	≤0.95	≤0.05	≤0.045	≤0.40	≤0.40	≤0.15	≤0.40	≤0.08	≥330	≥205
	B	≤0.30	/	≤1.20	≤0.05	≤0.045	≤0.40	≤0.40	≤0.15	≤0.40	≤0.08	≥415	≥240

Standard	Grade	Chemical Composition(%)								Mechanical Propentes		
		C	Si	Mn	P	S	V	Nb	Ti	T.S(MPa)	Y.S.(MPa)	A(%)
		max	max	Max	Max	Max	Max	Max	Max	min	Min	min
ISO3183	L245 or× B	0.28	-	1.2	0.03	0.03	0.06	0.15	0.15	415	245	21
	L290 or×42	0.28	-	1.3	0.03	0.03	0.15	0.15	0.15	415	290	21
	L320 or×46	0.28	-	1.4	0.03	0.03	0.15	0.15	0.15	435	320	20
	L360 or×52	0.28	-	1.4	0.03	0.03	0.15	0.15	0.15	460	360	19
	L390 or×56	0.28	-	1.4	0.03	0.03	0.15	0.15	0.15	490	390	18

Available Sizes of Line Pipes

Nominal Pipe Size		OD (mm)	Standard Wall Thickness									
NPS	DN	D	SHC30	STD	SCH40	SCH60	SCH80s	XS	SCH80	SCH100	SCH120	SCH160
1/8	6	10.3	---	1.73	1.73	---	2.41	2.41	2.41	---	---	---
1/4	8	13.7	---	2.24	2.24	---	3.02	3.02	3.02	---	---	---
3/8	10	17.1	---	2.31	2.31	---	3.2	3.2	3.2	---	---	---
1/2	15	21.3	---	2.77	2.77	---	3.73	3.73	3.73	---	---	4.78
3/4	20	26.7	---	2.87	2.87	---	3.91	3.91	3.91	---	---	5.56
1	25	33.4	---	3.38	3.38	---	4.55	4.55	4.55	---	---	6.35
1-1/4	32	42.2	---	3.56	3.56	---	4.85	4.85	4.85	---	---	6.35
1-1/2	40	48.3	---	3.68	3.68	---	5.08	5.08	5.08	---	---	7.14
2	50	60.3	---	3.91	3.91	---	5.54	5.54	5.54	---	---	8.74
2-1/2	65	73	---	5.16	5.16	---	7.01	7.01	7.01	---	---	9.53
3	80	88.9	---	5.49	5.49	---	7.62	7.62	7.62	---	---	11.13
3-1/2	90	101.6	---	5.74	5.74	---	8.08	8.08	8.08	---	---	---
4	100	114.3	---	6.02	6.02	---	8.56	8.56	8.56	---	11.13	13.49

Nominal Pipe Size		OD (mm)	Standard Wall Thickness									
NPS	DN	D	SHC30	STD	SCH40	SCH60	SCH80s	XS	SCH80	SCH100	SCH120	SCH160
5	125	141.3	---	6.55	6.55	---	9.53	9.53	9.53	---	12.7	15.88
6	150	168.3	---	7.11	7.11	---	10.97	10.97	10.97	---	14.27	18.26
8	200	219.1	7.04	8.18	8.18	10.31	12.7	12.7	12.7	15.09	18.26	23.01
10	250	273.1	7.8	9.27	9.27	12.7	12.7	12.7	15.09	18.26	21.44	28.58
12	300	323.9	8.38	9.53	10.31	14.27	12.7	12.7	17.48	21.44	25.4	33.32
14	350	355.6	9.53	9.53	11.13	15.09	---	12.7	19.05	23.83	27.79	35.71
16	400	406.4	9.53	9.53	12.7	16.66	---	12.7	21.44	26.19	30.96	40.49
18	450	457.2	11.13	9.53	14.27	19.05	---	12.7	23.83	29.36	34.93	45.24
20	500	508	12.7	9.53	15.09	20.62	---	12.7	26.19	32.54	38.1	50.01
22	---	559	12.7	9.53	---	22.23	---	12.7	28.58	34.93	41.28	53.98
24	600	610	14.27	9.53	17.48	24.61	---	12.7	30.96	38.89	46.02	59.54

TUBING AND CASING PIPE

Standard: APL SPEC 5CT

- Application:

  Tubing is used to extracting extract petroleum and natural gas from a well.

  Casing serves as walls of well.

