



Palgotta

METAL INDUSTRIES

Ferrous & Non-Ferrous Metals

AN ISO 9001-2008 CERTIFIED COMPANY

SE FASTENERS WIRE S
R TUBES COILS T E
ROD FLANGES E
BAR PLATES I
STRIPS S



We **PALGOTTA METAL INDUSTRIES** was established in the year 1992 in Mumbai, India has AN ISO 9001:2008 certification. Since 25 years is primarily engaged as Importer, Stock-holder, exporter and Supplier of Stainless Steel, Nickel Alloy, and Non-Ferrous Raw Materials also regular supplies to several blue chip & upcoming industries.

We strongly believe that the foundation and success of any business is to ultimately satisfy the consumer which must function with ease, have the desired appearance and emphasis on good quality for long lasting service with important price well within reach. If granted a probability to serve your organization, we assure our complete commitment with regard to the prices, quality and timely deliveries of products.

We trade & maintain Stocks of Stainless Steel, Nickel Alloy & Non-Ferrous raw materials in various Grades and dimensions to satisfy the pressing demands of our customers.

OUR MISSION

"To be one of the global leading unit in all ferrous & non-ferrous metals."



EXPORTS

Having establish our presence in the Indian market, we are now aggressively venturing into Exporting of our products to various countries. We are already exporting our product to Europe, middle East, Far East and African Countries.

ISO 9001-2008: In recognition of our efforts in quality control we have been awarded the coveted ISO 9001-2008 quality certification from reputed agency.

QUALITY POLICY

Quality is a key feature of all the products made available by PALGOTTA METAL INDUSTRIES and is always upheld under all circumstances. All required material soured from reliable vendors, who have reputed name in the market.

To ensure the quality of each material , we are providing material test certificate along with supply. Our team of experts maintain a vigil on the quality of the products. Every Single piece is attached with test certificate and reports. We are continually improving our quality to serve our client better.

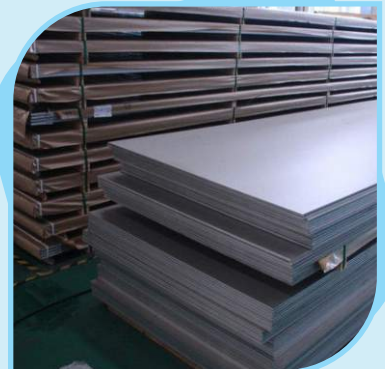




RANGE OF PRODUCTS

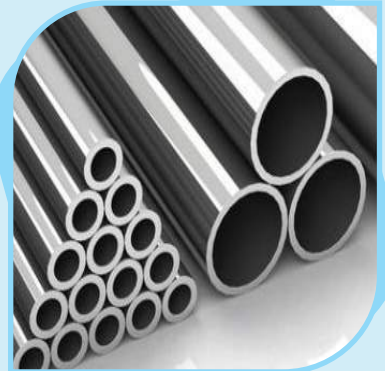
» SHEETS, PLATES, COILS & RODS

- » **Stainless Steel:** 202/304/304L/304H/316/317/317L/321/310/347/904L etc.
- » **Others :** Monel, Nickel, Inconel, Hastelloy, Duplex and Super Duplex Steel, Titanium, Brass, Bronze, Tantalum, Bismuth, Aluminium, High Speed Steel, Zinc, Lead etc.
- » **Type :** Sheet, Plates, Coils, Strips, Circles, Rings Etc.
- » **Thickness:** from 0.5mm



» PIPES & TUBES

- » **Stainless Steel:** 202/304/304L/304H/316/317/317L/321/310/347/904L etc.
- » **Carbon Steel:** ASTM A53 GR. B/A 106 GR.B / API 5L GRADE B / API 5L GR.X42/46/52/56/60/65/70/A333 GR.3/ GR.6 etc
- » **Others :** Monel, Nickel, Inconel, Hastelloy, Duplex and Super Duplex Steel, Titanium, Copper, Brass, Bronze, Bismuth, Aluminium, High Speed Steel, Zinc, Lead etc.
- » **Alloy Steel :** ASTM A 335 GR. P1 / P5 / P9 / P11 / P22 /P91 etc.
- » **Type :** Round, Square, Rectangular, Capillary Tubes in Straight, Coil Form
- » **Size of Pipes:** Upto 36" NB. (Seamless 7 welded)
- » **Wall Thickness:** Sch. 5S to Sch. XXS
- » **Size of Tubes:** From 0.5mm OD
- » **Wall Thickness:** From 0.2 mm



» BUTT WELD FITTINGS

- » **Stainless Steel:** 202/304/304L/304H/316/317/317L/321/310/347/904L etc.
- » **Carbon Steel:** ASTM A53 GR. B/A 106 GR.B / API 5L GRADE B / API 5L GR.X42/46/52/56/60/65/70/A333 GR.3/ GR.6 etc
- » **Others :** Monel, Nickel, Inconel, Hastelloy, Duplex and Super Duplex Steel, Titanium, Copper, Brass, Bronze, Bismuth, Aluminium, High Speed Steel, Zinc, Lead etc.
- » **Alloy Steel :** ASTM A 335 GR. P1 / P5 / P9 / P11 / P22 /P91 etc.
- » **Types :** Elbow, Tee, Reducer, Return Bends, Stub-Ends, Cap, Collar, Cross, Insert etc.
- » **Size :** 1/4" NB to 48" NB (Seamless & Welded)
- » **Wall Thickness:** Sch. 5S to Sch. XXS



