

I Master Superalloy 铸造母合金

Master Superalloy Brand

铸造母合金牌号

Brand 牌号	Identical Brand 国际等同牌号	Application 应用领域
K235	GMR235	Automotive 汽车动力
K418	INCO713C	
K246	MAR-M246	
K438	IN738LC	IGT 燃气轮机
K939	IN939	
K4169	IN718	
K403	ЖС6К	
K424	БЖЛ-12У	
K417	IN100	
K640	X40, HS31	
CoCrMo	F75	

Master Superalloy Specification

铸造母合金规格

Diameter 产品直径	mm	$\text{Ø } 40^{\pm 0.5}$	$\text{Ø } 50^{\pm 0.5}$	$\text{Ø } 65^{\pm 2}$	$\text{Ø } 75^{\pm 3}$	$\text{Ø } 80^{\pm 3}$
	Inch		2		3	

Length 产品长度	mm	≤800	≤800	≤800	≤1200	≤1200
Diameter 产品直径	mm	Ø 90 ^{±3}	Ø 100 ^{±3}	Ø 125 ^{±3}	Ø 150 ^{±3}	Ø 175 ^{±3}
	Inch		4	5	6	7
Length 产品长度	mm	≤1200	≤1200	≤1200	≤1200	≤1200

II Precision Alloy 精密合金

Precision Alloys typical products

精密合金典型产品

Alloy Type 合金类型	Brand 牌号	Equivalent Brand 相似牌号	Cold Strip 冷轧带材	Cold Wire 冷轧丝材	Rolled Bar 锻轧棒材
Soft magnetic alloys 软磁合金	1J21	Hiperco 50	√		
	1J27	Hiperco 27	√		
	1J22	Hiperco 50	√		√
	1J50		√		√
	1J51		√		
	1J79	Permalloy	√	√	√
	1J85	Super-permalloy	√	√	√
	1J116				√
	1J117				√
Half-soft	2J4		√		

magnetic alloys 永磁合金	2J85		√	√	√
Elastic alloys 弹性合金	3J1		√	√	
	3J9		√	√	√
	3J21		√	√	
	3J33		√		√
	3J53			√	
	3J78		√	√	√
Expansion alloys 膨胀合金	4J29	Covar	√	√	√
	4J33		√		√
	4J36	Invar	√	√	√
	4J42		√	√	√
	4J50		√	√	√

续表 Continued Table

Alloy Type 合金类型	Brand 牌号	Equivalent Brand 相似牌号	Cold Strip 冷轧带材	Cold Wire 冷轧丝材	Rolled Bar 锻轧棒材
Resistance alloys 电阻合金	6J10		√	√	
	6J12		√		
	6J20		√	√	√
	6J22	Karma	√		
	6J23	Evanohm	√		
	6J40	Constantan	√		
High resistance	Cr20Ni80		√		

alloys for electrical heating 高电阻电热合金	Cr20Ni35		√		
	Cr20Ni30		√		

Precision alloys specification

精密合金产品规格

Product Type 产品类型	Thickness 厚度, mm	Width 宽度, mm	Length 长度, mm	Remark 备注
Hot-rolled Plate 热轧板	6-100	100-400	100-3000	
Hot-rolled Strip 热轧带	3-6	100-450	100-25000	
Bar 棒材	Φ10-Φ150	—	100-4000	
Cold-rolled Plate 冷轧板	0.9-3.0	300-1000	100-3000	
Cold-rolled Strip 冷轧带	0.1-2.0	200-450		Coil 卷
Cold-rolled Thin Strip 冷轧薄带	0.03-0.1	200-450		Coil 卷
Foil 箔材	0.005-0.03	≤100		Coil 卷
Wire Rod 丝材	Φ3-Φ10	—		Coil 卷

Special Alloy Strip typical products 特种合金带材典型产品			
Alloy Type 合金类型	Brand 牌号	Identical Brand 国际等同牌号	Main Application 主要用途
Corrosion-resistant alloys 耐蚀合金	NS 312	Incoloy 600	strips for heat treatment and chemical processing device in high temperature oxidation atmosphere. 耐高温氧化气氛热处理装置、化学加工装置
	NS334	Hastelloy C-276	wet chlorine, hydrochloric acid, chloride devices 湿氯、盐酸、氯化物装置
Welding alloys 堆焊材料 (原来为: Clad-welding-strips 带极堆焊材料)	EQ309L	—	welding-layer on wall of reactor in petro-chemical equipment. 用于石化装备制造, 如: 化工反应器中耐腐蚀层焊接
	EQ347L	—	strips for welding reactor wall in chemical industry. 用于化工反应器的内壁耐腐蚀层堆焊
Titanium alloys 钛合金	TA1	Gr1	acoustic vibration diaphragm, metal bipolar plate of power battery. 用于高级音响音膜、新能源动力电池双极板
	TC4	Gr5	material in condenser and exchanger in marine engineering. 用于海洋工程中凝汽器、热交换器的关键部件
Wrought superalloys 变形高温合金	GH4169	Inconel 718	parts of automobile gasket, spring in energy field 用于汽车密封垫、能源领域用弹簧
	GH601	Inconel 601	components for industrial Muff tube. 用于工业马弗管高温部件
	GH3625	Inconel 625	materials for high-temperature and corrosion-resistant in marine engineering 用于制作海工耐高温、耐腐蚀部件材料
	GH5605	Hayness 25	components of corrosion-resistant in chemical industry etc. 用于化工耐腐蚀垫片等

Special Alloy Strip Specification 特种合金带材规格				
Type 类型	Thickness 厚度, mm	Width 宽度, mm	Length 长度, mm	Remark 备注
Cold-rolled Strip 冷轧带	0.1-2.0	200-450		Coil 卷
Cold-rolled Thin Strip 冷轧薄带	0.03-0.1	200-400		Coil 卷

Precision Strip for Consumer Electronics typical product
精密电子带材典型产品

Brand 钢种	TEMPER 状态标记	HV 维氏硬度	Yield Strength 屈服强度, Mpa	Tensile strength 抗拉强度, Mpa	Elongation 延伸率(EL)
SUS 301	ANN	≤218	205	520	40
	1/2H	310	510	930	10
	3/4H	370	745	1130	5
	FH	430	1030	1320	3
	EH	490	1275	1570	-
SUS 304	ANN	≤200	205	520	40
	1/2H	250	470	780	6
	3/4H	310	668	930	3
	FH	370	880	1130	-
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Precision Strip for Consumer Electronics Specification
精密电子带材规格

Type 类型	Thickness 厚度, mm	Width 宽度, mm	Length 长度, mm	Remark 备注
Cold-rolled Strip 冷轧带	0.1-2.0	200-450		Coil 卷
Cold-rolled Thin Strip 冷轧薄带	0.03-0.1	200-400		Coil 卷