



HENG XU
ALUMINUM
恒旭铝业



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NINGBO HENGXU ALUMINUM CO.,LTD

Add: No.68 of Da'ao Road, Da'ao Industrial Zone, Dongwu
Town, Yinzhou District, Ningbo, Zhejiang, China, 315114
Tel: +86-574-27681616 Fax: +86-574-28872188
E-mail:sales@nbhxly.com www.nbhxly.com

宁波恒旭铝业有限公司

地址 : 浙江省宁波市鄞州区东吴镇大岙工业区大岙路 68 号 315114
电话 : 86-574-27681616 传真 : 86-574-28872188
邮箱 : sales@nbhxly.com www.nbhxly.com

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宁波恒旭铝业有限公司位于中国浙江省宁波市鄞州区东吴经济开发区，环境优美，交通便捷，公司成立于2008年3月，专业生产各种型号变形铝合金、铸造铝合金，铝合金挤压工业型材及航空、船舶、新节能汽车、医疗器械、光伏等铝加工件、伺服电机各类配件等系列产品为主的中资企业。创建8年来，公司以雄厚的技术力量，先进的生产设备及检验设备，合理的生产管理，严格的标准，致力于产品的研发与制造。产品质量可靠，性能优越，公司产品已遍及全国各省、市，并批量出口到美国、欧洲、南美洲、中东、东南亚等30多个国家和地区，赢得了广大客户的信赖。

公司坚持“自信、诚信、和谐、创新”的经营方针，研发铝制品深加工，研制航空、船舶、

新节能汽车、光伏配件、医疗器械零部件、伺服电机产品配套配件等新产品，不断开拓创新，提高企业经济效益，不断完善企业质量管理体系，为客户提供全方位的服务。

公司坚持“发展是一个不断变革超越的过程”的管理模式，坚持以“人力资源管理是公司的动力之源”为指导思想，坚持“客户关系管理是公司的生存之本”为经营理念。公司现有管理人员20余人，绝大多数来自于国家大中型同行业企业，群英荟萃，人才济济；现有各种技术工人60余人，员工队伍素质优良，技术精湛，作风过硬，勇于吃苦耐劳，乐于无私奉献，为公司的长足发展奠定了坚实的基础。

公司将以不懈的努力，为用户提供优质的产品和完善的服务，为客户创造更多的价值！



Ningbo Hengxu Aluminum Co., Ltd is located at Dongwu Economic Development Zone, Yinzhou district, Ningbo, Zhejiang, China, with beautiful environment and convenient transportation. The company was established in March 2008, and it is a Chinese-funded enterprise specializing in the production of various types of wrought aluminum alloy, cast aluminum alloy, aluminum alloy extrusion industrial profiles, and aviation, ships, new fuel-efficient cars, medical equipment, photovoltaic and other aluminum machined parts, servomotor and other accessories, etc. For 8 years since the establishment, the company is dedicated to the R&D and manufacturing of products with strong technical force, advanced production equipment and inspection equipment, reasonable production management, and strict internal control standards. Because of the reliable quality and superior performance, the company products have been spread across all provinces and municipalities of the country, and exported in batches to more than 30 countries and regions including the United States, Europe, South America, Middle East, Southeast Asia, winning the trust of customers.

The company adheres to the management policy of "confidence, honesty, harmony, innovation", dedicated to the R&D of deep

processing of aluminum products, and developing aviation, ships, new fuel-efficient cars, photovoltaic parts, medical equipment accessories, mating parts of servomotor products, etc, constantly promoting innovation and improving revenue, and constantly improving the enterprise quality management system, so as to provide a full range of services to our customers. The company adheres to the management mode of "development is a process of constant change and creation", and the guiding ideology of "human resource management is the source of power", and the management theory of "customer relationship management (CRM) is the basic condition for the survival of the company". Currently the company has more than 20 managers, most of whom are from large and medium-sized enterprises in the same industry, a great wealth of talents; as well as various technical workers of more than 60 people, with fine quality, outstanding skills, excellent working style, the courage to bear hardships and stand hard work, and the will to give selfless dedication, which has laid a solid foundation for the company's long-term development. With unremitting efforts, the company will provide users with high-quality products and perfect service, so as to create more value for customers!