» SCREWED & FORGED FITTINGS

- » **Stainless Steel:** 202/304/304L/304H/316/317/317L/321/ 310/347/904L etc.
- » **Carbon Steel:** ASTM A53 GR. B/A 106 GR.B / API 5L GRADE B / APIL5 GR.X42/46/52/56/60/65/70/A333 GR.3/ GR.6 etc
- » **Others :** Monel, Nickel, Inconel, Hastelloy, Duplex and Super Duplex Steel, Titanium, Copper, Brass, Bronze, Bismuth, Aluminium, High Speed Steel, Zinc, Lead etc.
- » **Alloy Steel :** ASTM A 182 F1/ F5/ F9/ F11/ F22/ F91 etc.
- » **Types :** Elbow, Tee, Union, Cross, Coupling, Cap, Bushing, Plug, Swage Nipple, Welding Boss, Hexagon Nipple, Barrel Nipple, Weld Nipple, Parraler Nipple, Street Elbow, Hexagon Nut, Hose Nipple, Bend, Adapter Insert, Weldolet, Elbowlet, Sockolet, Threadolet, Letrolet etc.
- » **Class:** 3000#, 6000#, 9000#



» FLANGES

- » **Stainless Steel:** 202/304/304L/304H/316/317/317L/321/ 310/347/904L etc.
- » **Carbon Steel:** ASTM A105 / A694 F42 / 46 / 52 / 56 / 60 / 65 / 70 / A350 Lf3 / A350 Lf2 etc
- » **Others :** Monel, Nickel, Inconel, Hastelloy, Duplex and Super Duplex Steel, Titanium, Copper, Brass, Bronze, Bismuth, Aluminium, High Speed Steel, Zinc, Lead etc.
- » **Alloy Steel :** ASTM A 182 F1/ F5/ F9/ F11/ F22/ F91 etc.
- » **Types :** Weldneck Slipon, Blind, Socket Weld, Lap Joint, Spectacles, Ring Joint, Oriface, Long Weldneck, Deck Flange, etc
- » **Class:** 150#, 300#, 400#, 600#, 900#, 1500#, 2500#



» FASTENERS

- » **Stainless Steel:** 202/304/304L/304H/316/317/317L/321/ 310/347/904L etc.
- » **Carbon Steel:** Bare Condition, Galvanized, Phosphetised, Cadmium, Hot Deep Galvanized, Bloodied, Nickel, Chrome Plated, etc.
- » **Others :** Monel, Nickel, Inconel, Hastelloy, Duplex and Super Duplex Steel, Titanium, Copper, Nichrome, Phosphoruous, Brass, Bronze, Tantulum, Bismuth, Aluminium, High Speed Steel, Zinc, Lead etc.
- » **Alloy Steel :** 4.6, 5.6, 6.6, 8.8, 10.9, 12.9, B7, B7M, 2H, "R", "S", "T" Conditions
- » **Types :** Weldneck Slipon, Blind, Socket Weld, Lap Joint, Spectacles, Ring Joint, Oriface, Long Weldneck, Deck Flange, etc
- » **Class:** 150#, 300#, 400#, 600#, 900#, 1500#, 2500#