- Technical data:

Tolerance

Item		Tolerance
Outside Diameter	Pipe Body	D≤101.60mm±0.79mm
		D≥114.30mm +1.0%D-.5%D
	coupling	±1%D
Wall Thickness		0,-12.5%t
Weight	Single Lengths	+6.5%-3.5%
	Carload Lots	0,-1.75%

Mechanical Properties

Grade	Yield Strength				Tensile Strength		Hardness		Allowable Hardness Variation
	min		max		min		max		
	Psi	Mpa	Psi	Mpa	Psi	Mpa	HRC	BHN	HRC
J55	55,000	379	80,000	552	75,000	517	-	-	-
K55	55,000	379	80,000	552	95,000	655	-	-	-
N80-1	80,000	552	80,000	758	100,000	689	-	-	-
N80Q	80,000	552	80,000	758	100,000	689			-
M65	65,000	448	85,000	586	85,000	586	22	235	-
L80-1	80,000	552	95,000	655	95,000	655	23	241	-
C90-1	90,000	621	105,000	724	100,000	689	25.4	255	3.0
C90-2	90,000	621	105,000	724	100,000	689	25.4	255	3.0
C95	95,000	655	110,000	758	105,000	724	-	-	-
T95-1	95,000	655	110,000	758	105,000	724	25.4	255	3.0
T95-2	95,000	655	110,000	758	105,000	724	25.4	255	3.0
P110	110,000	758	140,000	965	125,000	862	-	-	-

Chemical Composition (%)

Grade	Chemical Composition%												
	C		Mn		Mo		Cr		Nl	Cu	P	S	Si
	min	max	min	max	min	max	min	max	max	max	max	max	Max
J55	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
K55	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
N80-1	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
N80Q	-	-	-	-	-	-	-	-	-	-	0.030	0.030	-
M65	-	0.43	-	1.90	-	-	-	-	0.25	0.35	0.030	0.030	0.45
L80-1	-	0.35	-	1.00	0.25	0.75	-	1.2	0.99	-	0.020	0.010	-
C90-1	-	0.50	-	1.90	-	NL	-	NL	0.99	-	0.030	0.010	-
C90-2	-	0.45	-	1.90	-	-	-	-	-	-	0.030	0.030	0.45
C95	-	0.35	-	1.20	0.25	0.85	0.40	1.50	0.99	-	0.020	0.010	-
T95-1	-	0.50	-	1.90	-	-	-	-	0.99	-	0.030	0.010	-
T95-2	-	-	-	-	-	-	-	-	-	-	-	0.030	0.45
P110	-	-	-	-	-	-	-	-	-	-	-	0.030	0.45

Length

	(Range 1)	(Pange 2)	(Pange 3)
Tubing	6.10-7.32m	8.53-9.75m	11.58-12.80m
Casing	4.88-7.62m	7.62-10.36m	10.36-14.63m
Pup Joint	0.5m-6.0m (2FEET-20FEET)		

Available sizes

- **For tubing**

Size Designation	Outside Diameter		Wall Thickness		Type of End Finish					
					Grade					
	In	mm	In	mm	J55	L80-1	N80	C90	T95	P110
1.900"	1.900	48.26	0.125	3.18	PI	-	-	-	-	-
	1.900	48.26	0.145	3.68	PNUI	PNUI	PNUI	PNUI	PNUI	-
	1.900	48.26	0.2	5.08	PU	PU	PU	PU	PU	PU
2 3/8"	2.375	60.32	0.167	4.24	PN	PN	PN	PN	PN	-
	2.375	60.32	0.19	4.83	PNU	PNU	PNU	PNU	PNU	PNU
	2.375	60.32	0.254	6.45	-	PNU	PNU	PNU	PNU	PNU
	2.375	60.32	0.259	7.49	-	P	-	P	P	-
	2.375	60.32	0.336	8.53	-	PU	-	PU	PU	-
2 7/8"	2.875	73.02	0.217	5.51	PNU	PNU	PNU	PNU	PNU	PNU
	2.875	73.02	0.276	7.01	-	PNU	PNU	PNU	PNU	PNU
	2.875	73.02	0.308	7.82	-	PNU	PNU	PNU	PNU	PNU
	2.875	73.02	0.34	8.64	-	PU	-	PU	PU	-
	2.875	73.02	0.392	9.96	-	P	-	P	P	-
	2.875	73.02	0.44	11.18	-	P	-	P	P	-
3 1/2"	3.5	73.02	0.216	5.49	PN	PN	PN	PN	PN	-
	3.5	88.9	0.254	6.45	PNU	PNU	PNU	PNU	PNU	PNU
	3.5	88.9	0.289	7.34	PN	PN	PN	PN	PN	-
	3.5	88.9	0.375	9.52	-	PNU	PNU	PNU	PNU	PNU
	3.5	88.9	0.43	10.92	-	P	-	P	P	-
	3.5	88.9	0.476	12	-	P	-	P	P	-
	3.5	88.9	0.53	13.46	-	P	-	P	P	-
4"	4	101.6	0.226	5.74	PN	PN	PN	PN	PN	-
	4	101.6	0.262	6.65	PU	PU	PU	PU	PU	-
4 1/2"	4.5	114.3	0.271	6.88	PNU	PNU	PNU	PNU	PNU	-
	4.5	114.3	0.337	8.56	-	P	-	P	P	-
	4.5	114.3	0.38	9.65	-	P	-	P	P	-
	4.5	114.3	0.43	10.92	-	P	-	P	P	-
	4.5	114.3	0.5	12.7	-	P	-	P	P	-
	4.5	114.3	0.56	14.22	-	P	-	P	P	-
	4.5	114.3	0.63	16	-	P	-	P	P	-