COMPANY CULTURE

公司文化

恒久致远，旭日东升

Persistence makes far-reaching results, like the red sun rising from the east.

公司理念 / Company Philosophy

Self-confidence / 自信

发现自我，悦纳自我，追求成功。

Discover ourselves, accept ourselves, and pursue success.

Honesty / 诚信

以真诚之心，行信义之事。

Practice good faith with a sincere heart.

Harmony / 和谐

各尽其能，各得其所而又和谐相处的环境。

A harmonious environment in which everyone does his own job and plays his proper role.

Innovation / 创新

自我批判，自我意识的发展，自我创新与成长。

Self-criticism and the development of self-awareness, as well as self innovation and growth.



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CERTIFICATES

证书

企业荣誉 - 从优秀到卓越
Enterprise honor - from excellence to outstanding



恒旭铝业坚持以销定产，责任到人，接到客户订单后排定生产计划、安排物料采购，建立合理的ERP、PDM、MES生产管理系统完善生产流程、确认生产进度及跟踪产品质量，并确保客户交期。

HENGXU adheres to the principle of "limiting production to market ability and dividing responsibility to the people", and arranges the production plan and material purchasing after receiving customer orders, so as to establish reasonable ERP, PDM, MES production management system, and improve the production process, and confirm production schedule, and track the quality of products, thus ensuring the delivery to customers.

EXTRUSION SURFACE TREATMENT WORKSHOP AND PRODUCTION PROCESS

挤出、表面处理车间及生产流程



You will reap the following benefits:

在完善质量检测体系过程中体会到，当前为企业保证产品质量，获得更大效益，企业质量工作必须转变传统的质量管理模式和思维方式，增强全员质量意识，树立溯源意识，提高质量工作自主性，使“质控一体化”有效地实施，按国际标准完善质量检测体系，必将提高产品质量，使企业获得更好效益。

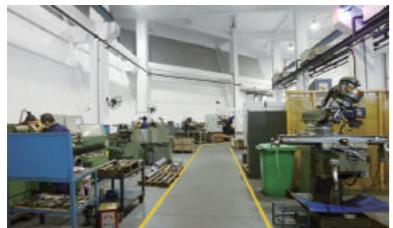
HENGXU has learned from the process of perfecting quality testing system that, in order to achieve quality assurance and gain more benefits, the quality work of the enterprise must change the traditional model of quality management mode and mode of thinking, and enhance the quality consciousness of the staff, and set up traceability consciousness, and improve the autonomy of quality work, so as to effectively implement "integration of quality control". In accordance with the international standard perfect quality inspection system, HENGXU will certainly improve the quality of products and make better benefits for the enterprise.



