



宇鸿集团®
YUHONG GROUP

STAINLESS STEEL / DUPLEX STEEL / NICKEL ALLOY STEEL



宇鸿集团
YUHONG GROUP

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宇鸿集团有限公司
YUHONG GROUP CO.,LTD



A 企业简介 ABOUT US

YUHONG is one of the Procurement, Engineering, Construction and Manufacturing Group in China, We specialized in Stainless Steel Grade, Duplex and Super Duplex grade, Nickel alloy steel Grade, our products contain seamless and welded pipe/tube, steel fittings, steel flanges, the goods be widely used in Boiler, Heat exchanger, Cooler plant, Petrochemical industry, Natural gas and Oil industry, Environmental protection, Pharmaceutical, Chemical, Food machinery, Water supply and Waste water exchanger plant, Shipbuilding Industry Offshore & Platform Project and so on !YUHONG brand goods have been already exported to more than 40 countries , because of strict quality control policy, excellent sales service ,delivery on time. YUHONG won more and more new clients and got more and more repeat orders from old clients, in YUHONG People's mind: Quality is First Important! We openly invite all customers coming to visit our group and looking forward to a continuation or commencement of our business activities together!





STAINLESS AND DUPLEX STEEL PIPE & TUBE						OD Range S=Seamless W=Welded		Wall Range AW=Average Wall Thk. MW=Min. Wall Thk.		Max. Length		
Specifications		Material Grade				inches	mm	inches	mm	ft.	m	
A/SA-213	Seamless Austenitic Alloy Steel Boiler, SuperHeater and Heat Exchanger Tube	TP304	TP304L	TP304H	TP317	TP321	0.125	3.18	0.016	0.41 AW/MW	660	200
	U-Bending Available	TP316	TP316L	TP316TI	TP347	TP347H	6	152.4	1	25.4		
	Welded Austenitic Alloy Steel Boiler, SuperHeater and Heat Exchanger Tube	TP304	TP316	TP321	TP310S		0.25	6.35	0.016	0.41 AW		
U-Bending Available	TP304L	TP316L	TP321H	TP347H		TO	TO	TO	TO			
						6	152.4	1	25.4			
A/SA-268	Seamless and Welded Ferritic And Martensitic Stainless Steel Tube For General Service	TP405	TP409	TP410	TP430		0.25	6.35	0.02	0.508 AW/MW	3280	1000
		TP439	TP444	TP446	TP441		TO	TO	TO	TO		
							6	152.4	1	25.4		
A/SA-269	Seamless and Welded Austenitic Stainless Steel Tube	TP304	TP304L	TP304H	TP317	TP321	0.125	3.18	0.016	0.41 AW	3280	1000
	U-Bending or Coil Available	TP316	TP316L	TP316TI	TP347	TP347H	6	152.4	1	25.4		
							0.125	3.18	0.016	0.41 AW		
A/SA-270	Seamless and Welded Austenitic Stainless Steel Sanitary Tube	TP304	TP304L				TO	TO	TO	TO		
		TP316	TP316L				TO	TO	TO	TO		
							6	152.4	0.2	5.08		
A/SA-312	Seamless and Welded Austenitic Stainless Steel Pipe	TP304	TP304L	TP304H	TP317	TP321	0.5	12.7	0.016	0.41 AW	80	25
	Square/Round Pipe and Tube Available	TP316	TP316L	TP316TI	TP347	TP347H						
		TP309S	TP316LN	TP347HFG	TP347LN	TP348H		3600	2.5	63.5		
A/SA-358	Welded Austenitic Stainless Steel Pipe For high temperature	TP304	TP304L	TP321			1	25.4	0.05	1 AW	50	15
		TP316	TP316L	TP321H			TO	TO	TO	TO		
								3600	2.5	63.5		
A/SA-511	Seamless Stainless Steel Pipe and Tube	TP304	TP304L	TP304H	TP317	TP321	0.5	12.7	0.016	0.41 AW	80	25
	Square/Round Pipe and Tube Available	TP316	TP316L	TP316TI	TP347	TP347H	48	1219	2.5	63.5		
A/SA-554	Welded Stainless Steel Mechanical Tubing	TP304	TP304L				0.5	12.7	0.016	0.41 AW	50	15
		TP316	TP316L				TO	TO	TO	TO		
							6	152.4	0.1	2.5		
A/SA-778	Welded, Un-Annealed Austenitic Stainless Steel Pipe	TP304	TP304L	TP321			1	25.4	0.05	1 AW	50	15
		TP316	TP316L	TP321H			TO	TO	TO	TO		
									1	25.4		



STAINLESS AND DUPLEX STEEL PIPE & TUBE						OD Range S=Seamless W=Welded		Wall Range AW=Average Wall Thk. MW=Min. Wall Thk.		Max. Length		
Specifications		Material Grade				inches	mm	inches	mm	ft.	m	
A/SA-789	Seamless and Welded Ferritic And Austenitic Stainless Steel Tube	S31803	S32205	S31500			0.25	6.35	0.02	0.508 AW/MW	80	25
	U-Bending Available	S32750	S32760	S32304			TO	TO	TO	TO		
		S32900					6	152.4	0.5	12.7		
A/SA-790	Seamless and Welded Ferritic And Austenitic Stainless Steel Pipe	S31803	S32205	S31500			0.25	6.35	0.02	0.508 AW/MW	80	25
		S32750	S32760	S32304			TO	TO	TO	TO		
		S32900						3600	2.5	63.5		
A/SA-928	Ferritic/Austenitic (Duplex) Stainless Steel Pipe	S31803	S32205	S31500			0.25	6.35	0.02	0.508 AW/MW	80	25
	Electric Fusion Welded with Addition of Filler Metal	S32750	S32760	S32304			TO	TO	TO	TO		
								3600	2.5	63.5		
JIS-G3459	Stainless Steel Pipe and Tube	SUS304	SUS304L	SUS321			1	25.4	0.05	1 AW	50	15
		SUS316	SUS316L	SUS316Ti			TO	TO	TO	TO		
		SUS347	SUS347H	SUS317			48	1219	2	50.8		
JIS-G3463	Stainless Steel Boiler and Heat Exchanger Tube	SUS304	SUS304L	SUS321			0.125	3.18	0.016	0.41 AW/MW	80	25
	U-Bending Available	SUS316	SUS316L	SUS316Ti			TO	TO	TO	TO		
		SUS347	SUS347H	SUS317			6	152.4	1	25.4		
GOST 9941-81	Seamless Stainless Steel Pipe and Tube	08X18H10	03X18H11	12X18H10	03X17H14M2		0.5	12.7	0.016	0.41 AW	80	25
	U-Bending Available	08X17H14M2	12X18H20T	08X18H10T	12X18H11T		TO	TO	TO	TO		
								48	1219	2.5		
EN 10216-5	Seamless Stainless Steel Pipe and Tube	1.4301	1.4306	1.4307	1.4571		0.5	12.7	0.016	0.41 AW	80	25
	U-Bending Available	1.4948	1.4401	1.4404	1.4541		TO	TO	TO	TO		
		1.4940	1.4550	1.4912	1.4845							
		1.4462	1.4539	1.4438	1.4501		48	1219	2	50		
DIN17456	Seamless Circular Austenitic Stainless Steel Pipe and Tube	1.4301	1.4306	1.4307	1.4571		0.5	12.7	0.016	0.41 AW	80	25
	For General Service	1.4948	1.4401	1.4404	1.4541		TO	TO	TO	TO		
		1.4940	1.4550	1.4912	1.4845							
		1.4462	1.4539	1.4438	1.4501		48	1219	2	50		
DIN17457	Welded Circular Austenitic Stainless Steel Pipe and Tube	1.4301	1.4306	1.4307			0.5	12.7	0.016	0.41 AW	50	15
	For Special requirements	1.4401	1.4404	1.4541			TO	TO	TO	TO		
							48	1219	2	50		
DIN17458	Seamless Circular Austenitic Stainless Steel Pipe and Tube	1.4301	1.4306	1.4307	1.4571		0.5	12.7	0.016	0.41 AW	80	25
	For General Service	1.4948	1.4401	1.4404	1.4541		TO	TO	TO	TO		
		1.4940	1.4550	1.4912	1.4845							
		1.4462	1.4539	1.4438	1.4501		48	1219	2	50		



