

90/10 & 70/30 COPPER NICKEL PIPING PACKAGES



SITINDUSTRIE MARINE S.A.S.



FOR THE WORLDWIDE SHIPBUILDING & OFFSHORE INDUSTRIES

SITINDUSTRIE MARINE S.A.S.

PRODUCTS, SERVICES & SOLUTIONS

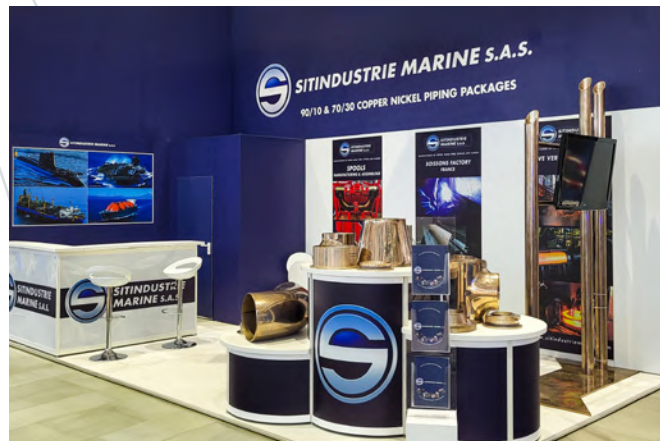
Established in 2003, SITINDUSTRIE MARINE S.A.S based in Marseille, France, produces and distributes copper nickel pipes, fittings and flanges for the worldwilde shipbuilding and offshore industries, recognized as the best compromise for seawater corrosion resistant line pipe material.

SITINDUSTRIE MARINE SAS offers:

- A single manufacturing source able to offer a complete range of **copper nickel pipes, fittings and flanges** produced within our different factories, in accordance with all international standards.
- A **customized service** with high flexibility, deliveries directly from production plants for large quantity requirements or from stock for fast track projects.
- A **team of specialists** at your service, with more than 30 years experience in the copper nickel industry, who will help you to define the best technical and economical solutions, and will ensure their successful implementation.
- An international network of **agents and distributors** dedicated to customer satisfaction that will provide you with a full project follow-up from budget and inquiry stage to on site deliveries and installation.



TUBE DUSSELDORF 2024 Exhibition



SMM HAMBURG 2022 Exhibition



FREGATE F-110
"Photography courtesy of Navantia, Spain"



FPSO CIDADE DE SAQUAREMA FOR SBM OFFSHORE - MERO FIELD
"Photography courtesy of Petrobras"



SITINDUSTRIE MARINE S.A.S.

QUALITY ASSURANCE

SITINDUSTRIE MARINE SAS offers piping packages of copper nickel products manufactured by factories which are ISO 9001:2015 certified and approved by the most important international certifying organizations:

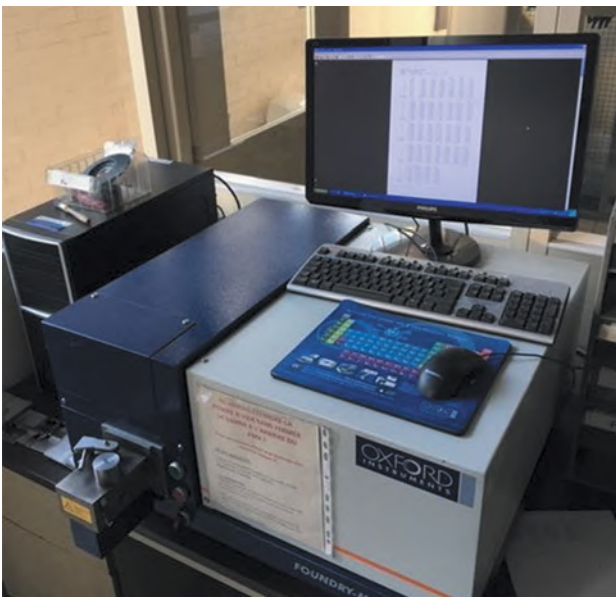
BUREAU VERITAS, LLOYD'S REGISTER, DNV GL, ABS, TÜV, RMRS

SEAMLESS & WELDED PIPES	1/4" up to 60" 6.35 mm OD up to 1 524 mm OD according to EEMUA / DIN / EN / BS ASME / MIL / NAVSEA
BUTT WELDING FITTINGS	
FORGED & MACHINED FITTINGS	
FLANGES & WELDING COLLARS	
BARs & PLATES	

VENDOR APPROVALS

SITINDUSTRIE MARINE SAS is approved by the following customers:

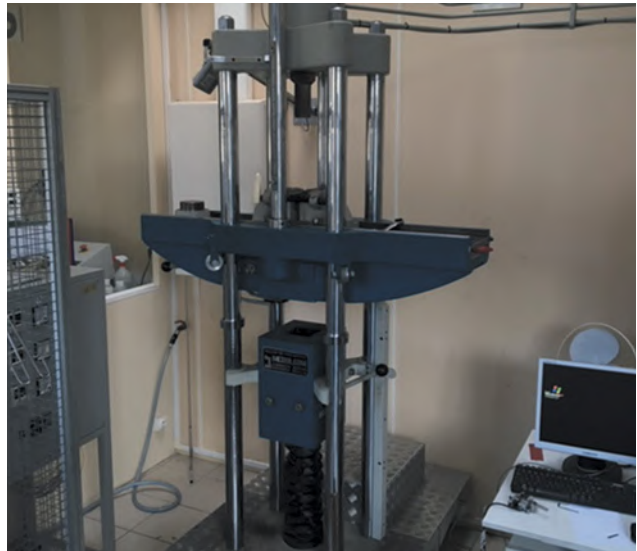
**TOTAL - PETROBRAS - SHELL - ARAMCO - EXXON
CHEVRON - BP - QATAR ENERGY - KOC - ONGC
WOODSIDE - ENI - ADNOC**



Chemical composition by spectrometer analysis



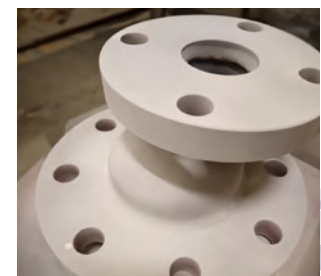
Positive Material Identification Test (PMI)



Tensile Test



Liquid penetrant test



Liquid penetrant test



SITINDUSTRIE MARINE S.A.S.