Note: P—Plain-end; N—Non upset; U—External upset; T&C—Threaded and coupled

• For casing

Size	Weight	Outside		Wall		Type of End Finish							
Designation	Designation	Diameter		Thickness		Grade							
		In	Mm	In	mm	J55/K55	L80-1	N80	C90	C95	T95	P110	M65
4 1/2"	9.5	4.5	114.3	0.205	5.21	PS	-	-	-	-	-	-	-
	10.5	4.5	114.3	0.224	5.69	PSB	-	-	-	-	-	-	-
	11.6	4.5	114.3	0.25	6.35	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	13.5	4.5	114.3	0.29	7.37	-	-	PLB	PLB	PLB	PLB	PLB	PLB
	15.1	4.5	114.3	0.337	8.56	-	-	-	-	-	-	PLB	-
5	11.5	5	127	0.22	5.59	PS	-	-	-	-	-	-	-
	13	5	127	0.253	6.43	PSLB	-	-	-	-	-	-	-
	15	5	127	0.296	7.52	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	18	5	127	0.362	9.19	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	21.4	5	127	0.437	11.1	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	23.2	5	127	0.478	12.14	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	24.1	5	127	0.5	12.7	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
5 /2"	14	5.5	139.7	0.244	6.2	PS	-	-	-	-	-	-	-
	15.5	5.5	139.7	0.275	6.99	PSLB	-	-	-	-	-	-	-
	17	5.5	139.7	0.304	7.72	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	20	5.5	139.7	0.361	9.17	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	23	5.5	139.7	0.415	10.54	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	26.8	5.5	139.7	0.5	12.7	-	-	-	P	-	P	-	-
	29.7	5.5	139.7	0.562	14.27	-	-	-	P	-	P	-	-
	32.6	5.5	139.7	0.625	15.88	-	-	-	P	-	P	-	-
	35.3	5.5	139.7	0.687	17.45	-	-	-	P	-	P	-	-
	38	5.5	139.7	0.75	19.05	-	-	-	P	-	P	-	-
	40.5	5.5	139.7	0.812	20.62	-	-	-	P	-	P	-	-
	43.1	5.5	139.7	0.875	22.22	-	-	-	P	-	P	-	-
6 5/8"	20	6.625	168.28	0.288	7.32	PSLB	-	-	-	-	-	-	-
	24	6.625	168.28	0.352	8.94	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	26	6.625	168.28	0.417	10.59	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	32	6.625	168.28	0.475	12.06	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
7"	20	7	177.8	0.272	6.91	PS	-	-	-	-	-	-	PS
	23	7	177.8	0.317	8.05	PSLB	PLB	PLB	PLB	PLB	-	-	PLB
	26	7	177.8	0.362	9.19	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	29	7	177.8	0.408	10.36	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	32	7	177.8	0.453	11.51	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	35	7	177.8	0.498	12.65	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	38	7	177.8	0.54	13.72	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB

Size	Weight	Outside		Wall		Type of End Finish							
Designation	Designation	Diameter		Thickness		Grade							
		In	Mm	In	mm	J55/K55	L80-1	N80	C90	C95	T95	P110	M65
7 5/8"	26.4	7.625	193.68	0.328	8.33	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	29.7	7.625	193.68	0.375	9.52	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	33.7	7.625	193.68	0.43	10.92	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	39	7.625	193.68	0.5	12.7	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	42.8	7.625	193.68	0.562	14.27	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	45.3	7.625	193.68	0.595	15.11	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	47.1	7.625	193.68	0.625	15.68	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
8 5/8"	24	8.625	219.08	0.264	6.71	PS	-	-	-	-	-	-	-
	28	8.625	219.08	0.304	7.72	-	-	-	-	-	-	-	-
	32	8.625	219.08	0.352	8.94	PSLB	-	-	-	-	-	-	-
	36	8.625	219.08	0.4	10.16	PSLB	PLB	PLB	PLB	PLB	PLB	PLB	
	40	8.625	219.08	0.45	11.43	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	44	8.625	219.08	0.5	12.7	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	49	8.625	219.08	0.557	14.15	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
9 5/8"	32.3	9.625	244.48	0.312	7.92	-	-	-	-	-	-	-	-
	36	9.625	244.48	0.352	8.94	PSLB	-	-	-	-	-	-	PSLB
	40	9.625	244.48	0.395	10.03	PSLB	PLB	PLB	PLB	PLB	PLB		PSLB
	43.5	9.625	244.48	0.435	11.05	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	47	9.625	244.48	0.472	11.99	-	PLB	PLB	PLB	PLB	PLB	PLB	PLB
	53.5	9.625	244.48	0.545	13.84	-	PLB	PLB	PLB	PLB	PLB	PLB	-
	58.4	9.625	244.48	0.595	15.11	-	PLB	PLB	PLB	PLB	PLB	PLB	-
	59.4	9.625	244.48	0.609	15.47	-	-	-	P	-	P	-	-
	64.9	9.625	244.48	0.672	17.07	-	-	-	P	-	P	-	-
	70.3	9.625	244.48	0.734	18.64	-	-	-	P	-	P	-	-
	75.6	9.625	244.48	0.797	20.24	-	-	-	P	-	P	-	-
10 3/4"	32.75	10.75	273.05	0.279	7.09	-	-	-	-	-	-	-	-
	40.5	10.75	273.05	0.35	8.89	PSB	-	-	-	-	-	-	PSB
	45.5	10.75	273.05	0.4	10.16	PSB	-	-	-	-	-	-	PSB
	51	10.75	273.05	0.45	11.43	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	55.5	10.75	273.05	0.495	12.57	-	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	60.7	10.75	273.05	0.545	13.84	-	-	-	PSB	-	PSB	PSB	-
	65.7	10.75	273.05	0.959	15.11	-	-	-	PSB	-	PSB	PSB	-
	73.2	10.75	273.05	0.672	17.07	-	-	-	P	-	P	-	-
	79.2	10.75	273.05	0.734	18.64	-	-	-	P	-	P	-	-
	85.3	10.75	273.05	0.797	20.24	-	-	-	P	-	P	-	-