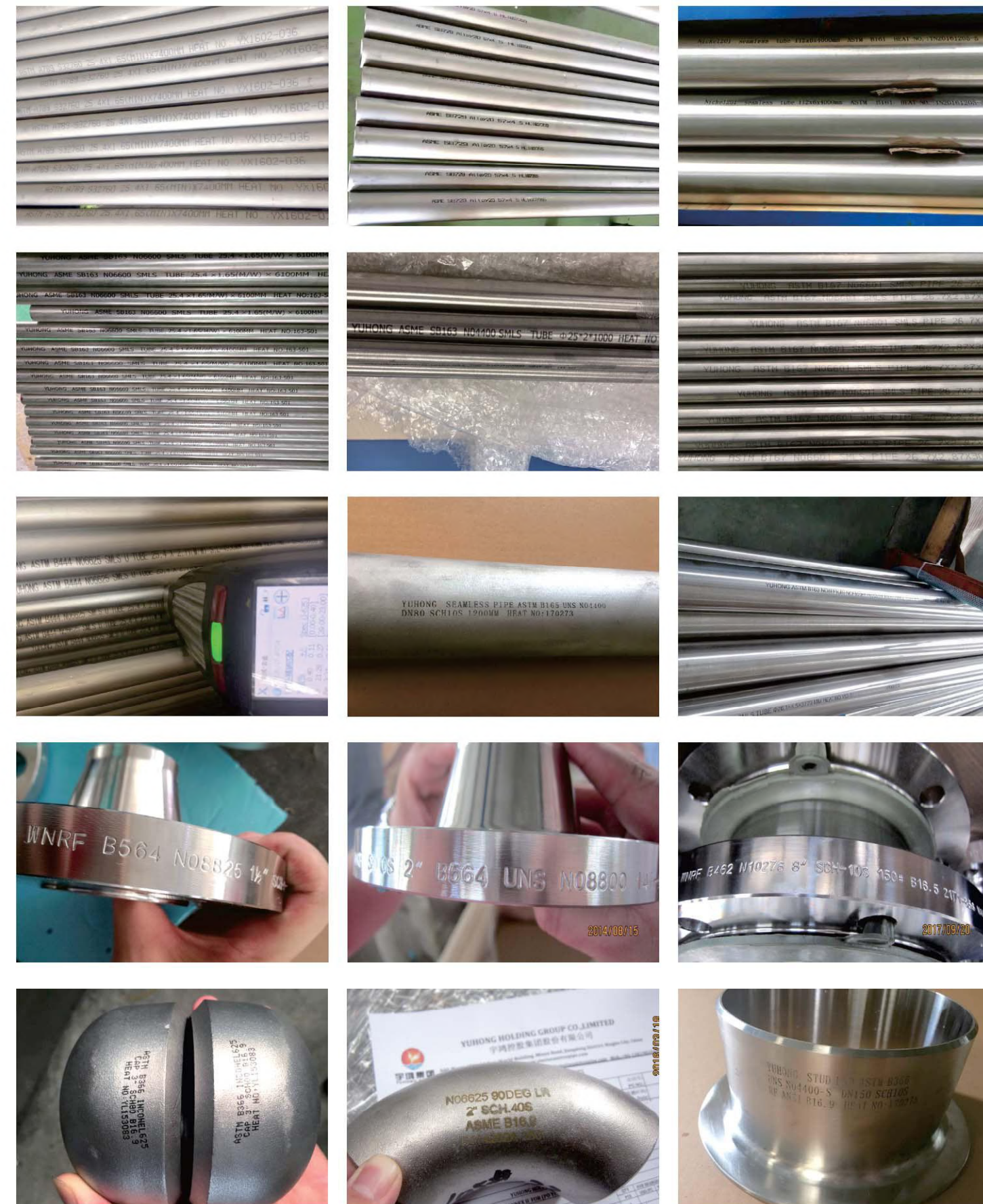
NICKEL ALLOY PIPE & TUBE						OD Range S=Seamless W=Welded		Wall Range AW=Average Wall Thk. MW=Min. Wall Thk.		Max. Length		
Specifications		Material Grade				inches	mm	inches	mm	ft.	m	
B/SB-161	Nickel Seamless Pipe and Tube	NO2200	NO2201			0.25	6.35	0.02	0.508AW	50	15	
						TO	TO	TO	TO			
						24	609.6	0.5	12.7			
B/SB-163	Seamless Nickel and Alloy Condenser and Heat Exchanger Tube	NO2200	NO2201	NO4400	NO6625	0.25	6.35	0.02	0.508AW	50	15	
		NO6600	NO6601	NO6690	NO8800	TO	TO	TO	TO			
	U-Bending Available	NO8810	NO8811	NO8825		24	609.6	2.5	63.5			
B/SB-165	Nickel-Copper Alloy(UNSNO4400) Seamless Pipe and Tube	NO4400				0.25	6.35	0.02	0.508AW	50	15	
						TO	TO	TO	TO			
B/SB-167	Nick-Chromium-Iron Alloys and Nickel-Chromium-Cobalt-Molybdenum Alloy Steel Pipe and Tube	NO6600	NO6601	NO6603	NO6690	NO6693	0.25	6.35	0.02	0.508AW	50	15
		NO6025	NO6045				TO	TO	TO	TO		
		NO6617					16	406.4	2	50.8		
B/SB-444	Nickel-Chromium-Molybdenum-Columbium Alloys Pipe and Tube	NO6625					0.25	6.35	0.02	0.508AW	50	15
							TO	TO	TO	TO		
	U-Bending Available						24	609.6	2.5	63.5		
B/SB-622	Seamless Nickel and Nickel Cobalt Alloy Steel Pipe and Tube	N1001	N10665	N10675	NO6455	NO6635	0.25	6.35	0.02	0.508AW	50	15
		N10276	NO6022	NO6035	NO6200	NO6030	TO	TO	TO	TO		
	U-Bending Available	NO6002	N10675									
B/SB-626	Welded Nickel and Nickel-Cobalt Alloy Pipe	NO8031	NO6022	N10276	NO6455	NO6200	0.25	6.35	0.02	0.508AW	50	15
		NO6030	NO6035	NO6002	N1001	N10665	TO	TO	TO	TO		
		N10675						3600	2	50.8		
B/SB-674	NO8904, NO8925, NO8926 WELDED TUBE	NO8904	NO8925	NO8926			0.25	6.35	0.02	0.508AW	50	15
							TO	TO	TO	TO		
								3600	2	50.8		
B/SB-677	Standard Specification for UNS N08904	NO8904	NO8925	NO8926			0.25	6.35	0.02	0.508AW	50	15
	UNS N08925, and UNS N08926 Seamless Pipe and Tube.						TO	TO	TO	TO		
							20	508	2	50.8		
B/SB-474	EFW Welded Nickel and Nickel Alloy pipe	NO6625	NO8825	NO8020	NO4400		0.25	6.35	0.02	0.508AW	50	15
		NO6601	NO6690				TO	TO	TO	TO		
		NO6600	NO6617	NO6025				3600	2	50.8		