■ ■ ■ SOISSONS – FRANCE



The plant based in Soissons (France) was founded in 1967 and it is worldwide known in the nuclear and oil & gas industries. It manufactures a complete range of stainless steel, Duplex, super Duplex & super alloys tubes, pipes and fittings for any large requirements, especially in the Oil & Gas market and for special applications.

Within the special alloys production range, BSL Pipes & Fittings, produces welded copper nickel pipes up to 60 inches, as well as the relevant range of seamless & welded but weld fittings.

On a site of 130.000 m² of which 25.000 m² are covered, the plant is organized for large projects but also manufactures a range of out of standard size pipes & fittings for special applications.



All types of Welding Processes PAW,SAW,TIG, etc...



3 ROLLS CuNi pipe forming



U-BEND PRESS CuNi pipe forming



Cold forming CuNi elbows from seamless pipes

SITINDUSTRIE MARINE S.A.S.

■ ■ ■ SOISSONS – FRANCE



3 automatic **welding lines** for diameter up to 20" equipped with heat treatment by induction annealing furnace and eddy current test of welding seam, a **1000 tons press** and a **rolling machine** ensure an annual capacity of **10.000 tons/year**.

The unit has a Quality Assurance System according to NF EN ISO 9001:2015 standard which has been approved by **Lloyd's Register**. It is also certified under **ISO 14001:2015** standard.

The plant is certified by TÜV, Lloyd's Register, Det Norske Veritas, R.I.N.A., Norsok 4, API 5LC, ARAMCO, PETRONAS, SHELL, TOTAL and holds the PDO Agreement.



CuNi Welded Equal Tees



36" CuNi welded elbows



End preparation before welding half shell CuNi elbows



28" CuNi welded elbow



U-BEND PRESS forming CuNi plate into pipe



SITINDUSTRIE MARINE S.A.S.

PIEVE VERGONTE – ITALY



The plant based in Pieve Vergonte (Italy), has a leading position in Europe in the field of copper and copper alloy products for the electromechanical, galvanic and building industry. The first industrial site was established in 1909. At the end of 1992 SITINDUSTRIE entered the non ferrous metal market acquiring from ENI the factory in Pieve Vergonte. Since 2011 the plant is owned by V.C.O. Copper SpA. It occupies a site of **77.000 m²** of which **27.500 m²** covered, with a total capacity of **20.000 tons** per year of copper and copper alloys round square and hexagonal sections and profiles, as well as special products such as large diameter seamless **CuNi pipes** and **CuNi bars & billets** for marine applications.

The production capability, the wide range of products (more than a thousand sections available) and the high quality standards of the range characterise the plant production. The overall strategy of the manufacturing process is further strengthened by the careful integration of techniques for processing raw materials, and by the continuous research and development, the setting and testing of new products and testing methods.

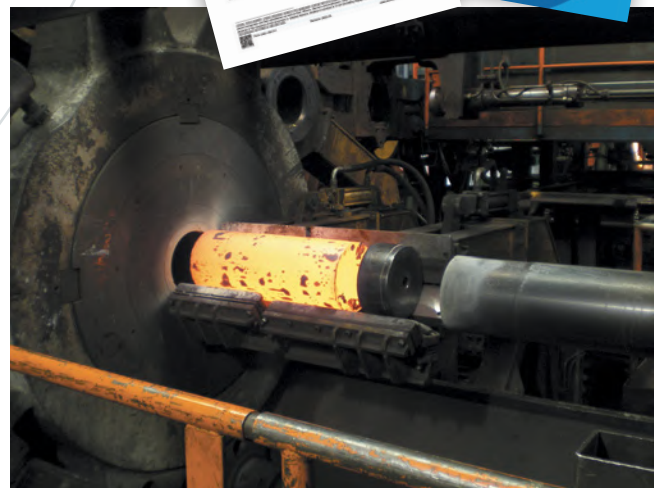
The Pieve Vergonte plant is certified ISO 9001:2015 and approved by DNV GL.



5500 tons Hot Extrusion press



Semi continuous casting of CuNi billet



Hot Extrusion of CuNi billet into pipe



SITINDUSTRIE MARINE S.A.S.

■ ■ ■ VALDUGGIA – ITALY



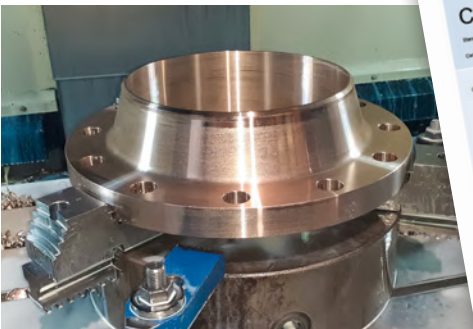
The plant located in Valduggia (Italy) is dedicated to the machining of mechanical components on a site of 1642 m².

It started in 1955 by manufacturing industrial valves and within few years became a reliable supplier of cast steel gate, globe and check valves, in bolted bonnet and pressure seal execution. Conduit valves and ball valves have subsequently been added to the range addressed mainly to critical application in the petrochemical, oil & gas, power generation, shipping, food and dairy industries.