Size	Weight	Outside		Wall		Type of End Finish							
Designation	Designation	Diameter		Thickness		Grade							
		In	Mm	In	mm	J55/K55	L80-1	N80	C90	C95	T95	P110	M65
11 3/4"	42	11.75	298.45	0.333	8.46	-	-	-	-	-	-	-	-
	47	11.75	298.45	0.375	9.53	PSB	-	-	-	-	-	-	PSB
	54	11.75	298.45	0.435	11.05	PSB	-	-	-	-	-	-	PSB
	60	11.75	298.45	0.489	12.42	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	65	11.75	298.45	0.534	13.56	-	P	P	P	P	P	P	-
	71	11.75	298.45	0.582	14.78	-	P	P	P	P	P	P	-
13 3/8"	48	13.375	339.72	0.33	8.38	-	-	-	-	-	-	-	-
	54.5	13.375	339.72	0.38	9.65	PSB	-	-	-	-	-	-	PSB
	61	13.375	339.72	0.43	10.92	PSB	-	-	-	-	-	-	PSB
	68	13.375	339.72	0.48	12.19	PSB	PSB	PSB	PSB	PSB	PSB	PSB	PSB
	72	13.375	339.72	0.541	13.06	-	PSB	PSB	PSB	PSB	PSB	PSB	-
16"	65	16	406.4	0.375	9.53	-	-	-	-	-	-	-	-
	75	16	407.4	0.438	11.13	PSB	-	-	-	-	-	-	PSB
	84	16	408.4	0.495	12.57	PSB	-	-	-	-	-	-	Pos-sible
	109	16	409.4	0.66	16.66	PSB	P	P	-	-	-	P	-

Note: P---Plain end; S---Short round thread; L---Long round thread; B---Buttress thread;

L & M & H BOILER TUBE

Standard: GB3087: Seamless Steel Tubes for Low and Medium Pressure Boiler

- Application: For manufacturing heating-pipelines, containers, steaming pipelines of low or medium pressure boilers (p≤450℃, work pressure ≤5.88 Mpa)
- Technical data:

Chemical Composition & Mechanical Properties

Standard	Grade	Chemical Composition (%)								Mechanical Properties		
		C	Si	Mn	P,S	Cr	Cu	Ni	Mo,V	Tensie Strength (MPa)	Yeid Strength (MPa)	Eongaion (%)
GB3087	10	0.07~0.14	0.17~0.37	0.35~0.65	≤0.035	≤0.25	≤0.25	≤0.25	/	335~475	≥195	≥24
	20	0.07~0.24	0.17~0.37	0.35~0.65	≤0.035	≤0.25	≤0.25	≤0.25	/	410~550	≥245	≥20

Standard: GB5310: Seamless Steel Tubes And Pipes for High Pressure Boiler

- Application: For manufacture heating-pipelines, containers, coal-saving devices, super heaters and reheaters of high pressure boilers(P>9.8Mpa,450℃<T<650℃)
- Steel Grade: 20G、20MnG、15MnG、15MnG、12Cr2MnG、12Cr1MoVG (etc),Other grade can also be provided after consulting with customers.
- Technical data:

Chemical Composition & Mechanic al Properties

Standard	Grade	Chemical Composition (%)								Mechanical Properties		
		C	Si	Mn	P	S	Cr	No	V	Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)
GB5310	20G	0.17~0.24	0.17~0.37	0.35~0.65	≤0.03	≤0.03	/	/	/	410~550	≥245	≥24
	20MoG	0.17~0.24	0.17~0.37	0.70~1.00	≤0.03	≤0.03	/	/	/	≥415	≥240	≥22
	15MoG	0.12~0.20	0.17~0.37	0.40~0.80	≤0.030	≤0.030	/	0.25~0.35	/	450~600	≥270	≥22
	15Cr1MoG	0.12~0.18	0.17~0.37	0.40~0.70	≤0.030	≤0.030	0.80~1.10	0.40~0.55	/	440~640	≥235	≥21
	12Cr2MoG	0.08~0.15	≤0.50	0.40~0.70	≤0.030	≤0.030	2.00~2.50	0.90~1.20	/	450~600	≥280	≥20
	12Cr1MoVG	0.08~0.15	0.17~0.37	0.40~0.70	≤0.030	≤0.030	0.90~1.20	0.25~0.35	0.15~0.30	470~640	≥255	≥21