STAINLESS AND DUPLEX STEEL PIPE & TUBE						OD Range S=Seamless W=Welded		Wall Range AW=Average Wall Thk. MW=Min. Wall Thk.		Max. Length		
Specifications		Material Grade				inches	mm	inches	mm	ft.	m	
A/SA-106	Seamless Carbon Steel Tube for High Pressure Service	A	B	C		COLD DRAWN	0.75	19.05	0.06	1.5MW/AW	80	25
						HOT FINISHED	TO	TO	TO	TO		
							48	1219	2.5	63.5		
A/SA-178	Electric-Resistance-Welded Carbon Steel Boiler and Superheater Tube	A	C	D			0.5	12.7	0.06	1.5MW	80	25
						ERW	6	152.4	1	25.4		
							TO	TO	TO	TO		
A/SA-179	Seamless Cold Drawn Low Carbon Steel Heat exchanger & Boiler Tube	A179				Cold Drawn	0.75	19.05	0.06	1.5mw	80	25
						Hot Finished	TO	TO	TO	TO		
	U-Bending Available						6	152.4	1	25.4		
A/SA-192	Seamless Carbon Steel Tube for High Pressure Service	A192				Cold Drawn	0.5	12.7	0.06	1.5MW	80	25
						Hot Finished	TO	TO	TO	TO		
	U-Bending Available						6	152.4	1	25.4		
A/SA-209	Seamless Carbon-Molybdenum Alloy Steel Boiler & Superheater Tube	T-1	T1a	T1b		Cold Drawn	0.5	12.7	0.06	1.5MW	70	20
						Hot Finished	TO	TO	TO	TO		
							6	152.4	1	25.4		
A/SA-210	Seamless Medium Carbon Steel Boiler & Superheater Tube	A-1	C			Cold Drawn	0.5	12.7	0.06	1.5MW	70	20
						Hot Finished	TO	TO	TO	TO		
							6	152.4	1	25.4		
A/SA-213	Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes	T1	T12	T2	T22	Cold Drawn	0.5	12.7	0.06	1.5mw	70	20
		T5	T9	T91	T92	Hot Finished	TO	TO	TO	TO		
							30	762	2.5	63.5		
A/SA-214	ERW Carbon Steel Heat-exchanger Condenser Tubes	A214					0.75	19.05	0.06	1.5MW	70	20
						ERW	TO	TO	TO	TO		
							6	152.4	1	25.4		
A/SA-513	Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing	MT101	MT1020	MT1010			0.75	19.05	0.06	1.5AW	70	20
		MTX1015	MTX1020			ERW	TO	TO	TO	TO		
							6	152.4	1	25.4		



STAINLESS AND DUPLEX STEEL PIPE & TUBE							OD Range S=Seamless W=Welded		Wall Range AW=Average Wall Thk. MW=Min. Wall Thk.		Max. Length	
Specifications		Material Grade					inches	mm	inches	mm	ft.	m
A/SA-53	Black and Hot-Dipped, Zinc-Coated	A	B			SEAMLESS	0.6	14	0.06	1.5AW	50	15
	Steel Pipes, Welded & Seamless Tube					WELDED	TO	TO	TO	TO		
							30	762	2.5	63.5		
API 5L	Specification for Line Pipe	A	B	X65	X60	SEAMLESS	0.6	14	0.06	1.5AW	70	20
		X42	X46	X52		ERW/LSAW	TO	TO	TO	TO		
		X65	X70			SSAW	48	1219	2.5	63.5		
API 5CT	Specification for Casing and Tube	J55	N80-1	C90		SEAMLESS	2	48.3	0.06	1.5AW	50	15
		K55	P110	T95		ERW	TO	TO	TO	TO		
		N80-Q	L80-1	L80(13Cr)			20	508	2	50.8		
API 5D	Seamless Steel Tube	35CrMo	E75-S135	G			2	48.3	0.06	1.5AW	50	15
	For Petroleum Drilling System Service	E	X	S		SEAMLESS	TO	TO	TO	TO		
							8	219	1	25		
A/SA-333	Seamless and Welded Steel Pipe	Gr.1	Gr.3	Cr.4	Gr.6		0.25	6	0.06	1.5AW	70	20
	For Low-Temperature Service	Gr.7	Cr.8	Gr.9	Gr.10	SEAMLESS	TO	TO	TO	TO		
		Cr.11					24	609	2	50.8		
A/SA-335	Seamless Ferritic Alloy-Steel Pipe	P1	P12	P11			0.5	12.7	0.06	1.5AW	70	20
	For High-Temperature Service	P2	P22	P5		SEAMLESS	TO	TO	TO	TO		
		P9	P91	P92			48	1219	2.5	63.5		
A/SA-671	Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures	CA55	CB60	CB65	CB70		16	406.4	0.375	9.52AW	80	25
		CC60	CC65	CC70		EFW	TO	TO	TO	TO		
							60	1524	2.5	63.5		
A/SA-672	Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures	A45	A50	A55			16	406.4	0.375	9.52AW	80	25
		B55	B60	B65	B70	EFW	TO	TO	TO	TO		
		C55	C60	C65	C70		60	1524	2.5	63.5		
A/SA-691	Electric-Fusion-Welded Steel Pipe for High-Pressure Service at High Temperatures	CM-65	CM-70	CM-75			16	406.4	0.375	9.52AW	80	25
		1/2CR	1CR	1-1/4CR	2-1/4CR	EFW	TO	TO	TO	TO		
	Carbon And Alloy Steel Pipe	3CR	5CR	9CR			60	1524	2.5	63.5		

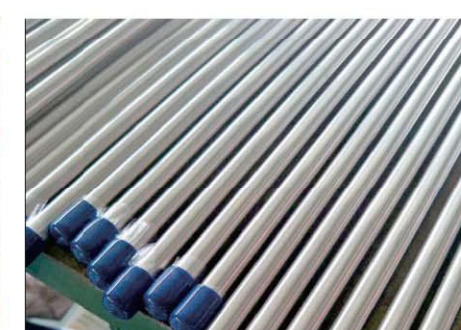




Tube Sizes for Heat Exchangers & Condensers & Boiler

Outside Diameter		BWG							
		25	22	20	18	16	14	12	10
		Wall Thickness mm							
		0.508	0.71	0.89	1.24	1.65	2.11	2.77	3.40
mm	inch	Weight kg/m							
6.35	1/4	0.081	0.109	0.133	0.174	0.212			
9.53	3/8	0.126	0.157	0.193	0.257	0.356	0.429		
12.7	1/2		0.214	0.263	0.356	0.457	0.612	0.754	
15.88	5/8		0.271	0.334	0.455	0.588	0.796	0.995	
19.05	3/4		0.327	0.405	0.553	0.729	0.895	1.236	
25.4	1		0.44	0.546	0.75	0.981	1.234	1.574	2.05
31.75	1 1/4		0.554	0.688	0.947	1.244	1.574	2.014	2.641
38.1	1 1/2		0.667	0.832	1.144	1.514	1.904	2.454	3.233
44.5	1 3/4				1.342	1.774	2.244	2.894	3.5
50.8	2				1.549	2.034	2.574	3.334	4.03
63.5	2 1/2				1.949	2.554	3.244	4.214	5.13
76.2	3				2.345	3.084	3.914	5.094	6.19
88.9	3 1/2				2.729	3.609	4.584	5.974	7.27
101.6	4					4.134	5.254	6.854	8.35
114.3	4 1/2					4.654	5.924	7.734	9.43

Carbon	Chromium	Low Temperature	Stainless Steel		Duplex	Copper & Bronze	Titanium	Ni-Alloy	
SA178-A	SA213-T1	SA333-GR.1	SA213	TP316L	A789-S31803	SB111-C70600	SB338-GR.1	SB163	No2200
SA178-C	SA213-T11	SA333-GR.3	SA249	TP316H	A789-S32205	SB111-C71500	SB338-GR.2	SB167	NO2201
SA179	SA213-T12	SA333-GR.6	SA268	TP316TI	A789-S32750	SB111-C71640	SB338-GR.5	SB444	NO8020
SA192	SA213-T22	SA333-GR.7	SA269	TP316LN	A789-S32760	SB111-C68700	SB338-GR.7	SB514	NO6022
SA209-T1	SA213-T5	SA333-GR.8	SA376	TP321	A789-S32707	SB111-C44300	SB338-GR.9	SB619	N10276
SA209-T1A	SA213-T9	SA334-GR.1	TP304	TP321H	A789-S32304		SB338-GR.12	SB622	NO4400
SA209-T1B	SA213-T91	SA334-GR.3	TP304L	TP347	A789-S31500			SB626	NO6600
SA210-A1	SA213 T92	SA334-GR.6	TP304H	TP347H	S31254			SB674	NO6601
SA210-C		SA334-GR.7	TP304N	TP405	254MA			SB677	NO6625
SA214		SA334-GR.8	TP310H	TP409	17-4PH			SB704	NO690
SA513 MT 1010			TP310S	TP410	17-7PH			SB705	NO8800
SA513 MT 1015			TP309S	TP430	15-7PH			N1001	NO8810
SA513 MT 1020			TP317	TP439				N10665	NO8811
			TP317L	TP444				N10675	NO8825
			TP348	TP446				TP904L	
			TP347HFG						





Buttweld fittings : 180°/90°/45°Elbow, Equal Tee, Reducing Tee, Concentric Reducer, Eccentric Reducer, Cap , Cross.
 Forged Fittings: Threaded and Socket weld 90°/45°Elbow, Tee, Reducing Tee, Full Coupling, Half Coupling ,
 Thread Olet, Reducing Coupling, Latrolet, Union, Nipple, Stud End.

