Innovating for a Strong World

Good Luck
METAL CORPORATION

Company Profile

GOODLUCK METAL CORPORATION based in Mumbai, India, founded by Mr. Amulakh Shah in 1974 is the professional Importers and Stockists of various Stainless Steel materials such as .....

STAINLESS STEEL AND NICKEL ALLOYS

Pipes, Tubes (Seamless / welded), Plates (Hot rolled), Sheets and Sheets in coil form (Hot Rolled / Cold Rolled), Bars, Rounds, Angles, Hexagonals and Flats from about nine Foreign Countries as follows • Japan • China • Singapore • Korea • Hong kong • Italy • USA • Malaysia • UAE • Saudi-Arabia & Australia for supply in Bulk Quantity or as per your requirement of various qualities / standards.

Our Clients are ....

- Power Plants • Petro-Chemicals • Sugar • Pharmaceuticals • Chemicals
- Heat Exchangers • Textile and Paper Industries etc.

Addition to above, we are the NOMINATED SELLING AGENTS in India for **"SMP WELDING ELECTRODES (KOREAN ORIGIN)"** for the past 14 years. Many reputed Engineering Houses in the Country have been consuming our products regularly which speaks for itself the satisfactory results. The product is also approved by the International Surveyors such as ....

- BUREAU VERITAS • DET NORSKE VERITAS • GERMANISCHER ALLOYDS
- LLOYD's REGISTER ASIA

Your special attention is draw to the fact that our product is being used by the approved suppliers of **"ENGINEERS INDIA LIMITED (EIL)". NEW DELHI** such as ....

- GODREJ & BOYCE • LARSEN & TOUBRO LTD • TEMA INDIA LTD
- GMM PFAUDLER LTD • TUBE PRODUCTS INCORPORATE • FEBTECH
- TEMA INDIA LTD • GUJARAT INFRAPIPES LTD. etc.

Please let us have your registration as "APPROVED VENDOR" and solicit your esteemed enquiries regularly and oblige. we assure you of our dependable qualitative products and competitive price at all times.

Type of Steel	Brand Name	Specification			ASME	
		KS	JIS	AWS	F-No	A-No
Stainless Steel	SMP E307B	D7014 D307-15	Z321 D307-15	A5.4 E307-15	5	8
	SMP E307	D307-16	D307-16	E307-16	5	8
	SMP E308B	D308-15	D308-15	E308-15	-	-
	SMP E308	D308-16	D308-16	E308-16	5	8
	SMP E308L	D308L-16	D308L-16	E308L-16	5	8
	SMP E308H	-	-	E308H-16	5	8
	SMP E309	D309-16	D309-16	E309-16	5	8
	SMP E309L	D309L-16	D309L-16	E309L-16	5	8
	SMP E309Cb	D309Nb-16	D309Nb-16	E309Nb-16	5	8
	SMP E309MoB	D309Mo-15	D309Mo-15	E309Mo-15	5	8
	SMP E309Mo	D309Mo-16	D309Mo-16	E309Mo-16	5	8
	SMP E309MoL	D309MOL-16	D309MOL-16	E309MoL-16	5	8
	SMP E310B	D310-15	D310-15	E310-15	5	8
	SMP E310	D310-16	D310-16	E310-16	5	8
	SMP E310Mo	D310Mo-16	D310Mo-16	E310Mo-16	5	8
	SMP E312	D312-16	D312-16	E312-16	5	8
	SMP E316B	D316-15	D316-15	E316-15	5	9
	SMP E316	D316-16	D316-16	E316-16	5	9
	SMP E316L	D316L-16	D316L-16	E316L-16	5	9
	SMP E317L	D317L-16	D317L-16	E317L-16	5	8
	SMP E347	D347-16	D347-16	E347-16	5	8
	SMP E410	D410-16	D410-16	E410-16	4	6
	SMP E410NiMo	-	-	E410NiMo-16	4	6
	SMP E308(L)-17	-	-	E308(L)-17	5	8
	SMP E309(L)-17	-	-	E309(L)-17	5	8
	SMP E306(L)-17	-	-	E306(L)-17	5	8
	SMP E307(L)-17	-	-	E307(L)-17	5	8
	SMP E347-17	-	-	E347-17	5	8
	SMP E2209	-	-	E2209-16	5	8
	SMP E2553	-	-	E2553-16	5	8