Standard: ASTM A192/A192M-02: Seamless Carbon Steel Boiler Tubes for High-Pressure

- Application: For seamless carbon steel boiler and super heater tubes for high-pressure service
- Steel Grade: A192、SA192
- Technical data:

Chemical Composition & Mechanical Properties

Standard	Steel Grade	(MPa) Tensile Strength	(MPa) Yield Strength	(%) Elongation
ASTM A192/ASME SA192	A192/SA192	≥325	≥180	≥35

Standard	Steel Grade	Chemical Composition (%)								
		C	Si	Mn	P	S	Cr	Mo	Cu	Ni	V
ASTM A192/ ASME SA192	A192 / SA192	0.06~0.18	≤0.25	0.27~0.63	≤0.035	≤0.035		/	/	/	/

Standard: ASTM A210, ASME SA210: Seamless Medium Carbon Steel Tubes for Boiler and Super heater

- Application: For manufacturing wall panel, economizer, super heater and steam pipeline of boilers
- Steel Grade: A-1、C
- Technical data:

Chemical Composition & Mechanical Properties

Standard	Steel Grade	(MPa) Tensile Strength	(MPa) Yield Strength	(%) Elongation
ASTMA210 ASME SA210	A-1	≥415	≥255	≥30
	C	≥485	≥275	≥30

Standard	Steel Grade	Chemical Composition (%)									
		C	Si	Mn	P	S	Cr	Mo	Cu	Ni	V
ASTM A210 ASME SA210	C	≤0.35	≥0.10	0.29~1.06	≤0.035	≤0.035	/	/	/	/	/
	A-1	≤0.27	≥0.10	≤0.93	≤ 0.035	≤0.035	/	/	/	/	/

Standard: ASTM A179, ASME SA179: Cold-Drawn Seamless low Carbon Steel Tubes for Boiler and Super heater

- Application: for heater, cooler and heat treatment exchanger
- Steel Grade: A179, SA179
- Technical data:

Chemical Composition & Mechanical Properties

Standard	Steel Grade	(MPa) Tensile Strength	(MPa) Yield Strength	(%) Elongation
ASTM A179/ASME SA179	A179/SA179	≥325	≥180	≥35

Standard	Steel Grade	Chemical Composition (%)									
		C	Si	Mn	P	S	Cr	Mo	Cu	Ni	V
ASTM A179 / ASME SA179	A179 / SA179	0.06~0.18	/	0.27~0.63	≤0.035	≤0.035	/	/	/	/	/

Standard: DIN17175/EN10216-2: Heat-resisting seamless steel tube for boiler

- Application: To be used for the manufacturing of boiler.
- Steel Grade: St35.8, St45.8, 15Mo3, 195GH, P235GH, P265GH, 20MnNb6, 16Mo3
- Technical data:

Chemical Composition & Mechanical Properties

DIN17175

Standard	Grade	Chemical Composition							Mechanical Property		
		C	Si	Mn	P≤	S≤	Cr	Mo	Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)
DIN17175	St35.8	≤0.17	0.10~0.35	0.40~0.80	0.030	0.030	/	/	360~480	≥235	≥25
	St45.8	≤0.21	0.10~0.35	0.40~1.20	0.030	0.030	/	/	410~530	≥255	≥21
	15Mo3	0.12~0.20	0.10~0.35	0.40~0.80	0.030	0.030	/	0.25~0.35	460~600	≥270	≥20

EN10216-2

Standard	Grade	Chemical Composition							Mechanical Property			
		C	Si	Mn	P≤	S≤	Cr	Mo	Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%) C	
EN10216-2	195GH	≤0.13	≤0.35	≤0.70	0.025	0.020	0.30	≤0.08	320~440	≥195	≥27	≥25
	P235GH	≤0.16	≤0.35	≤1.20	0.025	0.020	0.30	≤0.08	360~500	≥235	≥25	≥23
	P265GH	≤0.20	≤0.40	≤1.40	0.025	0.020	0.30	≤0.08	410~570	≥265	≥23	≥21
	20MnNb6	≤0.22	0.15~0.35	1.00~ 1.50	0.025	0.020	-	-	500~650	≥355	≥22	≥20
	16Mo3	0.12~0.20	≤0.35	0.40~ 0.90	0.025	0.020	0.30	0.25~0.35	450~600	≥280	≥22	≥20

Standard: JIS G3461/ G3462: Carbon steel tubes for boiler and heat exchanger/ alloy steel tubes for boiler and heat exchanger tubes

- Application: JIS G3461 is for Carbon steel tubes for boiler and heat exchanger
  JIS G3462 is for alloy steel tubes for boiler and heat exchanger tubes
- Steel Grade: STB 340,410,510; STBA12, 13, 20,22,23,24
- Technical data:

Chemical Composition & Mechanical Properties

Standard	Steel Grade	(MPa) Tensile Strength (Min)	(MPa) Yield Strength) (Min)
JIS G3461	STB 340	340	175
	STB 410	410	255
	STB 510	510	295
JIS G3462	STBA12	382	206
	STBA13	412	206
	STBA20	412	206
	STBA22	412	206
	STBA23	412	206
	STBA24	412	206