SUMMARY OF GENERAL ITEMS AVAILABLE

Flanges	Slip On, Socket Weld, Blind, Lapped, Screwed, Weld Neck, Reducing, Spectacle, Slip On Boss, Plate, Plate Blank, Screwed Boss
Fasteners	Hex Head Bolts, Hexagon Head Screw, Mushroom Head Square Neck Bolts, T- Head Bolts, Wing Screw, Eye Bolt, Lifting Eye Bolt, Countersunk Raised Head Bolts.
Stainless Steel Rods	(Magnetic & Non-Magnetic) Round/Square/Hex in 304, 316, 321, 410, 420, & 310 in the Size 1/8" dia (3.175 MM to 254 MM)
Stainless Steel Pipes	Seamless & Welded 304, 304L, 316, 316L, 310, 321 quality & All Schedule Pipes, Size 3mm OD to 260mm OD (1/8" to 10" WOD) in straight Lengths.
Stainless Steel Sheets	Size 8' x 4', 1 Mtr x 2.5mtr 50mm to 0.25 mm thickness (1" to .001" or in Roll Available in 20 SWG to 50 SWG in Rolls)
Stainless Steel Wires	16 mm to 42 SWG in Coils, Strips & Plates in width 1/2" to 10", Thickness 1 mm to 50 mm.
Stainless Steel Pipe Fitting	Long Bend, Short Bend, Elbow, Tees, Nuts & Bolts in all sizes.
Forged Fittings	Socket Weld Fittings: Elbow 90 deg, Elbow 45 deg, Cross, Tee, Coupling, Half Coupling & Cap
Brass Rods	Round Square, Hexagonal As per BSS-249/ISS 319 Alloys No. 1/BS/218 Extruded & Drawn, Free Cutting Commercial Naval Brass 60/40, Brass High tensile Brass as per Customer Specifications.
Brass Pipes	Imported & Indigenous seamless-soiled drawn, Sugar Mills quality, 70/30, & 63/37 Alloy Admiralty Brass Tubes, condenser tubes, Aluminium Brass Tube, Size 1mm OD (1/8" to 6 1/4") Thickness 0.274 mm to 6.35 mm (32 SWG to 3 SWG).
Brass Sheets Strips	Rolled-Hot & Cold, Industrial & Commercial quality, Hard & Half Hard, Thickness 25.4 mm to 0.024 mm (1" to 0.0001")
Brass Flats	6.35 mm width to 152.4 mm width. Thickness 1.6 mm to 50 mm.
Copper Rods	Round/Squares/Hexagonal Commercial & electrolytic Quality Size 3.2 mm to 102 mm (1/4" to 4")
Copper Pipes	Imported & Indigenous 3 mm OD to 200 mm OD in straight Lengths, Refrigeration Tubes: 0.081" OD to 1" OD in coils of 25.50 100 & 1000 Feet.
Copper Sheets	Rolled- Hot & Cold- Electrolytic- Industrial and Commercial Quality, Size 25.4mm to 0.025mm thick (1" to 0.00" thick)
Copper Flats & Strips	Cold Rolled & Drawn 50 SWG to 4/0 SWG Electrolytic wire & Super enameled Wire.
Phosphor Bronze Sheets	Spring hard quality imported & indigenous- Thickness to 10 swg to 42 swg, size 1/2" to 48", 12" to 48" in in Rolls.
Phosphor Bronze Rods	Imported & Indigenous - Imported size 1/4" to 4". Extruded & drawn Indigenous size 1/4" to 8".
Aluminium	Tubes, Rods, Sheets, Flats, Strips, Rolls, Coils, Foils & Ingots
Nickel Alloy	Pipes, tubes, rods wire, fittings, flanges plates & sheets in Nickel 200, Nickel 201, Monel 400, Monel K500, Inconel 600, Inconel 601, Inconel 625, Inconel 718, Incoloy 800, Incoloy 825, Hastelloy C22, Hastelloy C276, Invar 36, etc
Olets	15 NB upto 100 NB 3000 LBS & 6000 (Socket / Thredolet / Nippolet / Elbolet / Insert Weldolet / Branzolet & Coupolet), 6 NB upto 600 NB (Weldolet / Sweepolet) SCH 5S, 10S, 10, 20, 40S, STD, 60, 80S, 80, XC, 100, 120, 140, 160 & XXS.

Summary of the main ASTM Standards Generally used for Sheets / Plates

Mechanical Requirements																	
ASTM	Grade	Chemical	C max	Mn Max	P Max	S Max	Si Max	Ni	Cr.	Mo	Cu	Others	Tensile Strength Mini-MPa(Ksi)	Yield Strength Mini-	Elong mini %	Hardness	
															Brinell	Rockwell	
A240	304	0.08	2.00	0.45	0.030	0.75	8.00-10.5	18.0-20.0					515-75	205-30	40	202	92
	304L	0.030	2.00	0.45	0.030	0.75	8.00-12.0	18.0-20.0					485-70	170-25	40	183	88
	310S	0.08	2.00	0.45	0.030	0.75	19.0-22.0	24.0-26.0					515-75	205-30	40	217	95
	316	0.08	2.00	0.45	0.030	0.75	10.0-14.0	16.0-18.0		2.00-3.00			515-75	205-30	40	217	95
	316L	0.030	2.00	0.45	0.030	0.75	10.0-14.0	16.0-18.0		2.00-3.00			485-70	170-25	40	217	95
	317L	0.030	2.00	0.45	0.030	0.75	11.0-15.0	18.0-20.0		3.00-4.00			485-70	170-25	40	217	95
	321	0.08	2.00	0.45	0.030	0.75	9.00-12.0	17.0-19.0				5(C+N) < Ti < 0.70%	515-75	205-30	40	217	95
	347	0.08	2.00	0.45	0.030	0.75	9.00-13.0	17.0-19.0				10C < Cb+Ta < 1.10%	515-75	205-30	40	217	92
	409	0.08	1.00	0.40	0.030	1.00	-	10.5-11.75		-		6 x C / 0.75 Ti max	448-65	241-35	25	183	75
A 387 Class 1 Class 2													Class 1	Class 2	Class 1	Class 2	
	2	0.05-0.021	0.55-0.80	0.035	0.040	0.15-0.40			0.50-0.80	0.45-0.60			380-550	486-620	230	310	Max201HB
	7	0.15	0.30-0.60	0.030	0.030	1.00			6.00-8.00	0.45-0.65			415-585	515-690	205	310	Max217HB
	9	0.15	0.30-0.60	0.030	0.030	1.00			8.00-10.0	0.90-1.10			415-585	515-690	205	310	Max217HB
	11	0.04-0.17	0.40-0.65	0.035	0.040	0.50-0.80			1.00-1.50	0.45-0.65			415-585	515-690	240	310	Max217HB
	12	0.04-0.17	0.40-0.65	0.035	0.040	0.15-0.40			0.80-1.15	0.45-0.60			380-550	450-585	230	275	Max217HB
	21	0.04-0.17	0.30-0.60	0.035	0.035	0.50			2.75-3.25	0.90-1.10			415-585	515-690	205	310	Max217HB
	22	0.05-0.17	0.30-0.60	0.035	0.035	0.50			2.00-2.50	0.90-1.10			415-585	515-690	205	310	Max217HB
A515	55	0.22	0.90	0.035	0.04	0.15-0.40							380-515 / 55-75	205-30	27		Max92HRB
	60	0.27	0.90	0.035	0.04	0.15-0.40							415-550 / 60-80	220-32	25		
	65	0.31	0.90	0.035	0.04	0.15-0.40							450-585 / 65-85	240-35	23		
	70	0.33	1.20	0.035	0.04	0.15-0.40							485-620 / 70-90	260-38	21		
A516	55	0.20	0.60-1.20	0.035	0.04	0.15-0.40							380-515 / 55-75	205-30	27		
	60	0.23	0.85-1.20	0.035	0.04	0.15-0.40							415-550 / 60-80	220-32	25		
	65	0.26	0.85-1.20	0.035	0.04	0.15-0.40							450-585 / 65-85	240-35	23		
	70	0.28	0.85-1.20	0.035	0.04	0.15-0.40							485-620 / 70-90	260-38	21		
A537	Class 1	0.24	0.70-1.35	0.035	0.040	0.15-0.40		0.25 max	0.80 max	0.35 max			485-620 / 70-90	345-50	22		
	Class 2	0.24	0.70-1.35	0.035	0.040	0.15-0.40		0.25 max	0.80 max	0.35 max			550-690 / 80-100	415-60	22		