Mild & Stainless Steel Electrodes

Who is SMP, SeAH Group, Korea

- The only company supplying welding electrodes to all Shipyards in Korea.
- The Certificate of ISO 9001 for the first time as welding consumables maker in Korea.
- Top market share for stainless steel welding electrode, MIG, and TIG in Korea.

WELDING ELECTRODES

The welding rods that we undertake to supply is from SMP, **"SeAH Group" Korea** and many makes of Welding Consumables are available as per the requirernents of our clients.

SMP Welding Consumables

BRAND NAME

SMP - E308 - 16

DESCRIPTION :- Easy welding in all positions without spattering, Finely rippled bead and self-peeling slags. The deposit metal is 18% Cr -8% Ni austenitic stainless steel and has excellent resistance to heat and corrosion.

APPLICATION :- Welding of AISI 301, 302, 304 Stainless steels. Fabrication and repair of stainless steel equipment used in the dairy, food processing, drug and chemical industries.

SMP - E308L - 16

DESCRIPTION :- Easy welding in all positions without spattering, Finely-rippled head and self-peeling slags. Austenitic, Corrosion resistant 18%Cr - 8%Ni weld metal contains extra-low carbon to obtain resistance to intergranular corrosion due to carbide precipition

APPLICATION :- Welding of AISI 301, 302, 304, 304L and 308L Stainless steels. Fabrication and repair of stainless steel equipment used in the dairy, food processing, drug and chemical industries.

SMP - E308H - 16

DESCRIPTION :- SMP-E308H is anall position electrode which deposits a 19% Cr-10%Ni austenitic stainless steel weld metal with controlled carbon (0.04~o.o8%). It is designed to weld similar composition steels, used for higherlensile and creep strengths and oxidation resistance at lemperatures up to 800oC. Exceptionally good arc stability.

APPLICATION :- Welding of AISI321H and 347H stainless steels

SMP - E309 - 16

DESCRIPTION :- SMP-E308H is anall position electrode which deposits a 19% Cr-10%Ni austenitic stainless steel weld metal with controlled carbon (0.04~o.o8%). It is designed to weld similar composition steels, used for higherlensile and creep strengths and oxidation resistance at lemperatures up to 800oC. Exceptionally good arc stability.

APPLICATION :- Welding of AISI 309, 13Cr steel, 18Cr steel stainless clad steel. It is also suitable for joining of dissimilar materials such as stainless steel to mild steel.

SMP - E309L - 16

DESCRIPTION :- Austenitic-ferritic (ferrite content of 10%), corrosion resistant 22% Cr-12%Ni weld metal contains extra-low carbon to obtain resistance to intergranular corrosion due to carbide presciption. This low carbon alloy, however, is not so strong at elevated temperature as the columbium-stabillized alloys.

APPLICATION :- Welding of AISI 309 Stainless steel. It is also suitable for joining of dissimilar materials such as 18%Cr 8%Ni stainless steel to mild steel and welding of clad surface of stainless clad steel.

SMP - E309Cb - 16

DESCRIPTION :- The columbium (also known as niobium) provides resistance to intergranular corrosion and also provides higher strength in elevated temperature.

APPLICATION :- Welding of AISI 321, AISI 347 clad steels orwelding of dissimilar melals, such as AISI 347 stainless steel to carbon steels.
Lining welding of mild steel and Cr-Mo steel in which corrosion resistance is required.

SMP Welding Consumables

SMP - E309Mo(L) - 16

DESCRIPTION :- The deposit metal of 23%Cr-12%M0 stainless steel. Austenilic-ferrilic and corrosion-resistant weld deposit contains 2-3% molybdenum which provides creep resistance at elevated temperature and corrosion resistance against sulfuric acid, sulfurous acid, phosphoric acid, etc.