Standard	Grade	Chemical Composition						
		C	Si	Mn	P≤	S≤	Cr	Mo
JIS G3461	STB 340	≤0.18	≤0.35	0.30-0.60	≤0.035	≤0.035	-	-
	STB410	≤0.32	≤0.35	0.30-0.60	≤0.035	≤0.035	-	-
	STB510	≤0.25	≤0.35	1.00-1.50	≤0.035	≤0.035	-	-
JIS G3462	STBA12	0.10-0.20	0.10-0.50	0.30-0.80	≤0.035	≤0.035	-	0.45-0.65
	STBA13	0.15-0.25	0.10-0.50	0.30-0.80	≤0.035	≤0.035	-	0.45-0.65
	STBA20	0.10-0.20	0.10-0.50	0.30-0.60	≤0.035	≤0.035	0.50-0.80	0.45-0.65
	STBA22	≤0.15	≤0.50	0.30-0.60	≤0.035	≤0.035	0.80-1.25	0.45-0.65
	STBA23	≤0.15	0.50-1.00	0.30-0.60	≤0.030	≤0.030	-1.00-1.50	0.45-0.65
	STBA24	≤0.15	≤0.50	0.30-0.60	≤0.030	≤0.030	1.90-2.60	0.87-1.13

Standard: JIS G3454\G3455\G3456

- Application: JIS G3454 is for carbon steel pipes for pressure service
  JIS G3455 is for carbon steel pipes for high pressure service
  JIS G3456 is for carbon steel pipes for high temperature service
- Steel Grade: STPG 370\410; STS370\410\480; STPT370\410\480
- Technical data:

Chemical Composition & Mechanical Properties

Standard	Steel Grade	(MPa) Tensile Strength (Min)	(MPa) Yield Strength (Min)
JIS G3454	STPG 370	373	216
	STB 410	410	245
JIS G3455	STS 370	373	216
	STS 410	412	245
	STS 510	481	275
JIS G3456	STPT 370	373	216
	STPT 410	412	245
	STPT 480	481	275

standard	Steel grade	chemical composition				
		C	Si	Mn	P	S
JIS G 3454	STPG 370	≤0.25	≤0.35	0.30~0.90	≤0.040	≤0.040
	STPG 410	≤0.30	≤0.35	0.30~1.00	≤0.040	≤0.040
JIS G 3455	STS 370	≤0.25	0.10~0.35	0.30~1.10	≤0.035	≤0.035
	STS 410	≤0.30	0.10~0.35	0.30~1.40	≤0.035	≤0.035
	STS 480	≤0.33	0.10~0.35	0.30~1.50	≤0.035	≤0.035
JIS G 3456	STPT 370	≤0.25	0.10~0.35	0.30~0.90	≤0.035	≤0.035
	STPT 410	≤0.30	0.10~0.35	0.30~1.00	≤0.035	≤0.035
	STPT 480	≤0.33	0.10~0.35	0.30~1.00	≤0.035	≤0.035

GAS CYLINDER TUBE & PIPE

Standard: EN10291/EN10083/ASTMA519/GB18248

- Application: for gas cylinder
- Steel Grade: 34CrMo4/4135/4130/30CrMo/34Mn2V/35CrMo/37Mn
- Technical data:

Chemical Composition & Mechanical Properties

Standard	Grade	Tensile Strength(min),Mpa				Yield strength				Elongation %			
		WT≤8	8<WT ≤20	2<WT ≤50	5<WT ≤80	WT ≤8	8<WT ≤20	20<W ≤50	5<WT ≤80	WT≤8	8<WT ≤20	2<WT ≤50)	5<WT ≤80
EN10297	34CrMo4	800	650	550	500	1000	900	800	750	11	12	14	15
ASTMA51	4130	724				586				10			
GB18248	30CrMo	930				785				12			
	34Mn2v	745				530				16			
	35CrMo	980				835				12			

standard	Chemical composition												
	grade	C	Si	Mn	P	S	P+S	Mo	Cu	Cr	Ni	Al	V
EN10297	34CrMo4	0.30~0.37	≤0.40	0.30~0.37	≤0.035	≤0.035	—	0.30~0.37	—	0.90-1.20	—	—	—
EN10083	34CrMo4	0.30~0.37	≤0.40	0.30~0.37	≤0.035	≤0.035	—	0.30~0.37	—	0.90-1.2	—	—	—
ASTMA519	4135	0.32~0.39	0.15~0.35	0.30~0.37	≤0.04	≤0.04	—	0.30~0.37	—	0.80-1.10	—	—	—
	4130	0.28~0.33	0.15~0.35	0.30~0.37	≤0.04	≤0.04	—	0.30~0.37	—	0.80-1.10	—	—	—
GB18248	30CrMo	0.26~0.34	0.17~0.37	0.30~0.37	≤0.03	≤0.03	≤0.055	0.30~0.37	≤0.20	0.80-1.10		—	—
	34Mn2V	0.30~0.37	0.~0.37	0.30~0.37	≤0.03	≤0.03	≤0.055	——	≤0.20	≤0.03		—	0.07-0.12
	35CrMo	0.32~0.40	0.30~0.37	0.30~0.37	≤0.03	≤0.03	≤0.055	0.30~0.37	≤0.20	0.80-1.10		—	—
	37Mn	0.34~0.40	0.30~0.37	0.30~0.37	≤0.03	≤0.03	≤0.055	——	≤0.20	≤0.30		—	—