Standard Fittings

Type of Product	Dimensions	Execution
Elbows	Up to 64"	Seamless and Welded (cold formed, hot formed and by mandrel)
Equal and Reducing Tees	Up to 64"	Seamless and Welded (cold formed and hot formed)
Concentric and Eccentric Reducers	Up to 64"	Seamless and Welded (cold formed and hot formed)
Caps	Up to 64"	Seamless (cold formed and hot formed)

Special Fittings

Type of Product	Dimensions	Execution
Reducing Elbows	Up to 36"	Seamless and Welded
Bends Special Radius(2.5D-3D-5D)	Up to 48"	Seamless and Welded
Barred Tees	Up to 48"	Seamless and Welded (cold formed and hot formed)
Equal and Reducing Crosses	Up to 48"	Seamless and Welded
Equal and Reducing Laterals	Up to 48"	Seamless and Welded

Fittings Material

A234 WPB	A403 WP304/304L	A815 UNS S31803	B366 NO10276 (C-276)	B363 WP T1
A234 WPC	A403 WP304H	A815 UNS S32750	B366 NO6022 (C-22)	B363 WP T2
A420 WPL1	A403 WP316/316L	A815 UNS S32760	B366 NO4400 (MONEL 400)	B363 WP T3
A420 WPL3	A403 WP316H	A815 UNS S32205	B366 NO6601 (ALLOY 601)	17-4PH
A420 WPL6	A403 WP317/317L	A815 UNS S31500	B366 UNS N06625 (ALLOY 625)	17-7PH
A234 WP5	A403 WP321	A860 WPHY 42	B366 UNS N08800 (ALLOY 800)	15-7PH
A234 WP9	A403 WP321H	A860 WPHY 46	B366 NO8810 (ALLOY 800H)	
A234 WP11	A403 WP347	A860 WPHY 52	B366 NO8811 (ALLOY 800HT)	
A234 WP12	A403 WP347H	A860 WPHY 56	B366 UNS N08825 (ALLOY 825)	
A234 WP22	A403 WP310S	A860 WPHY 60	B366 UNS N08020 (ALLOY 20)	
A234 WP91	A403 WP316Ti	A860 WPHY 65	B366 UNS N08904 (904L)	
A234 WP92		A860 WPHY 70	UNS S 31254/254SMO, 253MA	



Type of Flange			Type of Face		
WELDING-NECK	THREAD	LOOSE	RF	FF	RTJ
Slip-On	SOCKET WELD	REDUCING FLANGE	M	F	T
BLIND	LAP JOINT	ORIFICE	G	MF	TG
PLATE	SPECIAL FLANGES ACCORDING TO DRAWING				

Size and Pressure Class

DN10--DN2000 , PN6---PN400 , 150LBS---10000LBS

Material

Carbon & Low Temperature	Chromium	Stainless & Duplex		Copper & Bronze	Ni-Alloy	Titanium
A105 /A105N	A182-F1	A182-F304	A182-F347H	SB151-C70600	B564-NO2200	SB381-GR.F1
A516-GR.70	A182-F11	A182-F304L	A182-F904L	SB151-C71500	B564-NO6022	SB381-GR.F3
A350-LF2	A182-F12	A182-F304H	A182-F44	SB151-C71520	B564-N10276	SB381-GR.F5
A694-F42	A182-F22	A182-F304N	A182-F51	C44300	B564-NO4400	
A694-F46	A182-F5	A182-F309S	A182-F53	C68700	B564-NO6600	
A694-F52	A182-F9	A182-F310S	A182-F55	C71640	B564-NO6601	
A694-F56	A182-F91	A182-F310H	A182-F60		B564-NO6625	
A694-F60	A182-F92	A182-F316			B564-NO8800	
A694-F65		A182-F316L			B564-NO8810	
A694-F70		A182-F316Ti			B564-NO8811	
		A182-F316H			B564-NO8825	
		A182-F317L			B564-N10665	
		A182-F321			B564-N10675	
		A182-F321H			B160-NO2201	
		A182-F347			B462-NO8020	

Relevant Standards

ANSI/NORMS	BS 4504
MSS SP 44	BS 10 TABLE FLANGES
AWWA NORMS	BS 3293
EN 1092-1	ISO-7005-1
DIN NORMS	JIS NORMS



翅片管规格参考
FIN TUBE REFERENCE

类型 TYPE	名称 NAME	基管常规材料 BARE TUBE GENERAL MATERIAL	翅片常规材料 FIN GENERAL MATERIAL	基管外径 (MM) BARE TUBE DIAMETERR	翅片规格 (MM) FIN TUBE SPECIFICATION		
					片距 FIN PITCH	片高 FIN HEIGHT	片厚 FIN THICK
镶嵌 EMBEDDED	G型翅片管 G-TYPE FIN TUBE	碳钢、铜、不锈钢、合金 CARBON STEEL, COPPER STAINLESS STEEL,ALLOY	铝 ALUMINUM	16-63	2.1-5	<17	~0.4
挤压 EXTRUDED	单金属/双金属 SINGLE METAL GOMBINED METAL	碳钢、铜、不锈钢、合金 CARBON STEEL, COPPER STAINLESS STEEL,ALLOY	铜、铝 COPPER ALUMINUM	8-51	1.6-10	<17	0.2-0.4
	波纹管/T型翅片管 LOW FIN TUBE T-TYPE FIN TUBE	碳钢、铜、不锈钢、合金 CARBON STEEL, COPPER STAINLESS STEEL,ALLOY	/	10-38	0.6-2	<1.6	~0.3
	波节管/胀波管 BAMBOO TUBE CORRUGATED TUBE	碳钢、铜、不锈钢、合金 CARBON STEEL, COPPER STAINLESS STEEL,ALLOY	/	16-51	8-30	<2.5	/
缠绕 WOUND	L/KL/LL型翅片管 L/KL/LL TYPE FIN TUBE	碳钢、铜、不锈钢、合金 CARBON STEEL, COPPER STAINLESS STEEL,ALLOY	铜、铝 COPPER ALUMINUM	16-63	2.1-5	<17	~0.4
串片 STRING	串片翅片管 STRING FIN TUBE	铝、铜、碳钢、不锈钢 COPPER CARBON STEEL STAINLESS STEEL	铝、铜、碳钢、不锈钢 ALUMINUM,COPPER CARBON STEEL STAINLESS STEEL	25-38	2.1-3.5	<20	0.2-0.5
U型 U-TYPE	U型管 U-TYPE TUBE	碳钢、铜、不锈钢 CARBON STEEL, COPPER STAINLESS STEEL	/	16-38	/	/	/
焊接 WELDING	高频焊翅片管 HF WELDING FIN TUBE	碳钢、合金、不锈钢 CARBON STEEL, ALLOY STAINLESS STEEL	碳钢、合金、不锈钢 CARBON STEEL, ALLOY STAINLESS STEEL	16-219	3-25	5-30	0.8-3
	H/HH型翅片管 H/HH TYPE FIN TUBE	碳钢、合金、不锈钢 CARBON STEEL, ALLOY STAINLESS STEEL	碳钢、合金、不锈钢 CARBON STEEL, ALLOY STAINLESS STEEL	25-63	8-30	<200	1.5-3.5
	钉头翅片管 STUDED FIN TUBE	碳钢、合金、不锈钢 CARBON STEEL, ALLOY STAINLESS STEEL	碳钢、合金、不锈钢 CARBON STEEL, ALLOY STAINLESS STEEL	25-219	8-30	5-35	外径 Φ5-20

YUHONG GROUP also supply cladding products , and our cladding products all accept Radiographic Inspection(RT), Dye Penetration Test(DPT),Positive Material Identification (PMI), Ultrasonic Testing(UT), Magnetic Particle Testing (MT),Visual Test (VT), Clad Layer Thickness Checking, Fe Content Inspection.