APPLICATION :- Welding of AISI 316 clad steel and AISI 316, 316L, 317 stainless steel to mild steel. Corrosion resistant lining of mild steel and Cr-Mo steel.

SMP - E310 - 16

DESCRIPTION :- Weld deposit has flat, regular beads, with easy slag removal. Heat resistant up to 1,200°C (2.200F) in oxidizing and sulfurfrec atmosphere.

APPLICATION :- Welding of austenitic, heat-resistant Cr - Ni steels of the type. 25%Cr-20%Ni (NCT, AISI 310 Ugine NS 30, Avesta 254 E, Sandvik 15 RE 10). Fabrication and repair of furnace linings, furnace grates, burners, etc.

SMP - E312 - 16

DESCRIPTION :- Highly crack resistant because of austenitic - ferritic electrode with a ferrite content of 25-30%. Also highly suitable for stress compensating buffer layer on parent metals sensitive to cracking.

APPLICATION :- Suitable for welding dissimilar and problem steels, e.g. high alloy and unalloyed steels. Joining of all kinds of alloy and high-alloy steels.

SMP - E316 - 16

DESCRIPTION :- Easy welding in all position without spattering finely-rippled bead and self-peeling slag. Austenitic and corrosion-resistant weld deposit contains 2-3% molybdenum which provide creep resistance at elevatedtemperature and corrosion resistance against sulphuric acid.

APPLICATION :- Welding of 18%Cr-12%Ni-2.5%Mo stainless steel, AISI 316, 316L, 317. Fabrication and repair of textile and other dyeing equipment, paper mill tanks, chemical tanks and equipment, picking tanks, salt processing equipment, alkali tanks, etc.

SMP - E316L - 16

DESCRIPTION :- Extra - Low carbon content in the weld deposit to obtain resistance to intergranular corrosion due to carbide precipitation.

APPLICATION :- Welding of 18%Cr-12%Ni-2.5%Mo stainless steel, AISI 316, 316L, 317. Fabrication and repair of textile and other dyeing equipment, paper mill tanks, chemical tanks and equipment, picking tanks, salt processing equipment, alkali tanks, etc.

SMP - E317L - 16

DESCRIPTION :- Extra - Low carbon content in the weld deposit to obtain resistance to intergranular corrosion due to carbide precipitation. SMP- E317L containing molybednum is higher than that of SMP- E316L, its weld metal has excellent resistance to non-oxisizing acid such as dilute sulfuric acid and is resistant for intercrystalline corrosion.

APPLICATION :- Welding of 18%Cr-12%Ni-3.5%Mo stainless steels, AISI 317, SUS 317L.

SMP - E347 - 16

DESCRIPTION :- As its weld metal has austenitic structure containing Cb, its intergranular corrosion and heat resistance is excellent. It has the most excellent creep resistance at elevated temperature.

APPLICATION :- Welding of Ti or Cb stabilized stainless steels corresponding to AISI 347. 321, 301, 304, and 304L. Suitable for welding of chemical industry's plants, boilers and gasturbines.

SMP - E2209

DESCRIPTION :- SMP-E2209 is a lime titania flux coated electrode which deposits a 23%Cr-9.0%Ni-3.0%Mo-0.15%N duplex type stainless steel weld melal with ferrite content of approximately FN 35. It has "duplex" microstructure consisting of an austenite-ferrite matrix. It combiness increased tensile strength with improved resistance to pitting corrosive attack and to stress corrosion cracking.

APPLICATION :- Applications include offshore platform pipe work for seawater cooling systems and fire fighting water, as well as pumps, valves and risers. Also, it can be used for joining duplex stainless to carbon or low alloy steel, and for cladding these steels.

SMP - E410

DESCRIPTION :- Easy welding in all positions without spattering, finely-rippled bead and self-peeling slag. 13% chromium alloy is an air-hardening steel and, therefore, required preheat and postheat tteatments in order to achieve welds adequate ductility for most engineering purpose.