Different types of CNC machines

Since 2011, the copper nickel flanges and fittings manufacturing activity has been taken over by T.F. Snc. The plant has accreditations for ISO 9001:2015 and is approved by Lloyd's Register. It is equipped with new CNC machines for the production of more than 2.000 tons/year of composite & solid **CuNi flanges with diameter up to 60" (1524 mm)**, and **forged & machined CuNi fittings with a diameter up to 4" (108 mm)**.



Welding neck flange machining



Hot rolling of CuNi flange



90° socket weld elbow machining



Hot forging of 20" CuNi stub ends



CuNi Inner flanges final inspection



SITINDUSTRIE MARINE S.A.S.

COPPER NICKEL PIPES: EUROPEAN STANDARDS

			Shipbuilding industry				Offshore industry			
ND inch	ND mm	Actual mm	10 Bar System		14 Bar System		16 Bar System		20 Bar System	
			WT mm	Weight Kg/M	WT mm	Weight Kg/M	WT mm	Weight Kg/M	WT mm	Weight Kg/M
1/8		10	1,0	0,26	1,0	0,26				
1/4		12	1,0	0,31	1,0	0,31				
3/8	10	16	1,0	0,42	1,0	0,42				
1/2	15	20/16*	1,0	0,53	1,0	0,53	2,0	1,01	2,0	1,01
3/4	20	25	1,5	0,99	1,5	0,99	2,0	1,30	2,0	1,30
1	25	30	1,5	1,20	1,5	1,20	2,5	1,93	2,5	1,93
1 1/4	32	38	1,5	1,54	1,5	1,54	2,5	2,50	2,5	2,50
1 1/2	40	44,5	1,5	1,81	1,5	1,81	2,5	2,95	2,5	2,95
2	50	57	1,5	2,34	1,5	2,34	2,5	3,83	2,5	3,83
2 1/2	65	76,1	2,0	4,16	2,0	4,16	2,5	5,17	2,5	5,17
3	80	88,9	2,0	4,88	2,5	6,07	2,5	6,07	2,5	6,07
4	100	108	2,5	7,41	2,5	7,41	3,0	8,85	3,0	8,85
5	125	133	2,5	9,16	3,0	10,95				
6	150	159	2,5	10,99	3,0	13,14	3,0	13,14	3,5	15,29
7	175	194	2,5	13,43	3,5	18,70				
8	200	219,1	3,0	18,21	3,5	21,19	4,0	24,17	4,5	27,12
10	250	267	3,0	22,24	4,0	29,55	4,5	33,18	5,5	40,39
12	300	323,9	4,0	35,94	5,0	44,78	5,5	49,18	7,0	62,30
14	350	368	4,0	40,89	5,5	56,00	6,5	65,99	8,0	80,89
16	400	419	4,0	46,62	6,0	69,60	7,0	81,00	9,0	103,64
18	450	457,2	4,0	50,91	6,0	76,03	8,0	100,93	9,5	119,45
20	500	508	4,5	63,63	6,5	91,55	8,5	119,24	11,0	153,54
24	600	610	5,0	84,96	8,0	135,26	10,5	176,79	13,0	217,97
28	700	711	6,0	118,80	9,0	177,45	12,0	235,58	15,0	293,22
32	800	813	6,0	135,99	10,0	225,53	13,5	303,14	17,0	380,06
36	900	914	8,0	203,57	11,0	278,98	15,5	391,14	19,0	477,60

* EEMUA 234



ZADCO UZ750 Oil Field
"Photography courtesy of ADNOC, UAE"



Mega Yacht ROE
"Photography courtesy of Turquoise Yachts, Turkey"



SITINDUSTRIE MARINE S.A.S.

COPPER NICKEL PIPES: EUROPEAN & U.S. STANDARDS

MAIN STANDARDS		BS	EEMUA	DEFSTAN	DIN	EN	ASTM / ASME	MIL
NITON 10	Seamless Pipes CuNi10 Fe1 Mn	2871 CN 102	234 UNS 7060X	779 part 3	86019 2.1972 17664/17664 2.0872	12449 CW352H	B 466 C 70600	MIL-T-1640K C70600
	Seamwelded Pipes CuNi10 Fe1 Mn	2875 CN 102	234 UNS 7060X		86018 2.1972 17664/17664 2.0872		B 467 C 70600	MIL-T-1640K C70600
	Bars CuNi10 Fe1 Mn	2872 CN 102 2874 CN 102		779 part 2	17664 2.0872 17672 2.0872.10		B 151 C 70600 B 249	MIL-C-24679 C70600
	Plates CuNi10 Fe1 Mn	2870 CN 102 2875 CN 102		779 part 1			B 171 C 70600 B 402	MIL-C-15726F C70600
NITON 30	Seamless Pipes CuNi30 Mn 1 Fe	BS 2871 CN 107		780 part 3	17664 2.0882 17671/1755	12449 CW354H	B 466 C 71500	MIL-T-1640K C71500
	Welded Pipes CuNi30 Mn 1 Fe	BS2875 CN 107			17664 2.0882 17670 2.0882/86018		B 467 C 71500	MIL-T-1640K C71500
	Bars CuNi30 Mn 1 Fe	BS 2872 CN 107 BS 2874 CN 107		780 part 2	17664 2.0872 17672 2.0872.10		B 151 C 71500 B 249	MIL-C-24679 C71500
	Plates CuNi30 Mn 1 Fe	BS 2875 CN 107		780 part 1			B 171 C 71500 B 402	MIL-C-15726F C71500