INSPECTION EQUIPMENT 检测设备

WORKSHOP AND FACTORY

车间和厂区



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REORGANIZATION 整顿

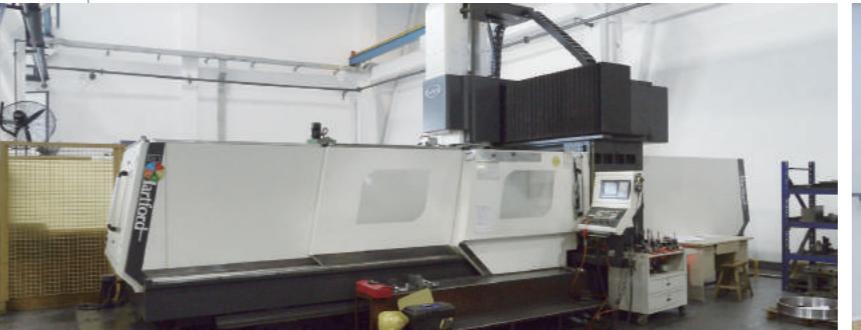
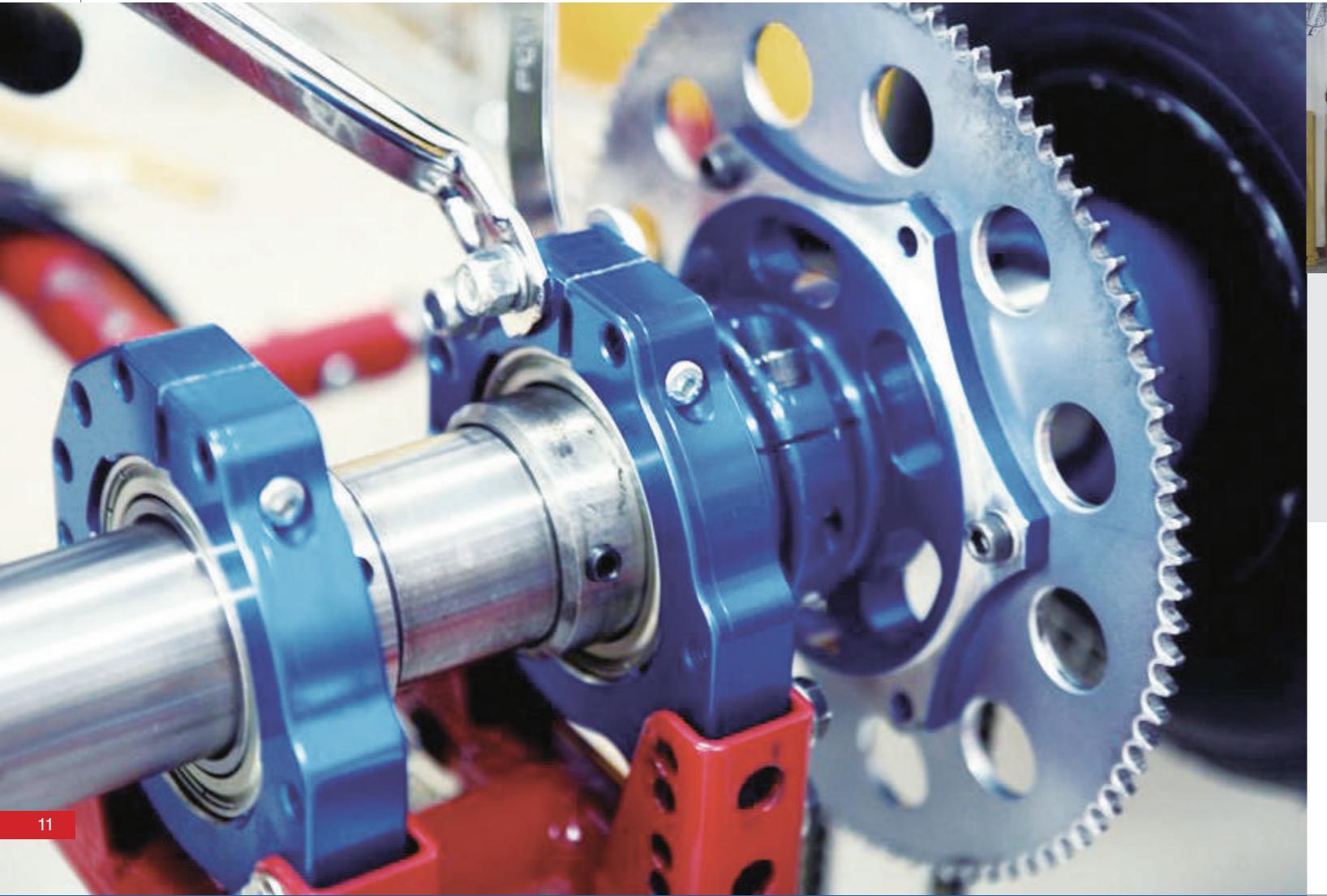
科学布局 取用快捷
Scientific layout Convenient access

从客户角度审视公司的产品设计和生产经营过程，识别各种增值活动和浪费，生产客户需要的有性价比的产品；并采用JIT、一件流、防错、快速转产等方法生产，将所有的呆滞视为浪费，对库存、生产资金占用、厂房利

用率、管理成本等进行不断优化，提高总体资金使用效率；同时按客户的需求投入和产出，使客户能精确的在需要的时间得到需要的产品。以满足客户需求为基础，不断地对各环节持续改善。

inventory, occupation of production fund, plant utilization, management cost, improving the overall efficiency of fund use; at the same time HENGXU makes the input and output according to the need of customers, providing customers with the needed products precisely. On the basis of customer's need, HENGXU continuously improves each link.