Clad Pipes

- Pipe Base Material including ASTM A53 GR.B , A106 GR.B , API 5L GR.B, X42, X 46, X 52, X 56, X60, X65, X 70, A333 Gr.6, Stainless Stee, Duplex Steel and So On
- According to API 5LD
- ID size:40mm to 1200mm
- Length: Up to 12.2M
- Hydraulic pressure test after cladding according to API 5LD requirement
- Pickled And passivation on internal surface, steam cleaning of surface
- 3LPP anti corrosion protection on pipes outside surface
- PT with internal video recording

Clad Bends

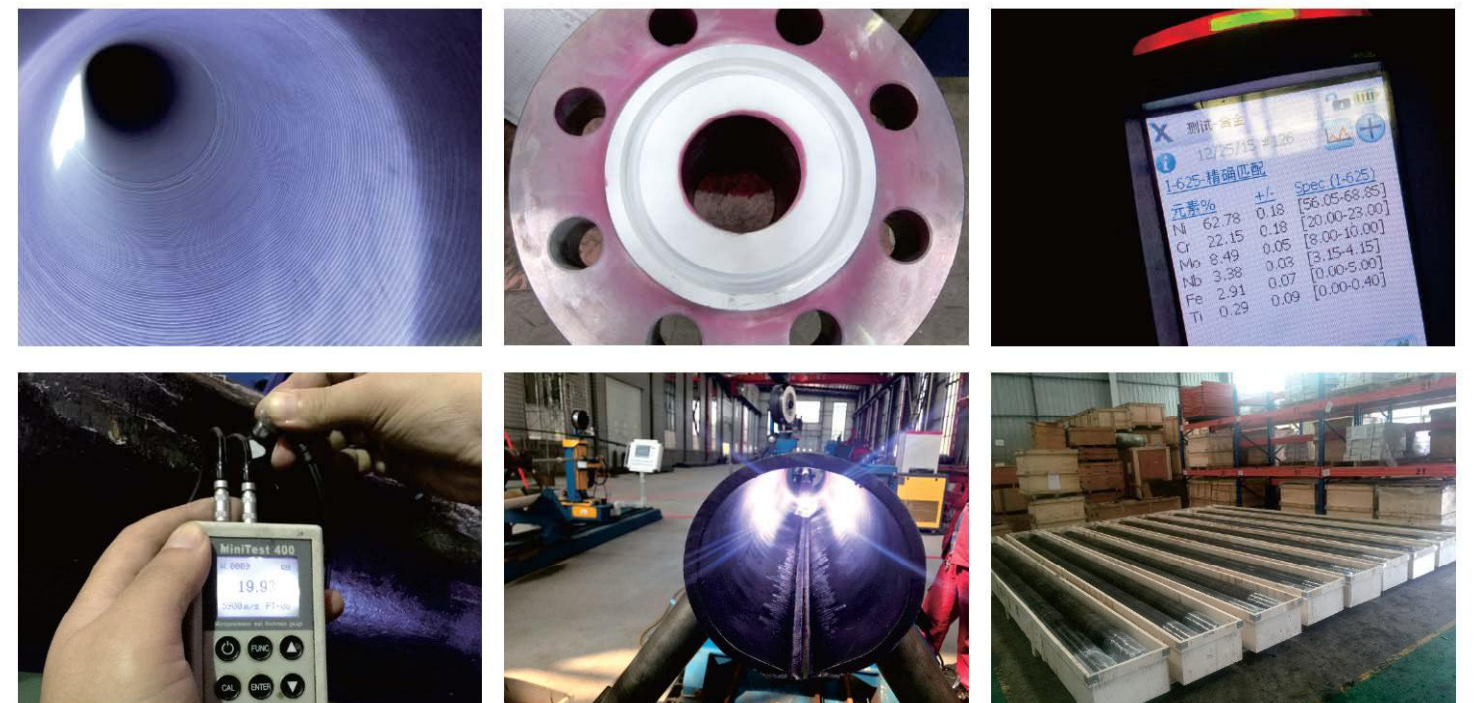
- Pipe Base Material including ASTM A53 GR.B , A106 GR.B , API 5L GR.B, X42, X 46, X 52, X 56, X60, X65, X 70, A333 Gr.6, Stainless Steel, Duplex Steel and So On
- According to API 5LD , B16.49
- ID size:40mm to 1200mm , R≥3D
- Length: Up to 12.2M
- 3LPP anti corrosion protection on pipes outside surface
- Hydraulic pressure test after cladding according to API 5LD requirement
- MPQT performance test per dimension , per material , per furnace, and per radius
- PT with internal video recording
- Disk Test

Clad Valves, Flanges, Fittings

- Bore size range: 38mm to 1800mm
- Valves base material: A216 WCB, WCC, A352 LCC, ...
- Flange base material:ASTMA105, A350 LF1, LF2, CL1/CL2, LF3 CL1/CL2
- ASTM A694 F42, F46, F52, F56, F60, F65, F70
- A182 F304/304L, F316/316L, ...
- API 45K, 65K, 75K
- AISI 4130(M), 4140, 4380, 8630(M)
- Fitting base material: ASTM A234 WPB, WPC, WP11, WP22, WP5, WP9, WP91
- ASTM A420, WPL1, WPL3, WPL6
- ASTM A860 WPHY42, WPHY, 46, WPHY 52, WPHY56, WPHY 60, WPHY65, WPHY70
- Other material: ASTM A516 GR.60, GR.70
- Full range of flange according to API 6A, API 17D, ASME B16.5
- Full range of fitting according to B16.9
- 100% Size and Visual inspection
- 100% PT
- 100% UT

Clad Material

- Stainless Steel : 304/304L, 316/316L, 904L, ...
- Incoloy 800, 800H, 800HT, 825
- Inconel600, 601, 625, 718, X-750
- Hastelloy C22, C276
- Monel 400, K-500
- Other material depend on request



YUHONG controls the entire manufacturing process from raw material to finished products, Inspection points are locked in the manufacturing process to ensure all products meet all requirements. In such quality control system, faults are detected at the earliest possible stage of the production process in order to eliminate the risk of rejection at final inspection. We have made continuous efforts to reduce the problem throughout total quality assurance system including traceability control, YUHONG not only inspect by ourself , also through TPI like BV, SGS, DNV, ABS, MOODY, IBR, so that today the quality of our products is clearly recognized by our clients.