MAJOR PROJECT REFERENCE LIST

No.	Company	Location	Grade	Size	Utilization
1	WuHan Boiler Co,Ltd	China	20G 12Cr1MoVG	OD45*5*11000 OD60*5*11000 OD42*5*11000	Power Station Boiler
2	HaErBin Boiler Co,Ltd	China	20G 12Cr1MoVG 15CrMoG	OD28*4 OD42*8 OD42*5*8000 OD51*4*8000	Power Station Boiler
3	DongFang Boiler Co, Ltd	China	20#,20G 12Cr1MoVG 15CrMoG	OD51*4 OD60*7	Power Station Boiler
4	HangZhou Boiler Co,Ltd	China	20G 12Cr1MoVG 15CrMoG	OD42*3*19150 OD42*3*19470 OD38*3.5*19150 OD38*3.5*19470	Power Station Boiler
5	ShangHai Boiler Co,Ltd	China	20#,20G 12Cr1MoVG 15CrMoG	OD42*3*19470 OD38*3.5*19150 OD38*3.5*19470	Power Station Boiler

No.	Company	Location	Grade	Size	Utilization
6	Thermax Limited (Trading: Wuxi Special Material Co., Ltd)	India	SA210-A1 SA213-T12 SA213-T22	OD38.1 * 4.06 OD38.1 * 4.5 OD44.5 * 4.06 OD44.5 * 4.5	Power Station Boiler
7	Babcock&Wilcox Beijing Co,Ltd	America	SA-210C 15CrMoG 12Cr1MoVG	OD60*4.5*12000 OD60*6.5*12800 OD57*3.5	Power Station Boiler
8	Foster Wheeler Power Machinery Co,Ltd	China	SA210-A1 SA213-T12 SA213-T22	OD51*5.1 2"*0.18"*	Power Station Boiler
9	TOYOTA TSUSHU AMERICA INC. (END USER: Webco Industries,Inc.)	U.S.A	SA-179 SA192	25.4x2.77, 25.4 x2.11 19.05 x 2.11 19.05x1.65	Heat Exchanger Tube
10	DOOSAN Heavy (For SUGEN PJT, INDIA, IBR APPLIED)	Korea	SA210-A1 SA213-T12 SA213-T22	OD38.1 * 2.6 OD44.5 * 3.0 OD44.5 * 4.5	Power Station Boiler
11	DOOSAN Heavy (For CAMAU PJT, Etc.)	Korea	SA210-A1 SA213-T12 SA213-T22	OD38.1 * 2.6 OD44.5 * 3.0 OD44.5 * 4.5	Power Station Boiler
12	Babcock Power Inc (Rily Power Inc)	U.S.A	SA210-A1 SA192 SA213-T12 SA213-T22	OD50.8 * 5.15 OD63.5 * 5.15 OD44.45 * 5.16 OD57.15 * 4.5	Power Station Boiler
13	Babcock Power Inc(Vogt Power International)	U.S.A	SA210-A1 SA192 SA213-T12 SA213-T22	OD38.1 * 3.429 OD38.1 * 2.667 OD38.1 * 3.81 OD50.8 * 2.667	Power Station Boiler HRSG
14	Daewoo International Corporation	Korea	A53/A106/API 5L B	OD219.1 * 8.18 OD219.1 * 12.7 OD141.3 * 6.55 OD141.3* 9.53 OD114.3*6.35	Oil Well
15	ALSTOM Power Inc (Item number P1B95, P4B37, P5B41)	U.S.A	SA210-A1 SA210C SA213-T22	OD38.1 * 3.2 OD38.1 * 6.604 OD44.45 * 5.72 OD44.45* 6.5	Power Station Boiler HRSG
16	Daewoo International Corporation	Korea	A53/A106/API 5L B	OD219.1 * 8.18 OD219.1 * 12.7 OD141.3 * 6.55 OD141.3* 9.53	Oil Well
17	DUFERCO SA	Switzerland	40Mn2	OD60.3 * 5.5 OD73 * 6 OD101.6.3 * 9 OD139.7* 9	Construction industry
18	Seamless Oil Pipes Co., LTD	China	K55,J55	177.8*10.08, 244.3*10.36	Oil Well
19	SUNGJIN GEOTEC	Korea	SA210-A1 SA210C	OD38.1 * 3.2 OD38.1 * 6.604 OD44.45 * 5.72 OD44.45* 6.5	Power Station Boiler HRSG