IS-2062-92 STEEL FOR GENERAL STRUCTURAL PURPOSES

Grade	Designatio n	% Chemical Composition	Tensile Strength (Min) Kg/mm ²	Yield Strength (Min) Mpa	%Elin gauge length 5.56 OSo	Bend Test	Std. test Piece charpy V Notch Impact Energy Joule min							
		C max	Mn max	S max	P max	Si max	C.E. max	<20mm	20-40min	>40min				
A	FE410WA	0.23	1.5	0.050	0.050	-	0.42	41.8	250	240	230	23	3T	-
B	FE410WB	0.22	1.5	0.045	0.045	0.40	0.41	41.8	250	250	230	23	2T-3T	2T for less than 25 mm 3T for more than 25 mm
C	FE410WC	0.20	1.5	0.040	0.040	0.40	0.39	41.8	250	250	230	23	2T	27

Dimension of Pipes & Tubes

Size of Pipes & Tubes			Nominal Thickness and Weight												Nominal Thickness and Weight																		
			Number of Schedule												Number of Schedule																		
			5S		10S		10		20		30		40		60		80		100		120		140		160		Standard		Extra Strong		Double Extra Strong		
Nominal	Outside	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	Kg/m	mm	
1/8"	10.3	-	-	1.28	0.28	-	-	1.60	0.345	-	-	1.73	0.36	-	-	2.41	0.46	-	-	-	-	-	-	-	-	1.73	0.36	2.41	0.46	-	-	-	-
1/4"	13.7	-	-	1.65	0.49	-	-	2.00	0.580	-	-	2.24	0.63	-	-	3.02	0.80	-	-	-	-	-	-	-	-	2.24	0.63	3.02	0.80	-	-	-	-
3/8"	17.1	-	-	1.65	0.63	-	-	2.00	0.750	-	-	2.31	0.85	-	-	3.20	1.10	-	-	-	-	-	-	-	-	2.31	0.85	3.20	1.10	-	-	-	-
1/2"	21.3	1.65	0.81	2.11	1.00	-	-	2.00	0.957	-	-	2.77	1.26	-	-	3.73	1.62	-	-	-	-	-	-	-	-	2.77	1.26	3.73	1.62	7.47	2.54	-	-
3/4"	26.7	1.65	1.03	2.11	1.28	-	-	2.50	1.500	-	-	2.87	1.68	-	-	9.91	2.19	-	-	-	-	-	-	-	-	2.87	1.68	3.91	2.91	7.82	3.63	-	-
1"	33.4	1.65	1.29	2.77	2.08	-	-	2.50	1.916	-	-	3.38	2.5	-	-	4.55	3.23	-	-	-	-	-	-	-	-	3.38	2.50	4.55	3.23	9.09	5.45	-	-
1 1/4"	42.2	1.65	1.65	2.77	2.69	-	-	3.00	2.910	-	-	3.56	3.38	-	-	4.85	4.46	-	-	-	-	-	-	-	-	3.56	3.38	4.85	4.46	9.70	7.75	-	-
1 1/2"	48.3	1.65	1.90	2.77	3.12	-	-	3.00	3.370	-	-	3.68	4.05	-	-	5.08	5.40	-	-	-	-	-	-	-	-	3.68	4.05	5.08	5.40	10.16	9.54	-	-
2"	60.3	1.65	2.38	2.77	3.94	-	-	3.00	4.263	-	-	3.91	5.43	-	-	5.54	7.47	-	-	-	-	-	-	-	-	3.91	5.43	5.54	7.47	11.07	13.44	-	-
2 1/2"	73.0	2.11	3.70	3.05	5.26	-	-	4.00	6.486	-	-	5.16	8.62	-	-	7.01	11.40	-	-	-	-	-	-	-	-	5.16	8.62	7.01	11.40	14.02	20.29	-	-
3"	88.9	2.11	4.50	3.05	6.45	-	-	4.00	8.423	-	-	5.49	11.29	-	-	7.62	15.25	-	-	-	-	-	-	-	-	5.49	11.28	7.62	15.25	15.24	27.65	-	-
3 1/2"	101.6	2.11	5.20	3.05	7.40	-	-	4.50	10.838	-	-	5.74	13.56	-	-	8.08	18.62	-	-	-	-	-	-	-	-	5.74	13.56	8.08	18.60	-	-	-	-
4"	114.3	2.11	5.81	3.05	8.34	-	-	4.50	12.555	-	-	6.02	16.06	-	-	8.56	22.29	-	-	-	-	-	-	-	-	6.02	16.06	8.56	22.29	17.12	40.99	-	-
5"	141.3	2.77	9.45	3.40	11.56	-	-	5.00	16.900	-	-	6.55	21.76	-	-	9.52	30.92	-	-	-	-	-	-	-	-	6.55	21.76	9.52	30.92	19.05	57.37	-	-