CHEMICAL COMPOSITION

		Ni%	Fe%	Mn%	C%	Pb%	S%	P%	Zn%	Zr%	Others %	Cu
NITON 10	Minimum	10,00	1,50	0,50								
	Maximum	11,00	1,80	1,00	0,05	0,01	0,005	0,02	0,05	0,03	0,10	Balance
NITON 30	Minimum	30,00	0,60	0,50								
	Maximum	32,00	0,70	1,00	0,05	0,01	0,005	0,01	0,05		0,10	Balance

MECHANICAL CHARACTERISTICS

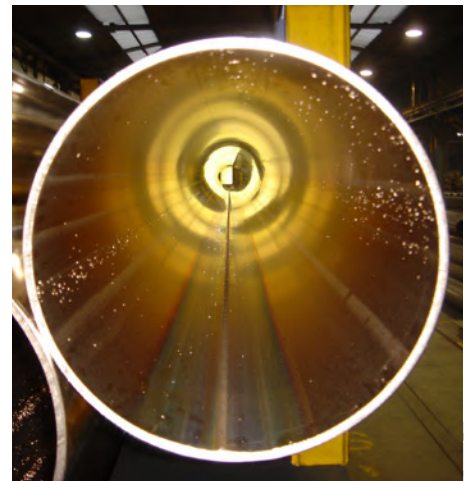
	90/10 CuNi	70/30 CuNi	
Tensile strength UTS, Rm (Mpa):	310	350	mini
Yield strength YS 0.2, Rp 0.2 (Mpa):	110	130	mini
Elongation (E 5.65 √S) %	35	30	mini
Hardness (HB10 D2)	70	80	



Seamless CuNi pipes

MECHANICAL CHARACTERISTICS

Typical values 20°C	Units	90/10 CuNi	70/30 CuNi
Density (20°C)	Kg/m³	8900	8900
Electrical resistivity (20°C annealed)	μΩ.cm	19	34
Thermal conductivity (20°C to 200°C)	W/m. °K	50	30
Coefficient of expansion (20°C to 200°C)	Cx10 ⁻⁶	17	16
Modulus of elasticity (20°C annealed)	MPa	126	126
Annealing temperature	°C	760-800	780-820
Melting interval	°C	1100-1150	1180-1240
Magnetic Permeability (20°C annealed)		below 1,08 on special request	below 1,05



90/10 CuNi welded pipe 8"

SITINDUSTRIE MARINE S.A.S.

COPPER NICKEL PIPES: U.S. STANDARDS

ND inch	Actual inch	Actual mm	MIL T 16420 K Class 50				MIL T 16420 K Class 200				MIL T 16420 K Class 700			
			WT inch	WT mm	Weight Lb/Ft	Weight Kg/m	WT inch	WT mm	Weight Lb/Ft	Weight Kg/m	WT inch	WT mm	Weight Lb/Ft	Weight Kg/m
	0,250	6,35												
1/8	0,405	10,29												
	0,500	12,70					0,035	0,89	0,22	0,33	0,065	1,65	0,38	0,57
1/4	0,540	13,72					0,065	1,65	0,42	0,62	0,065	1,65	0,42	0,62
3/8	0,675	17,15					0,065	1,65	0,53	0,79	0,072	1,83	0,58	0,87
1/2	0,840	21,34					0,065	1,65	0,68	1,01	0,072	1,83	0,75	1,11
3/4	1,050	26,67					0,065	1,65	0,86	1,28	0,083	2,11	1,08	1,61
1	1,315	33,40					0,065	1,65	1,09	1,62	0,095	2,41	1,55	2,31
1 1/4	1,660	42,16					0,072	1,83	1,53	2,28	0,095	2,41	1,99	2,96
1 1/2	1,900	48,27					0,072	1,83	1,77	2,63	0,109	2,77	2,62	3,90
2	2,375	60,32					0,083	2,11	2,55	3,80	0,120	3,05	3,63	5,40
2 1/2	2,875	73,03					0,083	2,11	3,11	4,63	0,134	3,40	4,92	7,32
3	3,500	88,90					0,095	2,41	4,33	6,44	0,165	4,19	7,37	10,97
3 1/2	4,000	101,60					0,095	2,41	4,97	7,39	0,180	4,57	9,21	13,70
4	4,500	114,30					0,109	2,77	6,42	9,55	0,203	5,16	11,69	17,40
5	5,563	141,30					0,125	3,18	9,12	13,57	0,220	5,59	15,75	23,44
6	6,625	168,30					0,134	3,40	11,64	17,32	0,259	6,58	22,09	32,87
7	7,625	193,70					0,140	3,56	14,05	20,91	0,284	7,21	27,91	41,54
8	8,625	219,10					0,151	3,84	16,81	25,01	0,340	8,64	37,75	56,17
9	9,625	244,48					0,187	4,75	23,64	35,18	0,340	8,64	42,30	62,94
10	10,750	273,05					0,187	4,75	26,46	39,37	0,380	9,65	52,77	78,52
12	12,750	323,90					0,250	6,35	41,86	62,29	0,454	11,53	74,76	111,25
14	14,000	355,60	0,165	4,19	27,78	41,35	0,250	6,35	46,04	68,51	0,473	12,01	85,65	127,46
16	16,000	406,40	0,165	4,19	31,80	47,32	0,250	6,35	52,73	78,47	0,534	13,56	110,57	164,54
18	18,000	457,20	0,180	4,57	39,03	58,10	0,250	6,35	59,42	88,43				
20	20,000	508,00	0,180	4,57	43,41	64,62	0,250	6,35	66,12	98,40				
22	22,000	558,80	0,180	4,57	47,80	71,12	0,250	6,35	72,82	108,36				
24	24,000	609,60	0,180	4,57	49,50	73,57	0,250	6,35	79,52	118,33				
30	30,000	762,00	0,250	6,35	90,54	134,77								
40	40,000	1.016,00	0,312	7,92	150,70	224,19								