Chemical Composition Testing&Mechanical Testing	Chloride Contamination Testing
In-House PMI (Positive Material Identification) Test for Mix-Up control and Traceability	Air Under water Testing
In-House Spectrometer	Universal Testing
Hydro Test - For straight and U-Tubes	Digital hardness Testing
Micro-scope with Image Analyzer for Microstructure Test and Analysis	Polishing Grinding Testing
Ultrasonic Testing	IGC Testing
Eddy Current Testing	Penetration Testing



Material Grade	UNS NO.	DIN	Ni Min.	Cu Max.	Mo	Fe Max.	Mn Max.	C Max.	Si Max.	S Max.	Cr	N	Al Max.	Ti Max.	P Max.	Nb+Ta	W	Co Max.	V Max.	B Max.	Zr Max.	Ta Max.	Ni+Mo	La Max.	Pipe & Tube		Fitting	Forging & Flange	Plate & Strip	Bar	Density g/cm ³
																									Welded	Seamless					
Alloy200	N02200	2.4066	99.0	0.25	/	0.4	0.35	0.15	0.35	0.01	/	/	/	/	/	/	/	/	/	/	/	/	/	/	B725/B730	B161/B163	B366	B160/B564	B162		8.9
Alloy201	N02201	2.4068	99.0	0.25	/	0.4	0.35	0.02	0.35	0.01	/	/	/	/	/	/	/	/	/	/	/	/	/	/	B725/B730	B161/B163	B366	B160	B162		8.9
Alloy 20	N08020	2.4660	32.0-38.0	3.0-4.0	2.0-3.0	Balance	2.00	0.07	1.00	0.035	19.0-21.0	/	/	/	/	8°C~1.0	/	/	/	/	/	/	/	/	B464/B468	B729	B366	B462	B463	B473	8.08
Alloy 28	N08028		30.0-34.0	0.6-1.4	3.0-4.0	Balance	2.50	0.03	1.00	0.03	26.0-28.0	/	/	/	/	/	/	/	/	/	/	/	/	/		B668	B366		B709		8.08
Alloy 31	N08031	1.4562	30.0-32.0	1.0-1.4	6.0-7.0	Balance	2.00	0.015	0.30	0.01	26.0-28.0	0.15-0.25	/	/	0.02	/	/	/	/	/	/	/	/	/	B619/B626	B622	B366	B462/B564	B625	B581/B694	8.08
Hastelloy C-22	N06022	2.4602	Balance	/	12.5-14.5	2.0-6.0	0.50	0.015	0.08	0.02	20.0-22.5	/	/	/	0.02	/	2.5-3.5	2.50	0.35	/	/	/	/	/	B619/B626	B622	B366	B462/B564	B575	B574	8.94
Hastelloy C-276	N10276	2.4819	Balance	/	15.0-17.0	4.0-7.0	1.00	0.01	0.08	0.03	20.0-22.5	/	/	/	0.04	/	3.0-4.5	2.50	0.35	/	/	/	/	/	B619/B626	B622	B366	B462/B564	B575	B574	8.9
Hastelloy C-4	N06455		Balance	/	14.0-17.0	3.0	1.00	0.015	0.08	0.03	14.0-18.0	/	/	0.7	0.04	/	/	2.00	/	/	/	/	/	/	B619/B626	B622	B366	B574	B575	B574	8.94
Hastelloy S	N06635		Balance	/	14.0-16.5	3.0	1.00	0.02	0.2-0.75	0.015	14.5-17.0	/	0.1-0.5	/	0.02	/	1.00	2.00	/	/	/	/	/	0.01-0.1							8.75
Hastelloy C2000	N06200		Balance	/	15.0-17.0	3.0	0.50	0.01	0.08	0.01	22.0-24.0	/	/	/	0.025	/	/	2.00	/	/	/	/	/	/	B619/B626	B622	B366	B462/B564	B575	B574	8.9
Hastelloy G-30	N06030		Balance	1.0-2.4	4.0-6.0	13.0-17.0	1.50	0.03	0.80	0.02	28.0-31.5	/	/	/	0.04	0.30-1.50	1.5-4.0	5.00	/	/	/	/	/	/	B619/B626	B622	B366	B462	B575	B574	8.75
Hastelloy G-35	N06035		Balance	0.30	7.60-9.00	2.0	0.50	0.05	0.60	0.015	32.25-34.25	/	0.4	/	0.03	/	0.60	1.00	0.2	/	/	/	/	/	B619/B626	B622	B366	B462	B575	B574	8.9
Hastelloy X	N06002		Balance	/	8.0-10.0	17.0-22.0	1.00	0.15	1.00	0.03	20.5-23	/	/	/	0.04	/	0.2-1.0	0.5-2.5	/	/	/	/	/	/	B619	B622	B366	B575	B435	B572	8.94
Hastelloy N	N10003		Balance	0.35	15.0-18.0	5.0	1.00	0.04-0.08	1.00	0.02	6.0-8.0	/	/	/	0.015	/	0.50	0.20	0.5	0.01	/	/	/	/				B573	B434	B573	8.896
Hastelloy B	N1001		Balance	/	26.0-30.0	4.0-6.0	1.00	0.05	1.00	0.03	1.00	/	/	/	0.04	/	/	2.50	0.2-0.4	/	/	/	/	/	B619/B626	B622	B366	B462/B564	B333	B335	9.24
Hastelloy B-2	N10665		Balance	0.20	26.0-30.0	2.0-7.0	1.00	0.02	0.10	0.03	1.00	/	/	/	0.04	/	/	1.00	/	/	/	/	/	/	B619/B626	B622	B366	B462/B564		B335	9.24
Hastelloy B-3	N10675		65.0	0.20	27.0-32.0	1.0-3.0	3.00	0.01	0.10	0.01	1.0-3.0		0.5	0.2	0.03	0.2	3.00	3.00	0.2		0.1	0.2	94.0-98.0	/	B619	B622	B366	B462/B564	B333	B335	9.24
Monel 400	N04400	2.4360	63.0	28.0-34.0	/	2.5	2.00	0.3	0.50	0.024	/	/	/	/	/	/	/	/	/	/	/	/	/	/		B163/B165	B366	B160/B564	B127	B164	8.83
Monel K-500	N0500		63.0	27.0-33.0	/	2.0	1.50	0.18	0.50	0.01	/	/	2.3-3.15	0.35-0.85	/	/	/	/	/	/	/	/	/	/		B163/B165	B366	B564	B127	B865	8.05
Inconel 600	N06600	2.4816	72.0	0.50	/	6.0-10.0	1.00	0.15	0.50	0.015	14.0-17.0	/	/	/	/	/	/	/	/	/	/	/	/	/		B163/B167	B366				8.40
Inconel 601	N06601	2.4851	58.0-63.0	1.00	/	Balance	1.00	0.1	0.50	0.015	21.0-25.0	/	/	/	/	/	/	/	/	/	/	/	/	/		B163/B167	B366				8.10
Inconel 617	N06617		44.5	0.50	8.0-10.0	3.0	1.00	0.15	1.00	0.015	20.0-24.0	/	0.8-1.5	0.2-0.6	/	/	/	10.0-15.0	/	0.006	/	/	/	/						8.40	
Inconel 625	N06625	2.4856	58.0	/	8.0-10.0	5.0	0.50	0.1	0.50	0.015	20.0-23.0	/	0.4	0.4	0.015	3.15-4.15	/	/	/	/	/	/	/	/	B704/B705	B444	B366	B564	B443	B446	8.40
Inconel 690	N06690	2.4642	58.0	0.50	/	7.0-11.0	0.50	0.05	0.50	0.015	27.0-31.0	/	/	/	/	/	/	/	/	/	/	/	/	/							8.19
Inconel 718	N07718	2.4668	50.0-55.0	0.30	2.8-3.3	Balance	0.35	0.08	0.35	0.015	17.0-21.0	/	0.2-0.8	0.65-1.15	0.015	4.75-5.50	/	1.00	/	/	0.006	/	/	/		AMS5589/90		B670	B670	B637	8.24
Inconel X-750	N07750	2.4669	Balance	0.15	3.0-5.0	4.0	0.75	0.15	0.75	0.015	15.0-20.0	/	2.50-3.25	2.50-3.25	0.015		/	13.0-20.0	/	0.003-0.01	/	/	/	/		AMS5582/83		B670	B670	B637	8.25
Incoloy 800	N08800	1.4876	30.0-35.0	0.75	/	39.5 Min.	1.50	0.1	1.00	0.015	19.0-23.0	/	0.15-0.6	0.15-0.6	/	/	/	/	/	/	/	/	/	/	B514	B163/B407	B366	B564	B409/A240	B408	8.00
Incoloy 800H	N08810	1.4958	30.0-35.0	0.75	/	39.5 Min.	1.50	0.05-0.10	1.00	0.015	19.0-23.0	/	0.15-0.6	0.15-0.6	/	/	/	/	/	/	/	/	/	/	B514	B163/B407	B366	B564	B409/A240	B408	8.00
Incoloy 800HT	N08811	1.4958	30.0-35.0	0.75	/	39.5 Min.	1.50	0.06-0.10	1.00	0.015	19.0-23.0	/	0.15-0.6	0.15-0.6	/	/	/	/	/	/	/	/	/	/	B514	B163/B407	B366	B564	B409/A240	B408	8.00
Incoloy 825	N08825	2.4858	38.0-46.0	1.5-3.0	2.5-3.5	22.0 Min.	1.00	0.05	0.50	0.03	19.5-23.5	/	0.2	0.6-1.2	/	/	/	/	/	/	/	/	/	/	B704/B705	B163/B423	B366	B564	B424	B425	8.00
Incoloy 925	N08925		24.0-26.0	0.8-1.5	6.0-7.0	Balance	1.00	0.02	0.50	0.03	19.0-21.0	0.1-0.2	/	/	0.045	/	/	/	/	/	/	/	/	/	B674/B674	B677	B366	B649	B625	B649	8.14
Incoloy 926	N08926	1.4529	24.0-26.0	0.5-1.5	6.0-7.0	Balance	2.00	0.02	0.50	0.01	19.0-21.0	0.15-0.25	/	/	0.03	/	/	/	/	/	/	/	/	/	B674/B674	B677/A312	B366	B649	B625	B649	8.10
Alloy904	N08904	1.4539	23.0-28.0	1.0-2.0	4.0-5.0	Balance	2.00	0.02	1.00	0.035	19.0-23.0	/	/	/	0.045	/	/	/	/	/	/	/	/	/	B674/B674	B677/A312	B366	B649/A182	B625	B649/A484	8.24
SAF2205	S31803	1.4462	4.5-6.5	/	2.5-3.5	/	2.00	0.03	1.00	0.02	21.0-23.0	0.08-0.20	/	/	0.03	/	/	/	/	/	/	/	/	/	A789/790	A789/790	A815	A182	A240	A182	7.8
SAF2507	S32750	1.4410	6.0-8.0	0.5	3.0-5.0	/	1.20	0.03	0.8	0.02	24.0-26.0	0.24-0.3	/	/	0.035	/	/	/	/	/	/	/	/	/	A789/790	A789/790	A815	A182	A240	A182	7.8
SUPER Duplex	S32760	1.4501	6.0-8.0	0.50-1.00	3.0-4.0	/	1.00	0.05	1.00	0.01	24.0-26.0	0.20-0.30	/	/	0.03	/	0.50-1.00	/	/	/	/	/	/	/	A789/790	A789/790	A815		A240	A182	7.8
	32304		3.0-5.5	0.05-0.60	0.05-0.60	/	2.5	0.03	1.00	0.04	21.5-24.5	0.05-0.20	/	/	0.04	/	/	/	/	/	/	/	/	/	A789/790	A789/790	A815				7.8
	31500		4.3-5.2	/	2.50-3.00	/	1.20-2.00	0.03	1.40-2.00	0.03	18.0-19.0	0.05-0.1	/	/	0.03	/	/	/	/	/	/	/	/	/	A789/790	A789/790	A815				7.7
253MA	S30815	1.4835	10.0-12.0	/	/	Balance	0.80	0.05-0.1	1.4-2.0	0.03	20.0-22.0	0.14-0.2	/	/	0.04	/	/	/	/	/	/	/	/					A240		7.98	
254SMO	S31254	1.4547	17.5-18.5	0.50-1.00	6.0-6.5	/	1.00	0.02	0.8	0.01	19.5-20.5	N 2 C ^C 0.18-0.22	/	0.03	/	/	/	/	/	/	/	/	/	/	A312	A312/A213	A403	A182		A182	8.24
	17-4PH	1.4542	3.0-5.0	3.0-5.0	/	/	1.00	0.07	1.00	0.03	15.0-17.0	/	/	/	/	0.15-0.45	/	/	/	/	/	/	/	/							7.78
	17-7PH	1.4568	6.5-7.75	/	/	/	1.00	0.09	1.00	0.04	16.0-18.0	/	0.75-1.5	/	/	/	/	/	/	/	/	/	/	/							7.65
	15-7PH	1.4532	6.5-7.75	/	0.75-1.5	/	1.00	0.09	1.00	0.03	14.0-16.0	/	/	/	/	/	/	/	/	/	/	/	/	/							7.65