6"	168.3	2.77	11.31	3.40	13.82	-	-	6.35	24.150	-	-	7.11	28.23	-	-	10.97	42.52	-	-	-	-	-	-	-	-	7.11	28.23	10.97	42.52	2.95	79.11	-	-
8"	219.1	2.77	14.78	3.76	19.94	-	-	6.35	33.28	7.04	36.76	8.18	42.49	10.31	53.07	12.70	64.97	15.09	75.79	18.26	90.32	20.62	100.89	23.01	11.18	8.18	42.49	12.70	64.57	22.22	107.78	-	-
10"	273.0	3.40	22.62	4.19	27.83	-	-	6.35	41.73	7.80	50.96	9.27	60.24	12.70	81.46	15.09	95.84	18.26	114.59	21.44	132.85	25.40	154.87	28.58	172.11	9.27	60.24	12.70	81.46	25.40	154.97	-	-
12"	323.9	3.96	33.00	4.57	36.00	-	-	6.35	49.68	8.38	65.14	10.31	79.71	14.27	108.97	17.48	131.81	21.44	159.67	25.40	166.75	28.58	207.87	33.32	238.60	9.52	73.76	12.70	97.36	25.40	186.75	-	-
14"	355.6	3.96	34.23	4.78	41.18	6.35	54.63	7.92	67.98	9.52	81.21	11.13	94.31	15.0	126.51	19.05	157.94	2.83	194.64	27.79	224.36	31.75	253.32	35.71	281.49	9.52	81.21	12.70	107.28	-	-	-	-
16"	409.4	4.19	41.60	4.78	47.33	6.35	62.58	7.92	77.92	9.52	93.10	12.70	123.18	16.66	160.64	21.44	203.26	26.19	245.34	30.96	286.33	36.53	332.72	40.49	364.94	9.52	93.13	12.70	123.18	-	-	-	-
18"	457.2	4.19	46.83	4.78	53.18	6.35	70.53	7.92	87.85	11.13	122.12	14.27	155.90	19.05	205.62	23.83	254.24	29.36	309.55	34.92	363.33	39.37	408.21	45.24	459.18	9.52	405.05	12.70	139.07	-	-	-	-
20"	508.0	4.78	59.22	5.54	68.50	6.35	78.47	9.52	116.67	12.70	154.97	15.09	183.14	20.62	247.79	26.19	310.91	32.54	381.20	28.10	441.06	44.45	507.63	50.01	564.24	9.52	116.97	12.70	154.97	-	-	-	-
22"	558.8	4.78	63.75	5.54	73.81	6.35	86.42	9.52	128.89	12.70	170.86	-	-	22.22	293.80	28.58	373.27	34.92	450.75	41.28	526.24	47.62	599.76	53.98	671.28	9.52	128.89	12.70	170.86	-	-	-	-
24"	609.6	5.54	82.60	6.35	94.37	6.35	94.37	9.52	140.81	14.27	209.54	17.48	254.74	54.61	354.62	30.96	441.30	38.89	546.84	46.02	639.18	52.37	716.16	59.54	806.74	9.52	140.81	12.70	186.75	-	-	-	-
26"	660.4	-	-	-	-	7.92	127.58	12.70	202.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.52	152.73	12.70	202.65	-	-	-	-
28"	711.2	-	-	-	-	7.92	137.52	12.70	216.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.52	164.65	12.70	218.54	-	-	-	-
30"	762.0	-	-	-	-	7.92	147.45	12.70	234.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.52	176.57	12.70	234.44	-	-	-	-
32"	812.8	-	-	-	-	7.92	157.38	12.70	250.33	-	-	17.48	342.17	-	-	-	-	-	-	-	-	-	-	-	-	9.52	188.50	12.70	250.33	-	-	-	-
34"	863.6	-	-	-	-	7.92	167.32	12.70	266.22	-	-	17.48	364.01	-	-	-	-	-	-	-	-	-	-	-	-	9.52	200.42	12.70	266.22	-	-	-	-
36"	914.4	-	-	-	-	7.92	177.26	12.70	282.12	-	-	19.05	420.21	-	-	-	-	-	-	-	-	-	-	-	-	9.52	212.34	12.70	282.12	-	-	-	-