CLEAN 清洁

洁净环境 贯彻到底
Carry through the cleaning of environment

PROCESSING EQUIPMENT (SERVOMOTOR ACCESSORIES)

加工设备（伺服电机配件）

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PROCESSING EQUIPMENT (ALUMINUM PROFILE)

加工设备（铝型材）

SAFETY 安全

防微杜渐 警钟长鸣
Check erroneous ideas at the outset
Alarm bells ringing

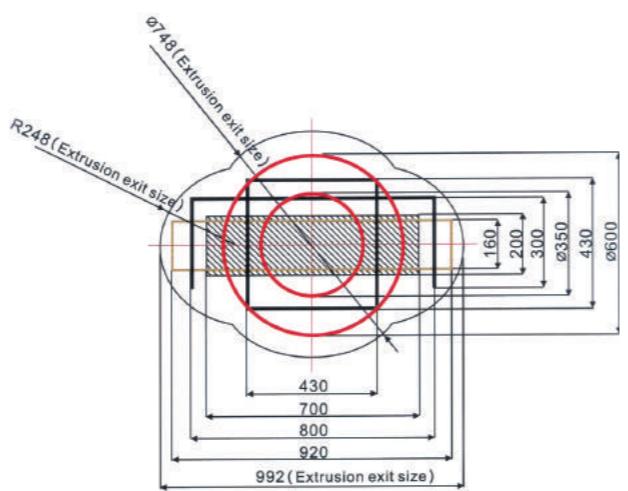
品质源于标准，品质源于聚焦，对于安全与品质的态度，更是恒旭的企业首先所在。

"Quality is the result of standard and focus". The attitude for safety and quality is the essence of HENGXU.



THE MAXIMUM EXTRUSION SIZE AND PRODUCTION PROCESS OF ALUMINUM PROFILE

铝型材最大挤压尺寸及生产工艺



铝型材化学成分 General Chemical Composition of Alloy

合金牌号 / ALLOY	6063(%)	6063A(%)	6061(%)
硅 Silicon Si	0.20-0.60	0.30-0.60	0.40-0.80
铁 Iron Fe	0.35	0.15-0.35	0.7
铜 Copper Cu	0.1	0.1	0.15-0.40
锰 Magnesium Mn	0.1	0.15	0.15
镁 Magnesium Mg	0.45-0.90	0.60-0.90	0.80-1.20
铬 Chromium Cr	0.1	0.05	0.04-0.35
锌 Zinc Zn	0.1	0.15	0.25
钛 Titanium Ti	0.1	0.1	0.15
其他单个 Others(each)	0.05	0.05	0.05
其他全部 Others(total)	0.15	0.15	0.15
铝 Aluminium Al	余量 Remainder	余量 Remainder	余量 Remainder

铝型材室温力学性能 Mechanical Properties of Sections under Room Temperature

合金牌号 Alloy	状态 State	拉伸实验 (Tensile strength test)			硬度实验 (Hardness test)		
		抗拉强度 Tensile strength δ b Mpa	规定非比例伸长应力 Non-proportional Stretching Stress (δ P0.2Mpa)	伸长率 Stretching rate (%)	实样厚度 Pattern thickness mm	维氏 HV	韦氏 HW
		不小于 (No less than)(≥)					
6061	T4	180	110	16	-	-	-
	T6	265	245	8	-	-	-
6063	T5	160	110	8	0.8	58	8
	T6	205	180	8	-	-	-
6063A	T5	200	160	5	0.8	65	10
	190	150	5				
	T6	230	190	5			
		220	180	4			