APPLICATION :- Welding of AISI 403, 410, SUS 420J1, 420J2 Surfacing of carbon steels to resist corrosion, erosino or abrasion, such as occurs in valve seats and other valve parts.

These are extensively used for different purposes in many industries. All position electrode, vertical up or down overhead, horizontal, ideal thick to thin work, for dirty and greasy steels, less splatter, self-releasing slag, boiler applications, industrial usage, Furniture, Dairy Plants, Chemical Plants, Water Pipes, Boilers and others.

PIPES & TUBES

PIPES

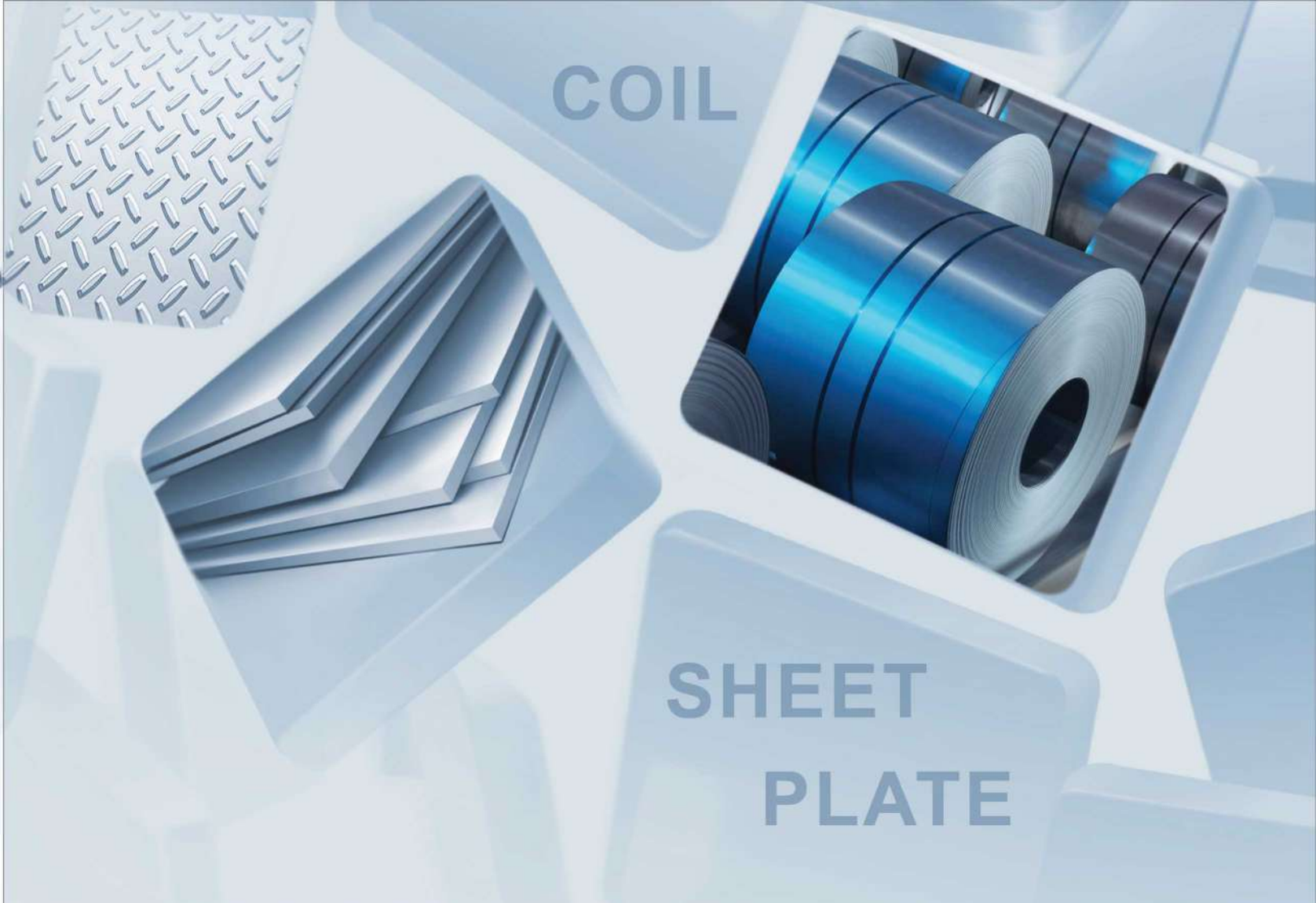
Range	:-	1/8 NB To 600 NB in Sch. 5,10, 20, 30, 40, 60, 80, 100,120,140,160, XXS.
Stainless Steel	:-	ASTM A312, A358 - TP 304, H, L, 316, H, L, Ti, 309, 310, 317L, 321, 347, 904 L etc.
Carbon Steel	:-	ASTM A-106 Gr. B, ASTM A 53, API 5L.
Alloy Steel	:-	ASTM A 335- P5, P9, P11, P12, P21, P22 & P91 (with IBR Test Certificate).
Nickel Alloy	:-	Alloy 20, Hastelloy, Inconel, Monel, Nickel, Nickel Alloys, Duplex & Super Duplex, etc.
Non Ferrous Metals	:-	Copper, & Copper Alloys.
Low Temperature	:-	ASTM - 333 Gr. 6.
Mild Steel & Galvanised. Pipe	:-	IS 1239, IS 3589 (Fe 330, Fe 410).
Form	:-	Round, Square, Rectangle, Hydraulic, Horn Tube etc.
Length	:-	Standard length & Cut length.
Value Added Services	:-	Draw,Polish, Galvanizing, Heat Treatment, Sand Blasting, Machining etc.
Test Certificate	:-	MTC, IBR TC, Lab.TC from Govt. App. Lab. with Third Party Inspection.
Specialize	:-	IBR Pipes, Fabricated Pipes (with Radiography) & Odd size etc.