DN	NPS	OD (mm)	5S	10S	10	20	30	40S	STD	40	60	XS	80S	80	100	120	140	160	XXS
6	1/8	10.29	—	1.24	—	—	—	1.73	1.73	1.73	—	2.41	2.41	2.41	—	—	—	—	—
8	1/4	13.72	—	1.65	—	—	—	2.24	2.24	2.24	—	3.02	3.02	3.02	—	—	—	—	—
10	3/8	17.15	—	1.65	—	—	—	2.31	2.31	2.31	—	3.20	3.20	3.20	—	—	—	—	—
15	1/2	21.34	1.65	2.11	—	—	—	2.77	2.77	2.77	—	3.73	3.73	3.73	—	—	—	4.78	7.47
20	3/4	26.67	1.65	2.11	—	—	—	2.87	2.87	2.87	—	3.91	3.91	3.91	—	—	—	5.56	7.82
25	1	33.4	1.65	2.77	—	—	—	3.38	3.38	3.38	—	4.55	4.55	4.55	—	—	—	6.35	9.09
32	1 1/4	42.16	1.65	2.77	—	—	—	3.56	3.56	3.56	—	4.85	4.85	4.85	—	—	—	6.35	9.70
40	1 1/2	48.26	1.65	2.77	—	—	—	3.68	3.68	3.68	—	5.08	5.08	5.08	—	—	—	7.14	10.16
50	2	60.33	1.65	2.77	—	—	—	3.91	3.91	3.91	—	5.54	5.54	5.54	—	—	—	8.74	11.07
65	2 1/2	73.03	2.11	3.05	—	—	—	5.16	5.16	5.16	—	7.01	7.01	7.01	—	—	—	9.52	14.02
80	3	88.9	2.11	3.05	—	—	—	5.49	5.49	5.49	—	7.62	7.62	7.62	—	—	—	11.13	15.24
90	3 1/2	101.6	2.11	3.05	—	—	—	5.74	5.74	5.74	—	8.08	8.08	8.08	—	—	—	—	—
100	4	114.3	2.11	3.05	—	—	—	6.02	6.02	6.02	—	8.56	8.56	8.56	—	11.13	—	13.49	17.12
125	5	141.3	2.77	3.40	—	—	—	6.55	6.55	6.55	—	9.52	9.52	9.52	—	12.70	—	15.88	19.05
150	6	168.28	2.77	3.40	—	—	—	7.11	7.11	7.11	—	10.97	10.97	10.97	—	14.27	—	18.26	21.95
200	8	219.08	2.77	3.76	—	6.35	7.04	8.18	8.18	8.18	10.31	12.70	12.70	12.70	15.10	18.26	20.60	23.00	22.23
250	10	273.05	3.40	4.19	—	6.35	7.80	9.27	9.27	9.27	12.70	12.70	12.70	15.09	18.26	21.44	25.40	28.58	25.40
300	12	323.85	3.96	4.57	—	6.35	8.38	9.52	9.52	10.31	14.27	12.70	12.70	17.48	21.44	25.40	28.58	33.32	25.40
350	14	355.6	3.96	4.78	6.35	7.92	9.52	—	9.52	11.13	15.09	12.70	—	19.05	23.83	27.79	31.75	35.71	—
400	16	406.4	4.19	4.78	6.35	7.92	9.52	—	9.52	12.70	16.66	12.70	—	21.44	26.19	30.96	36.53	40.49	—
450	18	457.2	4.19	4.78	6.35	7.92	11.13	—	9.52	14.27	19.05	12.70	—	23.83	29.36	34.93	39.67	45.24	—
500	20	508	4.78	5.54	6.35	9.52	12.70	—	9.52	15.09	20.62	12.70	—	26.19	32.54	38.10	44.45	50.01	—
550	22	558.8	4.78	5.54	6.35	9.52	12.70	—	9.52	15.87	22.23	12.70	—	28.57	34.93	41.28	47.62	53.98	—
600	24	609.6	5.54	6.35	6.35	9.52	14.27	—	9.52	17.48	24.61	12.70	—	30.96	38.89	46.02	52.37	59.54	—
650	26	660.4	—	—	7.92	12.70	—	—	9.52	—	—	12.70	—	—	—	—	—	—	—
700	28	711.6	—	—	7.92	12.70	15.88	—	9.52	—	—	12.70	—	—	—	—	—	—	—
750	30	762	6.35	7.92	7.92	12.70	15.88	—	9.52	—	—	12.70	—	—	—	—	—	—	—
800	32	812.8	—	—	7.92	12.70	15.88	—	9.52	17.48	—	12.70	—	—	—	—	—	—	—
850	34	863.6	—	—	7.92	12.70	15.88	—	9.52	17.48	—	12.70	—	—	—	—	—	—	—
900	36	914.4	—	—	7.92	12.70	15.88	—	9.52	19.05	—	12.70	—	—	—	—	—	—	—
—	38	965.2	—	—	—	—	—	—	9.52	—	—	12.70	—	—	—	—	—	—	—
1000	40	1016	—	—	—	—	—	—	9.52	—	—	12.70	—	—	—	—	—	—	—
—	42	1066.8	—	—	—	—	—	—	9.52	—	—	12.70	—	—	—	—	—	—	—
1100	44	1117.6	—	—	—	—	—	—	9.52	—	—	12.70	—	—	—	—	—	—	—
—	46	1168.4	—	—	—	—	—	—	9.52	—	—	12.70	—	—	—	—	—	—	—
1200	48	1219.2	—	—	—	—	—	—	9.52	—	—	12.70	—	—	—	—	—	—	—