TECHNICAL INFO OF NICKEL BASED ALLOYS

Handles bezeichnung Designation Commercial Designation	C%	Co%	Cr%	Mo%	Ni%	V%	W%	Al%	Cr%	Nb/Cb Ta%	Ti%	Fe%	Sonstige Autres- Other %
Monel 400	0.12	-	-	-	65.0	-	-	-	32.0	-	-	1.5	Mn1
Monel 410	0.10	-	-	-	43.0	-	-	-	53.0	-	-	0.75	Si0.25; Mnx25
Monel 404	0.15	-	-	-	52.0-57.0	-	-	0.5	rest/bal	-	-	0.50	Mn0.10; Si0.10, So.0254
Monel 502	0.10	-	-	-	63.0-17.0	-	-	2.5-3.5	rest/bal	-	0.50	2.0	Mn 1.6 Si so 010
Monel K 500	0.13	-	-	-	64.0	-	-	2.8	.0.0	-	0.6	1.0	Mn 0.8
Monel B	0.10	1.25	0.60	28.0	rest/bal	0.30	-	-	31.0	-	-	1.2	Mn 1.0, So .04
Hastelloy B2	0.02	1.0	1.0	26.0-30.0	rest/bal	-	-	-	-	-	-	2.0	Mn 1.0; Si 0.10
Hastelloy C	0.07	1.25	16.0	17.0	rest/bal	0.30	40	-	-	-	-	5.75	Mn 1.0; Si 0 0.70
Hastelloy C4	0.015	2.0	14.0-18.0	140-17.0	rest/bal	-	-	-	-	-	0.70	3.0	Mn 1.0; Si 0 0.70
Hastelloy C276	0.002	2.5	140-16.5	15.0-17.0	rest/bal	0.35	3.0-4.5	-	-	-	-	4.0-7.0	Mn1.0; Si 0.05
Incoloy 800	0.04	-	21.0	-	32.0	-	-	0.3	-	-	0.4	45.0	-
Incoloy 801	0.05	-	20.5	-	32.0	-	-	-	-	-	1.1	45.0	-
Incoloy 802	0.035	-	21.0	-	32.0	-	-	0.6	-	-	0.7	45.0	-
Incoloy 804	0.05	-	29.5	-	41.0	-	-	0.3	-	-	0.6	25.4	-
Incoloy 805	0.012	-	7.5	0.50	36.0	-	-	-	0.10	-	-	restbal	Mn0.60; Si 0.50
Incoloy 810	0.025	-	21.0	-	32.0	-	-	-	0.50	-	-	restbal	Mn0.90; Si 0.
Incoloy 825	0.04	-	21.0	3.0	42.0	-	-	-	2.0	-	1.0	30.0	-
Incoloy 901	0.05	-	12.5	6.0	rest/bal	-	-	-	-	-	2.9	34.0	Mn 0.24; 0.12; 00.015
Incoloy 903	0.02	15.0	-	-	38.0	-	-	0.7	-	Nb 3.0	1.4	41.0	-
Incoloy 904	0.02	14.0	-	-	33.0	-	-	-	-	-	1.7	50.0	-
Incoloy 600	0.05	-	15.5	-	75.0	-	-	-	-	-	-	8.0	-
Incoloy 601	0.05	-	23.0	-	60	-	-	1.4	-	-	-	14.0	-
Incoloy 610	0.20	-	15.5	-	rest/bal	-	-	-	0.50	Nb 1.0	-	9.0	Mn0.900; Si 2.0
Incoloy 617	0.07	12.5	22.5	9.0	54.0	-	-	1.0	-	-	-	-	-
Incoloy 625	0.05	-	21.5	9.0	61.0	-	-	0.60	-	Nb 3.65	0.60	2.5	Mn 05; Si 0.50
Incoloy 671	0.07	12.5	22.5	9.0	51.0	-	-	-	-	-	0.35	-	-
Incoloy 700	0.12	28.5	15.0	3.75	46.0	-	-	3.0	0.5	-	2.20	0.70	Mn 0.10, Si 0.30
Incoloy 702	0.04	-	15.6	-	rest/bal	-	-	3.4	0.10	-	0.70	0.35	Mn0.05; Si 0.20
Incoloy 705	00.30	-	15.5	-	rest/bal	-	-	-	0.50	-	-	8.0	Mn0.90; Si5.5

CHEMICAL COMPOSITION

	Nickel	Chromium	Molybdenum	Copper	Iron	Maganese	Carbon	Silicon	Sulphur
Alloy 020	32.00-38.00	19.00-21.00	2.00-3.00	3.00-4.00	bal	2.00 Max	0.07 Max	1.00 Max	0.035 Max