TUBES

Range	:-	1/4" OD to 12" OD in Guage: 25 Swg. to 10 Swg.
Stainless Steel	:-	ASTM A-213 &A-249-TP 304,H,L, 316,H,L,Ti, 309,310,317L,321,347, 904.L, 202.
Carbon Steel Tube	:-	BS 3059 Gr. 360 / 440, SA, 179, SA / ASTM A 210 Gr. A 1.
Alloy Steel Tube	:-	ASTM A 213 - T-1 1, T-12, T-22, T-5, T-9 etc.
Nickel Alloy	:-	Alloy 20, Hastelloy, Inconel, Monel, Nickel, Nickel Alloys, Duplex & Super Duplex, etc.
Non Ferrous Metals	:-	Copper Cppper Alloys.
Other Pipes & Tubes	:-	ERW / CDW Boiler Tubes, Air Heater Tubes & Cold Drawn Seamless Tubes.
Special Tube	:-	Capillary Tube, Precision Tubes Instrumentation Tube, Condensers Tubes etc.
Form	:-	Round, Square, Rectangle, Coil, 'U' Shap, Hydraulic Tube & Horn Tube.
Length	:-	Standard length & Cut length.
Other Services	:-	Draw, Polish (Electro & Comm.), Heat Treatment, Bending, Machining.
Test Certificate	:-	MTC, IBR TC, Lab. TC from Govt. App. Lab. with Third Party Inspection.
Specialize	:-	* Capillary Tube, IBR Tubes, Cupro Nickel Tube, Dioxide Copper Tube. * Square, Rectangle & Other Odd Size.

