Global Raw Material Sourcing



General-purpose raw materials: Ferrous metals

Ferrous Metals List						
SN	Category	ASTM	DIN	JIS	GB	ISO
		USA	GERMANY	JAPAN	CHINA	
1	Carbon Steel	A570 Gr.A	1.0037	SS400, (SS41)	Q235 (A3/C3)	Fe360A
		1020	1.1151	S20C	20	\
		1450	1.1191	S45C	45	C45E4
		1050	1.1210	S50C	50	C50E4
2	Steel	1115	1.0723	SUM32	Y15	11SMn28
		12L13	1.0718	SUM22L	Y15Pb	11SMnPb28
3	Alloy Steel	5140	1.7035	SCr440	40Cr	41Cr4
		4140	1.7225	SCM440	42CrMo	42CrMo4
		\	1.8509	\	38CrMoAl	41CrAlMo74
4	Spring Steel	\	1.1231	SUP2	65	SL.SM
5	Tool Steel	D3	1.2080	SKD1	Cr12	210Cr12
		\	1.2601	SKD11	Cr12MoV	\
		O1	1.251	SKS3	9CrWMn	95MnWCr1
		O2	1.2842	\	9Mn2V	90MnV2
		D2	1.2379	\	Cr12Mo1V1	160CrMoV12
		P20	\	\	3Cr2Mo	35CrMo2

Ferrous Metals List						
SN	Category	ASTM	DIN	JIS	GB	ISO
		USA	GERMANY	JAPAN	CHINA	
6	Austenitic Stainless Stee	301	1.4310	SUS301	1Cr17Ni7	X10CrNi18-8
		303	1.4305	SUS303	Y1Cr18Ni9	X8CrNiS18-9
		304	1.4301	SUS304	0Cr19Ni9, (0Cr18Ni9)	X5CrNi18-10
		304L	1.4306	SUS304L	00Cr19Ni10	X2CrNi19-11
		316	1.4401, 1.4436	SUS316	0Cr17Ni12Mo2	X5CrNiMo17-12-2
		316L	1.4435	SUS316L	00Cr17Ni14Mo2	\
7	Ferritic Stainless Steel	430F	1.4104	SUS430F	Y1Cr17	X14CrMoS17
8	Martensitic Stainless Steel	431	1.4057	SUS431	1Cr17Ni2	X17CrNi16-2
		\	1.4021	SUS420J1	2Cr13	X20Cr13
		\	1.4028	SUS420J2	3Cr13	X30Cr13
		440C	\	SUS440C	11Cr17 (9Cr18)	\
9	Precipitation-Hardening Stainless Steel	17-4PH	1.4542	SUS630	0Cr17Ni14Cu4Nb	X5CrNiCuNb16-4

General Raw Materials: Non-Ferrous Metals

SN	Category	ASTM USA	DIN GERMANY	JIS JAPAN	GB CHINA	ISO
1	**Aluminum Alloy**	AL2017A	AlCuMg1, 3.1325	A2017	2017A	AlCu4MgSi, 2017A
		AL5052,	AlMg2.5, 3.3523	5052	5052	AlMg2.5, 5052
		AL5083	AlMg4.5Mn, 3.3547	5083	5083	AlMg4.5Mn0.7, 5083
		AL6061	AlMg1SiCu, 3.3211	6061	6061, LD30	AlMg1SiCu, 6061
		AL6063	\	6063	6063, LD31	AlMg0.7Si, 6063
		AL6082	AlMgSi1, 3.2315	\	6082	AlSiMgMn, 6082
		7075	AlZnMgCu1.5, 3.4365	7075	7075	AlZn5.5MgCu, 7075
		256.0	G-AlSi7Mg	AC4C	ZAlSi7Mg (ZL101)	Al-Si7Mg(Fe)
		355.0	G-AlSi5Mg	AC4D	ZAlSi5Cu1Mg (ZL105)	Al-Si5Cu1Mg
		356.0	G-AlSi7Mg	AC4C	ZAlSi8MgBe (ZL116)	Al-Si7Mg(Fe)
		319.2	G-AlSi6Cu4	AC2B	ZAlSi7Cu4Mg (ZL107)	Al-Si6Cu4
		413.2	G-AlSi12	AC3A	ZAlSi12 (ZL102)	Al-Si12
2	Titanium Alloy	Ti-6Al-4V	/	TAP6400	TC4	3.7105
		GR4	/	T550	TA4	/
3	Copper & Copper Alloys	Cu-OF	C10200	OF-Cu, 2.0040	T1	C1020
		Cu-ETP	C11000	SE-Cu	T2	C1100
		Cu-OF	C10200	OF-Cu, 2.0040	TU1	C1020
		Cu-OF	C10200	OF-Cu, 2.0040	TU2	C1020
		CuBe2	C17200	CuBe2, 2.1247	QBe1.9-0.1	C1720
		CuZn40	C28000	CuZn40, 2.0360	H59	C2800
		CuZn34Pb2	C35600	CuZn36Pb1.5, 2.0331	HPb63-3	C3560
		CuSn6	C51900	CuSn6, 2.1020	QSn6.5-0.4	C5191
		CuSn8	C52100	CuSn8, 2.1030	QSn7-0.2	C5210
		CuAl10Ni5Fe4	C63000	CuAl10Ni5Fe4, 2.0966	QAl9-5-1-1	C6280
4	Nickel Alloy	Nickel 718	2.4668	NCF7516	GH4169	NiCr19Fe19Nb5
		Monel K500	2.4375	NW5500	N5501	NiCu30Al
		Nickel 625	2.4856	NCF625	GH625	NiCr22Mo9Nb

General Raw Materials: Engineering Plastics and Industrial Ceramics

Engineering Plastics and Industrial Ceramics		
SN	**Category**	**Description**
1	Engineering Plastics	PP
		PE
		ABS
		PVC (ESD)
		PC (ESD)
		TEFLON
		BAKELITE
		A.S DERLIN (ESD)
		DERLIN (POM)
		POM (ESD225)
		ACRYLIC PMMA
		PMMA (ESD)
		B.C PLASTIC (CONDUCTION)
		S1000
		PEEK
		PEEK (ESD480) (ESD490HR)
		PEI (ESD410C) (ESD420)
		PAI (ESD520)
		NYLON6, 66
2	Ceramics	ZrO2
		Al2O3

Oil & Gas Raw Material

Oil & Gas Industry Raw Materials List		
SN	**Categary**	**Grade**
1	Nickel Alloy	AGED 925, INCONEL 718 (120,125,150,160 KSI), NITRONIC 50HS, MONEL K500
2	Stainless Steel	15-5PH H1025, 17-4PH (H900 / H1025 / H1075 / H1150) S303, S304, S316, 9CR,13CR, SUPER 13CR, 410SST ANN
3	Non-Magnetic Stainless Steel	15-15LC, P530, Datalloy 2
4	Alloy Steel	S-7, 8620, SAE 5210, 4140, 4145H MOD, 4330V, 4340
5	Carbon Steel	1018
6	Aluminium Alloy	Al2011-T3, Al6061-T6, Al6082-T6
7	Copper Alloy	AMPCO 45, TOUGHMET, BRASS C36000, BRASS C26000, BeCu C17200, C17300
8	Titanium Alloy	C.P. TITANIUM GR.4, Ti-6Al-4V,
9	Cobalt-Based Alloy	STELLITE 6, MP35N
10	Engineering Plastics	PEEK, PTFE, ACETAL