ND inch	Actual inch	Actual mm	ASTM/ASME B 466/B 467			
			WT inch	WT mm	Weight Lb/Ft	Weight Kg/m
	0,250	6,35				
1/8	0,405	10,29	0,058	1,47	0,24	0,36
	0,500	12,70				
1/4	0,540	13,72	0,065	1,65	0,38	0,56
3/8	0,675	17,15	0,065	1,65	0,48	0,72
1/2	0,840	21,34	0,065	1,65	0,61	0,91
3/4	1,050	26,67	0,065	1,65	0,78	1,16
1	1,315	33,40	0,065	1,65	0,99	1,47
1 1/4	1,660	42,16	0,072	1,83	1,39	2,07
1 1/2	1,900	48,27	0,072	1,83	1,60	2,39
2	2,375	60,32	0,083	2,11	2,32	3,45
2 1/2	2,875	73,03	0,083	2,11	2,82	4,20
3	3,500	88,90	0,095	2,41	3,93	5,85
3 1/2	4,000	101,60	0,095	2,41	4,51	6,71
4	4,500	114,30	0,109	2,77	5,83	8,68
5	5,563	141,30	0,125	3,18	8,29	12,34
6	6,625	168,30	0,134	3,40	10,57	15,75
7	7,625	193,70	0,134	3,40	12,20	18,17
8	8,625	219,10	0,148	3,76	15,26	22,73
9	9,625	244,48	0,187	4,75	21,47	31,97
10	10,750	273,05	0,178	4,52	22,89	34,09
12	12,750	323,90	0,250	6,35	38,01	56,62
14	14,000	355,60	0,250	6,35	41,81	62,27
15	15,000	381,00	0,250	6,35	44,85	66,80
16	16,000	406,40	0,250	6,35	47,89	71,33
18	18,000	457,20	0,250	6,35	53,97	80,39
20	20,000	508,00	0,250	6,35	60,05	89,45
22	22,000	558,80	0,250	6,35	66,13	98,51
24	24,000	609,60	0,250	6,35	72,21	107,56
30	30,000	762,00	0,250	6,35	90,46	134,74



S80+ SUBMARINE
"Photography courtesy of Navantia, Spain"

SITINDUSTRIE MARINE S.A.S.

COPPER NICKEL PIPES: U.S. STANDARDS

ND inch	Actual inch	Actual mm	MIL T 16420 K Class 1650				MIL T 16420 K Class 3300				MIL T 16420 K Class 6000			
			WT inch	WT mm	Weight Lb/Ft	Weight Kg/m	WT inch	WT mm	Weight Lb/Ft	Weight Kg/m	WT inch	WT mm	Weight Lb/Ft	Weight Kg/m
	0,250	6,35					0,035	0,89	0,101	0,15	0,058	1,47	0,150	0,22
1/8	0,405	10,29					0,058	1,47	0,27	0,40	0,095	2,41	0,395	0,58
	0,500	12,70	0,035	0,89	0,218	0,33	0,072	1,83	0,413	0,62	0,120	3,05	0,611	0,91
1/4	0,540	13,72	0,042	1,07	0,281	0,42	0,072	1,83	0,451	0,67	0,120	3,05	0,675	1,00
3/8	0,675	17,15	0,049	1,24	0,410	0,61	0,095	2,41	0,738	1,10	0,148	3,76	1,045	1,55
1/2	0,840	21,34	0,058	1,47	0,607	0,90	0,120	3,05	1,16	1,73	0,203	5,16	1,727	2,57
3/4	1,050	26,67	0,083	2,11	1,075	1,61	0,148	3,76	1,79	2,66	0,238	6,05	2,585	3,85
1	1,315	33,40	0,095	2,41	1,55	2,31	0,180	4,57	2,74	4,07	0,300	7,62	4,08	6,07
1 1/4	1,660	42,16	0,120	3,05	2,48	3,69	0,220	5,59	4,25	6,31	0,380	9,65	6,51	9,69
1 1/2	1,900	48,27	0,134	3,40	3,17	4,71	0,250	6,35	5,52	8,22	0,425	10,80	8,39	12,50
2	2,375	60,32	0,165	4,19	4,88	7,26	0,340	8,64	9,27	13,79	0,520	13,21	12,87	19,22
2 1/2	2,875	73,03	0,203	5,16	7,26	10,81	0,380	9,65	12,65	18,89				
3	3,500	88,90	0,250	6,35	10,88	16,19	0,458	11,63	18,70	27,75				
3 1/2	4,000	101,60	0,284	7,21	14,08	21,02								
4	4,500	114,30	0,340	8,64	18,92	28,19								
5	5,563	141,30	0,425	10,80	29,26	43,54								