No.	Company	Location	Grade	Size	Utilization
20	Seamless Oil Pipes Co., LTD	China	K55,J55,N80-1	139.7*7.72 177.8*8.05 177.8*10.08, 244.3*10.36	Oil Well
21	AZAR DAMGOSTER	IRAN	DIN17175 ST 35.8	OD38.1 * 3.2 OD38.1 * 6 OD44.45 * 5.5 OD44.45* 6.5	BOILER TUBE
22	ARVIN	IRAN	DIN17175 ST 35.8	OD38.1 * 3.2 OD60.3*3.2 OD 60.3*3.6 OD44.45* 6.5	BOILER TUBE
23	GARMGOSTER	IRAN	DIN17175 ST 35.8	OD38.1 * 3.2 OD60.3*3.2	BOILER TUBE
24	IRIOC DAKA GAS PIPE LINE PROJECT	IRAN	API 5L X52 & IPS-M-PT-190 (2)	4''*6.02	PIPELINE

CERTIFICATES

API 5 CT

API 5 L

ISO

Certificate of Authority to use the Official API Monogram

License Number: SL-0644 ORIGINAL

The American Petroleum Institute hereby grants to:

HUA'AN ZHENDA STEEL TUBE MANUFACTURING CO., LTD.
Hualyin Industrial Park District, Shenyang Road, East Side
North Side of Railway
Hua'an, Jiangsu
People's Republic of China

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API Spec 5L and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram should be used in conjunction with this certificate number: SL-0644

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Manufacturer of Line Pipe Plain End at PSL 1; Manufacturer of Line Pipe Plain End at PSL 2

QMS Exclusions: Section 7.3, Design and Development

American Petroleum Institute

Effective Date: FEBRUARY 9, 2009
Expiration Date: FEBRUARY 9, 2012

To verify the authenticity of this license, go to www.api.org/compositelist.

American Petroleum Institute

Director of Training and Certification Programs

API 5L

Certificate of Authority to use the Official API Monogram

License Number: 5CT-0945 ORIGINAL

The American Petroleum Institute hereby grants to:

HUA'AN ZHENDA STEEL TUBE MANUFACTURING CO., LTD.
Hualyin Industrial Park District, Shenyang Road, East Side
North Side of Railway
Hua'an, Jiangsu
People's Republic of China

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API Spec 5CT and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram should be used in conjunction with this certificate number: 5CT-0945

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Manufacturer of Casing or Tubing Plain End; Manufacturer of Coupling Stock at Group 1

QMS Exclusions: Section 7.3, Design and Development

American Petroleum Institute

Effective Date: FEBRUARY 9, 2009
Expiration Date: FEBRUARY 9, 2012

To verify the authenticity of this license, go to www.api.org/compositelist.

American Petroleum Institute

Director of Training and Certification Programs

API 5CT

Beijing Grand Honour Management System Certification Co., Ltd.
(China Metallurgical Industry Quality System Certification Center)

QUALITY MANAGEMENT SYSTEM CERTIFICATE

Hereby certifies that

Jiangsu Zhenda Steel Tube Manufacture Co., Ltd.
(Wuxi Zhenda Special Steel Tube Manufacture Co., Ltd.)

Post Add: 208 Dongdaan, West of Bridge No. 2, Xicheng Road, Wuxi City, Jiangsu Province, China.
Post Code:214046

Has established and implement a quality management system in conformity with

GB/T19001-2000－ISO 9001:2000 standard.

The scope covered by this management system:
Products and activities:
Production and servicing of the Seamless steel tubes for structural purposes, liquid service, low and medium pressure boiler, high pressure boiler, petroleum cracking, high pressure chemical fertilizer equipment and gas cylinder; seamless tubes of low temperature dew-point corrosion resistant steel, steel tubes of high carbon chrome bearing steel; cold-drawn or cold-rolled precision seamless steel tubes; cold-drawn special-shape steel tubes; seamless steel tubes for engineering machinery fittings; c old-drawn internal thread seamless steel tubes and other kinds of alloy steel tubes.
Physical locations:
208 Dongdaan, West of Bridge No. 2, Xicheng Road, Wuxi City, Jiangsu Province.

Note: The products covered in this scope shall be conformed to the requirement of associated qualified document.

Certificate registration: 02206Q10094R3L
Issuing date: July 12, 2006
Certificate change date: Oct. 14, 2008
Effective date: From July 12, 2006 to July 11, 2009
GHC Add: Fuhai Center, Building No. 3, Room 307,
Daliushu Road, Haidian District, Beijing,China.

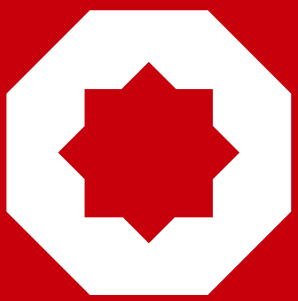
(Authorized Representative)

CNAS
MANAGEMENT SYSTEM
CNAS C022-Q

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT
IAF

Note:Concerning the maintenance of qualification for certification and effectiveness of certificate,please look over "The announcement of maintenance of qualification for quality management system certificate" or visit the web site of the company http://www.cnqc.com.

ISO



CNBM

CNBM International Corporation

SEAMLESS STEEL PIPE

CMAX®

CNBM INTERNATIONAL CORPORATION

Add: 17th Floor, No.4 Building, Zhuyu Business Center, Shouti South Road, Haidian District, Beijing 100048, China.

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www.icnbm.com/en

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