RODS & WIRES

Range	:-	Dia 0.5 mm to 500 mm & Length 500 mm to 6000 mm.
Stainless Steel	:-	ASTM A-479, A-182- 304, H, L, 316, H, L, Ti, 309, 310, 317L, 321, 347, 409, 410, 420, 430, 440 (A, B, C), 446, 904L, 202 etc.
Non Ferrous Metal	:-	Copper, Brass, Aluminium , Phosphorus Bronze, Gun Metal, Lead etc.
Nickel Alloy	:-	Alloy 20, Hastelloy, Inconel, Monel, Nickel, Nickel Alloys, Duplex & Super Duplex, etc.
Alloy Steel	:-	A-182 - F5, F9, F11, F12, F21, F22 & F91
High Speed Steel (HSS),	:-	M2, M3, M35, M42, T-1, T-4, T-15, T-42, D2, D3, H11, H13, OHNS-01 & EN52 HCHCR & OHNS in Grade.
Duplex & Special Grade	:-	UNS 2507, 2205, 329L, Stainless Steel 17-4 PH,15.5 PH, 4122 etc.
Carbon Steel	:-	A 105, LF 2.
Other Grade	:-	CopperAlloy, Brass Alloy, Aluminium Alloy, Zinc, Bi-Metals, Leaded Spring Steel, Silver Steel, Plastic Mould Steel, EN Series.
Finish	:-	Bright, Polish & Black.
Form	:-	Round, Square, Hex (A/F), Bush, Rectangle, Flat, Block, Billet, Ingot, etc.
Hardness	:-	Soft, Hard, Half Hard, Quarter Hard etc.
Other Services	:-	Forging, Rolling, Casting, Machining (CNC), Centreless Grinding (CG), Heat Treatment Polish, Anodising, Cutting, Bending, Minor Fabrication,
Test Certificate	:-	MTC, IBR TC, Lab.TC from Govt. App. Lab. with Third Party Inspection.
Specialize	:-	*17- 4PH, 440C, CG, Forging, IBR Approved, Copper E/c Grade.



SHEET / PLATE / COIL

Range	:-	0.5 to 5 mm Thin in Sheet & Coill etc.
Range	:-	5 mm to 150 mm + Thk in Various Size in Plat & Coil etc.
Stainless Steel	:-	ASTM A-240 - TP 304, 304H, 304L, 316, 316H, 316L, 316Ti, 309, 310, 317L, 321, 347, 409, 410, 420, 430, 446, 904L, 202 etc.
Nickel Alloy	:-	Alloy 20, Hastelloy, Inconel, Monel, Nickel, Nickel Alloys, Duplex & Super Duplex, Copper, Brellium, Brass, Aluminium, Lead, Phosphorus Bronze, Bi- Metals, White Metal, Antimony, Tin,
Alloy Steel	:-	ASTM A-387 - Gr. 11, Gr. 12, Gr. 22, Gr. 5 Cl. 2.
Carbon Steel	:-	IS 2062, EN-8, C 45, Sail Hard etc.
Boiler Quality	:-	ASTM 516 Gr.70.
High Speed Steel	:-	M2, M3, M35, M42 etc.
Other	:-	CRCA, Spring Steel, Silver Steel etc.
Finish	:-	2B, 2D, HR, CR, BA (No. 8 & No. 4), Satin (Met with Plastic Coated).
Hardness	:-	Soft, Hard, Half Hard, Quarter Hard, Spring Hard etc.
Form	:-	Coils, Foils, Rolls, Plain Sheet, Shim Sheet, Perforated Sheet, Chequered Plate, Strip, Flats, Blank (Circle), Ring (Flange) etc.
Other Services	:-	Cutting, Bending, Forging, Rolling, Heat Treatment, Minor Fabrication.
Test Certificate	:-	MTC, IBR TC, Lab.TC from Govt. App. Lab. with Third Party Inspection.
Specialize	:-	Shim Sheet, Perforated Sheet, B. Q. Profile.

Nickel Alloy

NICKEL 200 / 201
Commercial pure nickel with good mechanical properties and excellent resistance to may corrosive media. Important characteristic are its magnetic and magnetostrictive properties, the high thermal and electrical conductivity at low gas content.