ND inch	Actual inch	Actual mm	ANSI B 36.19 5 S				ANSI B 36.19 10 S				ANSI B 36.19 40 S				ANSI B 36.19 80 S			
			WT inch	WT mm	Weight Lb/Ft	Weight Kg/m	WT inch	WT mm	Weight Lb/Ft	Weight Kg/m	WT inch	WT mm	Weight Lb/Ft	Weight Kg/m	WT inch	WT mm	Weight Lb/Ft	Weight Kg/m
1/8	0,405	10,29					0,049	1,24	0,21	0,32	0,068	1,73	0,28	0,42	0,095	2,41	0,36	0,53
1/4	0,54	13,72					0,065	1,65	0,38	0,56	0,088	2,24	0,48	0,72	0,119	3,02	0,61	0,91
3/8	0,675	17,15					0,065	1,65	0,48	0,72	0,091	2,31	0,64	0,96	0,126	3,20	0,84	1,25
1/2	0,84	21,34	0,065	1,65	0,61	0,91	0,083	2,11	0,77	1,14	0,109	2,77	0,97	1,44	0,147	3,73	1,24	1,84
3/4	1,05	26,67	0,065	1,65	0,78	1,16	0,083	2,11	0,98	1,46	0,113	2,87	1,29	1,92	0,154	3,91	1,68	2,50
1	1,315	33,40	0,065	1,65	0,99	1,47	0,109	2,77	1,60	2,38	0,133	3,38	1,91	2,85	0,179	4,55	2,48	3,69
1 1/4	1,66	42,16	0,065	1,65	1,26	1,88	0,109	2,77	2,05	3,06	0,140	3,56	2,59	3,86	0,191	4,85	3,41	5,08
1 1/2	1,9	48,27	0,065	1,65	1,45	2,16	0,109	2,77	2,38	3,54	0,145	3,68	3,09	4,61	0,200	5,08	4,14	6,16
2	2,375	60,32	0,065	1,65	1,83	2,72	0,109	2,77	3,01	4,48	0,154	3,91	4,16	6,19	0,218	5,54	5,72	8,52
2 1/2	2,875	73,03	0,083	2,11	2,82	4,20	0,120	3,05	4,02	5,99	0,203	5,16	6,60	9,83	0,276	7,01	8,73	13,00
3	3,5	88,90	0,083	2,11	3,45	5,14	0,120	3,05	4,93	7,35	0,216	5,49	8,63	12,86	0,300	7,62	11,68	17,39
3 1/2	4	101,60	0,083	2,11	3,95	5,89	0,120	3,05	5,67	8,44	0,226	5,74	10,37	15,45	0,318	8,08	14,25	21,22
4	4,5	114,30	0,083	2,11	4,46	6,65	0,120	3,05	6,40	9,53	0,237	6,02	12,29	18,30	0,337	8,56	17,07	25,42
5	5,563	141,30	0,109	2,77	7,24	10,78	0,134	3,40	8,84	13,17	0,258	6,55	16,64	24,78	0,375	9,53	23,67	35,26
6	6,625	168,30	0,109	2,77	8,65	12,88	0,134	3,40	10,57	15,74	0,280	7,11	21,60	32,18	0,432	10,97	32,53	48,46
8	8,625	219,10	0,109	2,77	11,30	16,83	0,148	3,76	15,27	22,74	0,322	8,18	32,53	48,45	0,500	12,70	49,42	73,61
10	10,75	273,05	0,134	3,40	17,28	25,74	0,165	4,19	21,24	31,63	0,365	9,27	46,10	68,66	0,500	12,70	62,33	92,84
12	12,75	323,90	0,156	3,96	23,89	35,58	0,180	4,57	27,51	40,98	0,375	9,53	56,48	84,13	0,500	12,70	74,51	110,98
14	14	355,60	0,156	3,96	26,25	39,10	0,188	4,78	31,61	47,09								
16	16	406,40	0,165	4,19	31,77	47,32	0,188	4,78	36,19	53,91								
18	18	457,20	0,165	4,19	35,78	53,30	0,188	4,78	40,77	60,72								
20	20	508,00	0,188	4,78	45,34	67,54	0,218	5,54	52,47	78,16								
22	22	558,80	0,188	4,78	49,92	74,36	0,218	5,54	57,78	86,07								
24	24	609,60	0,218	5,54	63,09	93,97	0,250	6,35	72,21	107,56								
30	30	762,00	0,250	6,35	90,46	134,74	0,312	7,92	112,59	167,70								



LITTORAL COMBAT SHIP
"Photography courtesy of AUSTAL Shipbuilding"



LPD 30
"Photography courtesy of INGALLS Shipbuilding"



COPPER NICKEL FITTINGS

All drawings are available online

BUTT WELD FITTINGS



45° ELBOWS
LONG AND SHORT RADIUS
DIN 86090 / EEMUA 234
ASME B 16.9

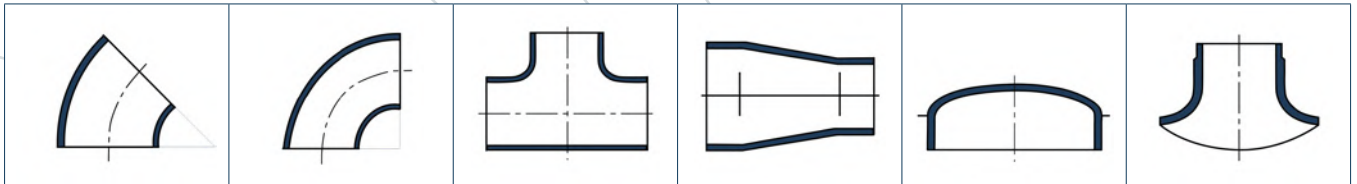
90° ELBOWS
LONG AND SHORT RADIUS
DIN 86090 / EEMUA 234
ASME B 16.9