DN	NPS	OD (mm)	SGP	5S	10S	10	20	30	40S	STD	40	60	XS	80S	80	100	120	140	160	XXS
15	1/2	21.7	2.8	1.65	2.10	—	2.50	—	2.80	2.80	2.80	—	3.70	3.70	3.70	—	—	—	4.80	7.50
20	3/4	27.2	2.8	1.65	2.10	—	2.50	—	2.90	2.90	2.90	—	3.90	3.90	3.90	—	—	—	5.60	7.80
25	1	34	3.2	1.65	2.80	—	3.00	—	3.40	3.40	3.40	—	4.50	4.50	4.50	—	—	—	6.40	9.10
32	1 1/4	42.7	3.5	1.65	2.80	—	3.00	—	3.60	3.60	3.60	—	4.90	4.90	4.90	—	—	—	6.40	9.70
40	1 1/2	48.6	3.5	1.65	2.80	—	3.00	—	3.70	3.70	3.70	—	5.10	5.10	5.10	—	—	—	7.10	10.20
50	2	60.5	3.8	1.65	2.80	—	3.50	—	3.90	3.90	3.90	—	5.50	5.50	5.50	—	—	—	8.70	11.10
65	2 1/2	76.3	4.2	2.10	3.00	—	3.50	—	5.20	5.20	5.20	—	7.00	7.00	7.00	—	—	—	9.50	14.00
80	3	89.1	4.2	2.10	3.00	—	4.00	—	5.50	5.50	5.50	—	7.60	7.60	7.60	—	—	—	11.10	15.20
90	3 1/2	101.6	4.2	2.10	3.00	—	4.00	—	5.70	5.70	5.70	—	8.10	8.10	8.10	—	—	—	—	—
100	4	114.3	4.5	2.10	3.00	—	4.00	—	6.00	6.00	6.00	—	8.60	8.60	8.60	—	11.10	—	13.50	17.10
125	5	139.8	4.5	2.80	3.40	—	5.00	—	6.60	6.60	6.60	—	9.50	9.50	9.50	—	12.70	—	15.90	19.00
150	6	165.2	5	2.80	3.40	—	5.00	—	7.10	7.10	7.10	—	11.00	11.00	11.00	—	14.30	—	18.20	21.90
200	8	216.3	5.8	2.80	4.00	—	6.50	7.00	8.20	8.20	8.20	10.30	12.70	12.70	12.70	15.10	18.20	20.60	23.00	22.20
250	10	267.4	6.6	3.40	4.00	—	6.50	7.80	9.30	9.30	9.30	12.70	12.70	12.70	15.10	18.30	21.40	25.40	28.60	25.40
300	12	318.5	6.9	4.00	4.50	—	6.50	8.40	9.50	9.50	10.30	14.30	12.70	12.70	17.40	21.40	25.40	28.60	33.30	25.40
350	14	355.6	7.9	4.00	5.00	6.40	8.00	9.50	—	9.50	11.10	15.10	12.70	—	19.00	23.80	27.80	31.80	35.70	—
400	16	406.4	7.9	4.50	5.00	6.40	8.00	9.50	—	9.50	12.70	16.70	12.70	—	21.40	26.20	30.90	36.50	40.50	—
450	18	457.2	7.9	4.50	5.00	6.40	8.00	11.10	—	9.50	14.30	19.00	12.70	—	23.80	29.40	34.90	39.70	45.20	—
500	20	508	7.9	5.00	5.50	6.40	9.50	12.70	—	9.50	15.10	20.60	12.70	—	26.20	32.50	38.10	44.40	50.00	—
550	22	558.8	—	5.00	5.50	6.40	9.50	12.70	—	9.50	15.90	22.20	12.70	—	28.60	34.90	41.30	47.60	54.00	—
600	24	609.6	—	5.50	6.50	6.40	9.50	14.30	—	9.50	17.50	24.60	12.70	—	31.00	38.90	46.00	52.40	59.50	—
650	26	660.4	—	5.50	8.00	7.90	12.70	—	—	9.50	—	—	12.70	—	34.00	—	—	—	—	—
700	28	711.6	—	5.50	8.00	7.90	12.70	15.90	—	9.50	17.50	—	12.70	—	—	—	—	—	—	—
750	30	762	—	6.50	8.00	7.90	12.70	15.90	—	9.50	17.50	—	12.70	—	—	—	—	—	—	—
800	32	812.8	—	8.00	7.90	12.70	15.90	—	9.50	17.50	—	12.70	—	—	—	—	—	—	—	—
850	34	863.6	—	8.00	7.90	12.70	15.90	—	9.50	17.50	—	12.70	—	—	—	—	—	—	—	—
900	36	914.4	—	8.00	7.90	12.70	15.90	—	9.50	19.10	—	12.70	—	—	—	—	—	—	—	—
—	38	965.2	—	—	—	—	—	—	—	9.50	—	—	12.70	—	—	—	—	—	—	—
1000	40	1016	—	9.50	—	—	—	—	—	9.50	26.20	—	12.70	—	—	—	—	—	—	—
—	42	1066.8	—	—	—	—	—	—	—	9.50	—	—	12.70	—	—	—	—	—	—	—
1100	44	1117.6	—	—	—	—	—	—	—	9.50	—	—	12.70	—	—	—	—	—	—	—
—	46	1168.4	—	—	—	—	—	—	—	9.50	—	—	12.70	—	—	—	—	—	—	—
1200	48	1219.2	—	—	—	—	—	—	—	9.50	—	—	12.70	—	—	—	—	—	—	—



BOILER & HEAT EXCHANGER



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ELECTRIC PLANT



SHIPBUILDING



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WATER TREATMENT



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METAL MELTING INDUSTRY



PHARMACEUTICAL INDUSTRY



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