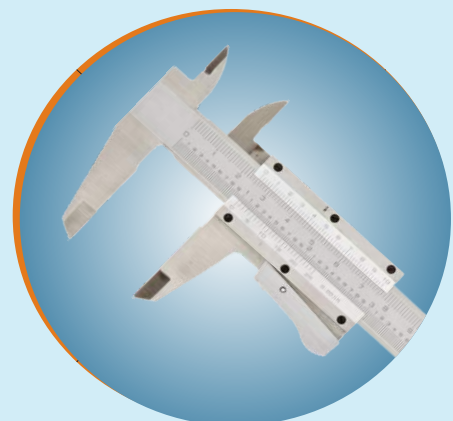
CHEMICAL COMPOSITION OF TITANIUM / NICKEL BASED ALLOYS

Grade	UNS Designation	C% Max	Mn% Max	P% Max	S% Max	Si%	Ni%	Co%	Cu%	Ag%	Fe%	Pb%	Zn%	N%	Ti% Max	H% Max	O%
70/30 Cu-Nu	C 71500	0.05	1.0	0.02	0.02	-	29.0-33.0	-	-	-	0.40-1.0	0.02	0.50	-	-	-	-
90/10 Cu Ni	C 70600	0.05	1.0	0.02	0.02	-	9.0-11.0	-	-	-	1.0-1.8	0.02	0.50	-	-	-	-
Titanium Gr-2	R 50400	0.08	0.03	-	-	-	-	-	-	-	0.30	-	-	-	-	-	0.25
Titanium Gr 1	R 50250	0.08	0.03	-	-	-	-	-	-	-	0.20	-	-	-	-	0.015	0.018
Type 17-4Ph	-	0.07	1.00	0.04	0.03	1.00	3.00-5.00	3.00-5.00	0.15-0.45	-	-	-	-	-	-	-	-
Nickel 200	2200	0.15	0.35	-	0.01	0.35	99.0	-	-	-	0.40	-	-	-	-	-	-
Nickel 201	2201	-	0.35	-	0.01	0.35	99.0	-	0.25	-	0.40	-	-	-	-	-	-



FORMULA FOR CALCULATING WEIGHT

- 1) **WEIGHT OF STAINLESS STEEL PIPE**
 $\text{O.D. (mm)} \times \text{W.Thick (mm)} \times \text{W.Thick (mm)} \times 0.0248 = \text{Wt. Per Mtr}$
 $\text{O.D. (mm)} \times \text{W.thick (mm)} \times \text{W.Thick (mm)} \times 0.00756 = \text{Wt. Per Feet}$
- 2) **WEIGHT OF STAINLESS STEEL ROUND BAR**
 $\text{Dia (mm)} \times \text{Dia (mm)} \times 0.00623 = \text{Wt. Per Mtr.}$
 $\text{Dia (mm)} \times \text{Dia (mm)} \times 0.0019 = \text{Wt. Per Feet}$
- 3) **WEIGHT OF STAINLESS STEEL SQUARE BAR**
 $\text{Dia (mm)} \times \text{Dia (mm)} \times 0.00788 = \text{Wt. Per Mtr.}$
 $\text{Dia (mm)} \times \text{Dia (mm)} \times 0.0024 = \text{Wt. Per Feet}$
- 4) **WEIGHT OF STAINLESS STEEL HEXAGONAL BAR**
 $\text{Dia (mm)} \times \text{Dia (mm)} \times 0.00680 = \text{Wt. Per Mtr.}$
 $\text{Dia (mm)} \times \text{Dia (mm)} \times 0.002072 = \text{Wt. Per Feet}$
- 5) **WEIGHT OF STAINLESS STEEL FLAT BAR**
 $\text{Width (mm)} \times \text{Thickness (mm)} \times 0.00798 = \text{Weight Per Mtr.}$
WEIGHT OF STAINLESS STEEL FLAT BAR
 $\text{Width (mm)} \times \text{Thickness (mm)} \times 0.00243 = \text{Weight Per Feet.}$
- 6) **WEIGHT OF STAINLESS STEEL SHEETS & PLATES**
 $\text{Lenght (Mtrs)} \times \text{Width (Mtrs)} \times \text{Thick (mm)} \times 8 = \text{Weight Per PC.}$
 $\text{Lenght (Feet)} \times \text{Width (Feet)} \times \text{Thick (mm)} \times 3/4 = \text{Weight Per PC.}$
- 7) **WEIGHT OF STAINLESS STEEL CIRCLE**
 $\text{Dia (mm)} \times \text{Dia (mm)} \times \text{Thick (mm)} / 160 = \text{Gms. per PC}$
 $\text{Dia (mm)} \times \text{Dia (mm)} \times \text{Thick (mm)} \times 0.0000063 = \text{Kg. Per PC}$
- 8) **WEIGHT OF Brass Pipe / Copper Pipes**
 $\text{O.D.(mm)} \times \text{W.Thick(mm)} \times \text{W. Thick(mm)} \times 0.0260 = \text{Wt. Per}$
- 9) **WEIGHT Lead Pipe**
 $\text{O.D.(mm)} \times \text{W.Thick(mm)} \times \text{W. Thick(mm)} \times 0.0345 = \text{Wt. Per}$
- 10) **WEIGHT OF ALUMINIUM PIPE**
 $\text{O.D. (mm)} \times \text{W.Thick (mm)} \times \text{W.Thick (mm)} \times 0.0083 = \text{Wt. Per Mtr.}$
- 11) **WEIGHT OF ALUMINIUM SHEET**
 $\text{Lenght (Mtrs)} \times \text{Width (Mtrs)} \times \text{Thick (mm)} \times 2.69 = \text{Weight per pc.}$
- 12) **WEIGHT CONVERSION OF MTR. TO FT.**
 $\text{WT. OF 1 MTR} \times 3.2808 = \text{FEET.}$
- 13) **Barlow's Formula for calculating bursting pressure**
 $P = 2ST/D$ or $t-DP/2S$ or $S-DP/2T$ or $D=2St/P$
 $P = \text{Bursting Pe/ressure P Si.,}$
 $S = \text{Tensile Strenght oftubes,}$
 $T = \text{Wall Thickness (in inches),}$
 $D = \text{Outside Diamete (in inches)}$
- 14) **Pressure Conversion:**
 $\text{kg/mm}^2 \times 1422.3 = \text{PSI} = \text{kg/cm}^2 \times 14.223$
 $1 \text{ feet} = 0.3048 \text{ meter}$
 $1 \text{ meter} = 3.2808 \text{ feet}$
 $1 \text{ inch} = 25.4 \text{ mm}$
 $1 \text{ pound} = 0.454 (45359243) \text{ Kgs}$
- 15) **FORMULA FOR HEALTHY BUSINESS**
 $\text{Honesty} + \text{Quality of Goods} + \text{Quick Service} = \text{Good Healthy Business}$