TEES
EQUAL AND REDUCING
DIN 86088 / EEMUA 234
ASME B 16.9

REDUCERS
CONCENTRIC AND ECCENTRIC
DIN 86089 / EEMUA 234
ASME B 16.9

END CAPS
DIN 28011 / EEMUA 234
ASME B 16.9

SADDLES
EQUAL AND REDUCING
DIN 86087 / EEMUA 234



FLANGES



COLLARS/INNER FLANGE
LONG TYPE / SHORT TYPE
DIN 86037 / EEMUA 234
ASME B 16.9

CARBON STEEL
OUTER FLANGE
DIN 86037 / EEMUA 234
ASME B 16.5

COMPOSITE SLIP ON
FLANGE
DIN 86036
EEMUA 234 / ISO NP 10

SOLID WELDING NECK
DIN 2632 / 2633
EEMUA 234 / ISO NP 10

BULKHEAD
DIN 86068

SPECTACLE BLIND
ASME B 16.48



FORGED AND MACHINED FITTINGS



ELBOWS 45°
SOCKET WELD /
CAPILLARY
EEMUA 234 / ASME B 16.11

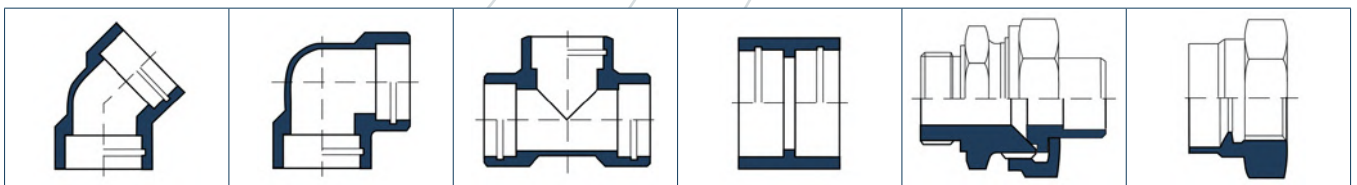
ELBOWS 90°
SOCKET WELD /
CAPILLARY
EEMUA 234 / ASME B 16.11

EQUAL AND REDUCING
TEES
SOCKET WELD / CAPILLARY
EEMUA 234 / ASME B 16.11

STRAIGHT / HALF /
REDUCING COUPLING
SOCKET WELD / CAPILLARY
THREADED / EEMUA 234
ASME B 16.11

MALE / FEMALE UNION
CONNECTORS
SOCKET WELD / CAPILLARY
BUTTWELD / MSS SP-83

ADAPTORS
BUTT WELD /
MALE OR FEMALE
THREADED



SPRINKLER
BUSHES

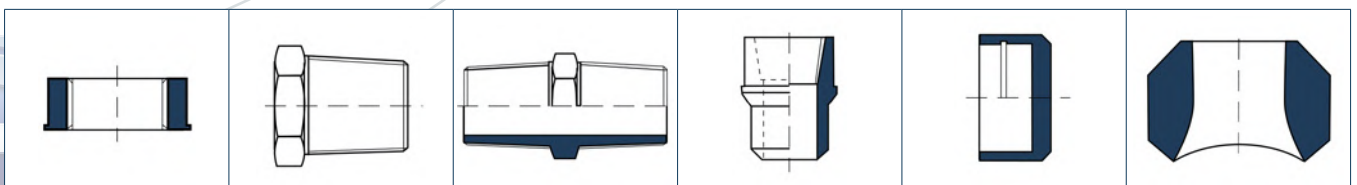
PLUGS
MALE
EEMUA 234 / ASME B 16.11

NIPPLES
HEXAGONAL / PIPES
THREADED / MSS SP-95

WELDING BOSSES
EEMUA 234

CAPS
SOCKET WELD / CAPILLARY
THREADED / EEMUA 234

OLETS
SOCKET / THREADOLET
THREADED / EEMUA 234
MSS SP-97



SITINDUSTRIE MARINE S.A.S.