MONEL 400 (ALLOY 400)
Alloy 400 is especially resistant to saline and other acids in ventilated condition. It is successfully employed in the salt winning process. Alloy 400 is especially suited for employment in sea brakage water at high speed, where resistance against cavitation and erosion is of great importance. This alloy is very resistant to solvents, glass etching agents, sulfuric and other acids and virtually to all alkalis. This grade is not sensitive to stress corrosion cracking in oxidizing media. Alloy 400 can be employed at temperatures up to 550" Celsius.

MONEL K-500 (ALLOY K-500)
An age-hardening alloy with the same corrosion resistance as Alloy 400, though with increased tensile strength and hardness. Alloy K-500 retains its strength up to temperature of about 650° Celsius.

INCONEL 600 (ALLOY 600)
Alloy 600 has excellent resistance to oxidation at temperatures upto 1175° Celsius and is also resistant to a variety of corrosive media. It retains its high strength up to about 650'' Celsius. Even at lowest temperature, alloy 600 is employed in components of power plants. This grade can be welded without thermal retreatment.

INCONEL 625 (ALLOY 625)
Excellent corrosion resistance with high strength and ductility at temperature upto 700° Celsius applicable upto 1100° Celsius. Alloy 625 is weldable without thermal retreatmet.

INCOLLOY 800 (H) (ALLOY 800 (H)
This Alloy is resistant to corrosion resulting form hydrigen sulfied as well as to stress corrosion cracking. It is highly heat resistant and insensitive to the separation of sigma phase. Alloy 800 H with controlled carbon content improves furthermore the creep strength depending on time solution annealed condition.

INCOLLOY 825 (ALLOY 825)
Resistance to sulfuric acid, phosphoric acid solvents and sea water as well as to many oxidising chemicals. Alloy 825 has good resistance to reducing acid. It can be employed without thermal treatment after the welding process.

HASTALLOY C-276 (ALLOY C-276)
Today probably one of the best and manifold alloys on the market, hen employed in extremely corrosive reducing and oxidising applications. applications. Alloy C-276 has excellent resistance to strong oxidising media contaminated by chloride, dry chloride acid formate acid, acetic hydride solutions, sea water solutions and saline solutions. The alloys is resistant to the corrosive influence of we hydrochloride acid, hydrochloride chlorine diexide solutions.

HASTALLOY C-4 (Alloy C-4)
Excellent resistance against strong oxidising agents, hot contaminated miniral acid, solvent, chlorine and media contaminated by chlorine (organic and inorganic), dry chloric acid, formic acid, acetic acid, acetic hydride solutions, sea water solutions and saline solution. This alloy has high ductility and corrosive resistance even in temperature range of 650-1040" celsius. Alloy C-4 is resistant against the formation of grain boundary carbides and can thus used in most cases without heat-treatment after welding.

INCOLLY DS (ALLOY DS)
Alloy Ds is a heat resistant Ni-Cr-Fe alloy with Si addition for the employment at high temperatures where sufficient strength and corrosive resistance are required. Alloy Ds is heat-resistant upto 1100'' Celsius when in fresh air. This alloy is especially resistant against changing oxidising / reducing conditions as well as the formation of sigma phase in the critical temperature range of 590-870" Celsius. Furthermore it is green rot. Due to high strength and heat resistance to alloy DS, smaller sections than usual can be manufactured from this material.

ALLOY 20
Alloy 20 is a high-allyoed stainless steel. Its corrosion properties surpass those of usual stainless qualities. For example. alloy 20 has excellent stress corrosion to boiling 20-40% sulfuric acid. Although alloy 20 was originally developed for usage in sulfuric environment, its range application has been steadily extended and today also includes machining of artificial rubber, plastic, synthetic fiber etc. In pharmaceutical and food producing application, where purity has to be guaranteed, Alloy 20 is employed to prevent metalic contamination. The most important advantages of this grade are its excellent mechanical properties as well as its comparatively easy machine ability.

Good Luck
METAL CORPORATION

98, Khetwadi Main Road,
Mumbai - 400 004. India
Tel : +91 - 22 - 2385 7713 / 6636 2500
Fax : +91 - 22 - 2382 0728
e-mail : info@goodluckmetal.com
Web : www.goodluckmetal.com