Certificate Number:
IN/06/0604811685

This is to certify that the Quality Management System of:
PALGOTTA METAL INDUSTRIES
of
194, T.P Street, L.P Wadi, 6th Kumbharwada Lane, Mumbai – 400004, Maharashtra, India

has been assessed and registered by
ACS Registrars Ltd against the following
Quality Management System Requirements:
ISO 9001:2008

The scope of registration is:
"Importer, Stock-holder and Supplier of Stainless Steel, Nickel Alloy, and Non-Ferrous Raw Materials"

Signed by: *[Signature]*

Date of initial assessment: 22/04/2014
Date of registration: 01/05/2014
Date reissued: N/A
Date of expiry: 21/04/2017

Whilst all due care and skill was exercised in carrying out this assessment, ACS Registrars Ltd. accepts responsibility only for proven gross negligence. This is not a legal document and cannot be used as such. This certificate remains the property of ACS Registrars Ltd. to whom it must be returned upon request. Certificate validity is based on successful completion of required surveillance visits.

To check the authenticity of this certificate, please visit our website www.acsr.in and enter the certificate number in the "Check Certificate Authenticity" option.

Head Office:
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www.acsregistrars.com
www.acsr.in

ACS REGISTRARS

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MANAGEMENT
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Government of Maharashtra
Office of the Joint Director of Industries (MMR)
ICL Bldg, Opp. Tata Nagar, V.N.Purav Marg, Chunabhati (E), Mumbai-400 022.
Tele. 022 2405 5999 email-didimumbai@maharashtra.gov.in

Form No. 04781

ACKNOWLEDGEMENT (PART-II)

1. M/s. PALGOTTA METAL INDUSTRIES, has filed Memorandum for a Service Enterprise at the address- 546, Pathe Bapurao Marg, Ground Floor, Shop No 2, Near Gulalwadi Circle Mumbai –400 004 for the item/items indicated below as per facts Stated in **form No. 04781** and allocated Entrepreneur's Memorandum No.as Below:-

2. Details of Item/Items to be Service to be provided.

Sr. No	Type of Service to be Rendered	Capacity in case of Manufacture (p.a)	Commencement of Service
01	Wholesale Trading In Ferrous & Non Ferrous Metals. (622)	-----	01/07/1992

3. Details of Plant and Machinery as per Date-Wise Investment

Sr.No.	Investment in Equipments (Rs.in lakhs)	Date of Investment
1.	02.00	01/07/1992

Date of issue –
0 7 1 0 2 0 1 4

Nature of Activity – (Manufacturing-1 / Services-2) –
2

Category of the Unit (Micro-1/Small-2/Medium-3)-
1

Entrepreneur Memorandum Number – Part-II
2 7 2 3 2 1 0 1 5 5 3

(First two boxes are for State code, next two boxes for District Code, fifth one box for indicating manufacturing or service and sixth one box for indicating micro or small or medium, and last five boxes are for Entrepreneur's Memorandum number)

Note:- The above acknowledge should be read with following conditions.

- The issue of this acknowledgement does not bestow any legal right. The enterprise is required to seek requisite clearance/License / Permit required under statutory obligations stipulated under the Laws of Central Government / State Government / Court orders.
- This enterprise has submitted the undertaking stating that, they have obtained approval consent / License / Permit from concerned Ministry / Dep. Of Central / State Govt. as per Statutory requirement.
- Please Note that ELP-1 Return for the period of every financial year is required to be submitted to JDI (MMR) before End of June.

Date – 07/10/2014
Place-Mumbai.

[Signature]
Dy. Director of Industries (MMR)

APPLICATION INDUSTRIES

• CEMENT INDUSTRIES

• PAPER & PULP INDUSTRIES

• BEVERAGE INDUSTRIES

• OIL & GAS INDUSTRIES

• STAINLESS STEEL SAND
CASTING MANUFACTURERS

• PHARMACEUTICALS

• REFINERIES PLANTS

• FOOD INDUSTRIES

• HEAT EXCHANGERS

• VALVES BODY MANUFACTURERS

• TEXTILE INDUSTRIES

• WATER PIPING SYSTEMS

• ACID & CHEMICAL INDUSTRIES

• AUTOMOBILE INDUSTRIES

• INSTRUMENT CENTRIFUGAL



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info@palgottametal.in • sales@palgottametal.in

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palgottapune@gmail.com

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