LONG TANGENT FITTINGS

90° LONG TANGENT ELBOWS
LONG & SHORT RADIUS

NAVSEA 810-1385880

45° LONG TANGENT ELBOWS
LONG & SHORT RADIUS

NAVSEA 810-1385880

LONG TANGENT TEES
EQUAL AND REDUCING

NAVSEA 810-1385880

LONG TANGENT LATERALS

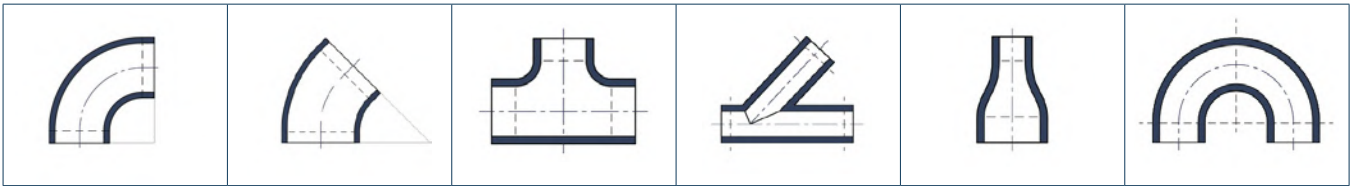
NAVSEA 810-1385880

LONG TANGENT REDUCERS
CONCENTRIC AND ECCENTRIC

NAVSEA 810-1385880

180° LONG TANGENT
RETURN BENDS

NAVSEA 810-1385880



BELLED END FITTINGS

90° BELLED END ELBOWS
LONG & SHORT RADIUS

MSS SP-119
NAVSEA 802-5959353

45° BELLED END ELBOWS
LONG RADIUS

MSS SP-119
NAVSEA 802-5959353

90° BELLED END STREET ELBOWS
LONG & SHORT RADIUS

MSS SP-119
NAVSEA 802-5959353

BELLED END TEES
STRAIGHT AND REDUCING

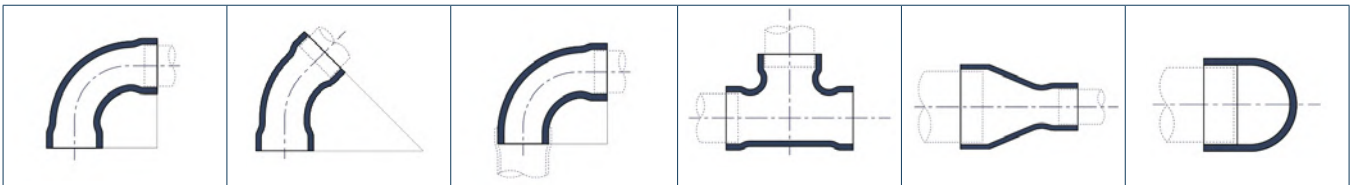
MSS SP-119
NAVSEA 802-5959353

BELLED END REDUCERS
CONCENTRIC AND ECCENTRIC

MSS SP-119
NAVSEA 802-5959353

BELLED END CAPS

MSS SP-119
NAVSEA 802-5959353



NAVSEA FLANGES

SOLID WELDING NECK

NAVSEA 810-1385992
NAVSEA 803-6983512

SOLID SLIP ON
CLASS 50 TO 400 PSI

NAVSEA 810-4715319
NAVSEA 803-6983512

SOCKET WELDING
CLASS 50 TO 400 PSI

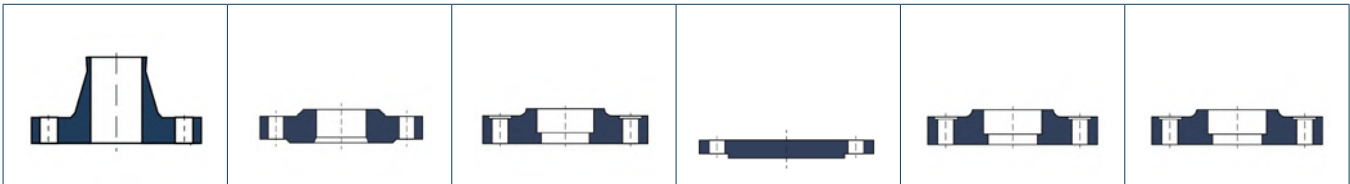
NAVSEA 810-4715319
NAVSEA 803-6983512

SOLID BLIND
CLASS 50 TO 400 PSI

NAVSEA 810-4715319
NAVSEA 803-6983512

BUTTERFLY FLANGES
MIL-F-20042

COMMERCIAL FLANGES
ANSI B16.5 150# 300#



This list is not exhaustive. For the full list of products, please refer to our website.



USNS Lewis B. Puller (T-ESB-3)
"Photography courtesy of NASSCO"



USCGC Wausatche
"Photography courtesy of U.S. COAST GUARD"





- SITINDUSTRIE MARINE SAS is supported by its commercial network with a presence in more than 40 countries.
- SITINDUSTRIE MARINE SAS main stock of semi finished and finished products is located in Soissons, 1 hour drive from Paris, 2.5 hours drive from Antwerp, crossroads of the European logistics network.
- Thanks to our SAP computer system, SITINDUSTRIE MARINE SAS is able to maximize efficiency in your supply chain management and can provide a fully integrated service from the technical definition of the customer needs, up to the complete piping package delivery on site.

- Through our website www.sitindustriemarine.com, SITINDUSTRIE MARINE SAS customers will find the following services:

Catalog online - Request for quotation online.



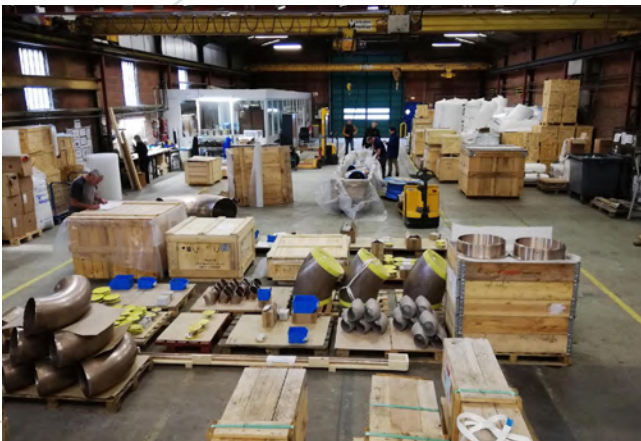
Welding CuNi piping spools



Fire fighting deluge skid 90/10 CuNi



90/10 CuNi piping spools



Third party quality inspection



500 tons of finished products in stock



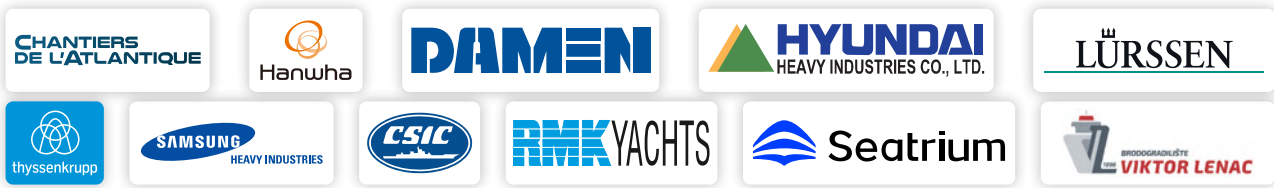
SITINDUSTRIE MARINE S.A.S.

MAIN CUSTOMERS REFERENCE LIST:

MILITARY SHIPBUILDING



CIVIL SHIPBUILDING



ENGINEERING & CONTRACTORS



OIL & GAS END USERS





**SITINDUSTRIE
MARINE S.A.S.**

COPPER NICKEL PIPES, FITTINGS AND FLANGES APPLICATIONS

*Copper nickel alloys are the best compromise
for piping systems resistant to seawater corrosion*

Alloys: CuNi10Fe1Mn - C70600; CuNi30Mn1Fe - C71500

OFF SHORE PLATFORM



F.P.S.O.



CIVIL SHIPBUILDING



AIRCRAFT CARRIER



DESALINATION PLANT



MILITARY SHIPBUILDING



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2024 Edition