铝型材表面处理 Surface Treatment

级别 (Class)	最小平均膜厚度 (Min-avg film thickness)	最小局部膜厚度 (Min-part film thickness)
AA10	10	8
AA15	15	12
AA20	20	16
AA25		25

注：氧化膜厚度一般按 AA10 级供货，也可按客户要求的膜厚生产。（The anodized of goods is generally supplied in grade AA10 or is controlled according to client's request）

我公司可以生产的材料牌号 6063, 6060, 6005, 6061, 6082, 3003, 6463, 5052, 2014, 2011, 7075, 5052 等，广泛应用于建筑、装饰、工业、航空、船舶、车辆、电子、机械，光伏、民用家具等行业。产品具有重量轻、硬塑性适中、表面光洁、均匀、氧化膜致密、强度高、耐磨、耐蚀、色泽美观、装配性能好等特点。

产品的化学成分，氧化膜厚度等严格按高于国际的内控标准组织生产，产品符合 GB/T5237-93 的要求，并达到了日本 JIS 标准的水平。

Our company can produce the material grades 6063, 6060, 6005, 6061, 6082, 3003, 6463, 5052, 2014, 2011, 7075, 5052, etc., are widely used in building, decoration, industry, aviation, ships, vehicles, electronics, machinery, counter, civil furniture, etc. Products with light weight, hard plastic is moderate, smooth surface, uniform, oxidation film density, high strength, wear resistance, anticorrosion, colour and lustre is beautiful, good assembly performance. The chemical composition of the product, the thickness of oxide film and so on strictly according to the above international internal control standards organization of production, the product conforms to the requirements of GB/T5237-93, and achieved the level of Japanese JIS standard.

电泳涂漆表面处理 Electrophoresis paint surface treatment

级别	阳极氧化膜	漆膜		复合膜
	平均膜厚 μm	局部膜厚 μm	局部膜厚 μm	局部膜厚 μm
A	≥10	≥8	≥12	≥21
B	≥10	≥8	≥7	≥16
P (象牙白彩色电泳)	≥6		≥15	≥21

注：电泳涂漆型材均按 B 级供货，也可按客户要求供应其他级别型材



ALUMINIUM PROFILE

铝型材

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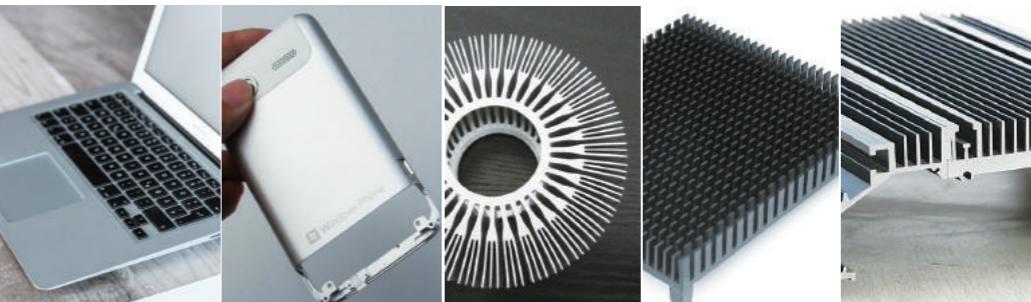
HIGH QUALITY PRODUCTS

恒旭提供优质的产品满足以下行业的需求

HENGXU ALUMINUM provides high quality products to satisfy the need of the following industries.



印刷、休闲用铝材
Aluminum used for printing and leisure



电子家电用铝材
Aluminum used for household electrical appliances



交通运输用铝材
Aluminum used for transport



建筑装饰用铝材
Aluminum used for architecture decoration



铝板、带、箔材
Aluminum sheet belt foil
作为一个制造者，我们的挤出、表面处理车间，凭借优秀的专业人才和现代技术，保证高质量、高精度的生产。
As a manufacturer, our extrusion and surface treatment workshop, with excellent professional talents and modern technology, can guarantee the production of high quality and high precision.

我们一直
致力于做好

伺服电机配件

We are committed to making the best
SERVOMOTOR ACCESSORIES





SERVOMOTOR

伺服电机

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INTRODUCTION

伺服电机介绍

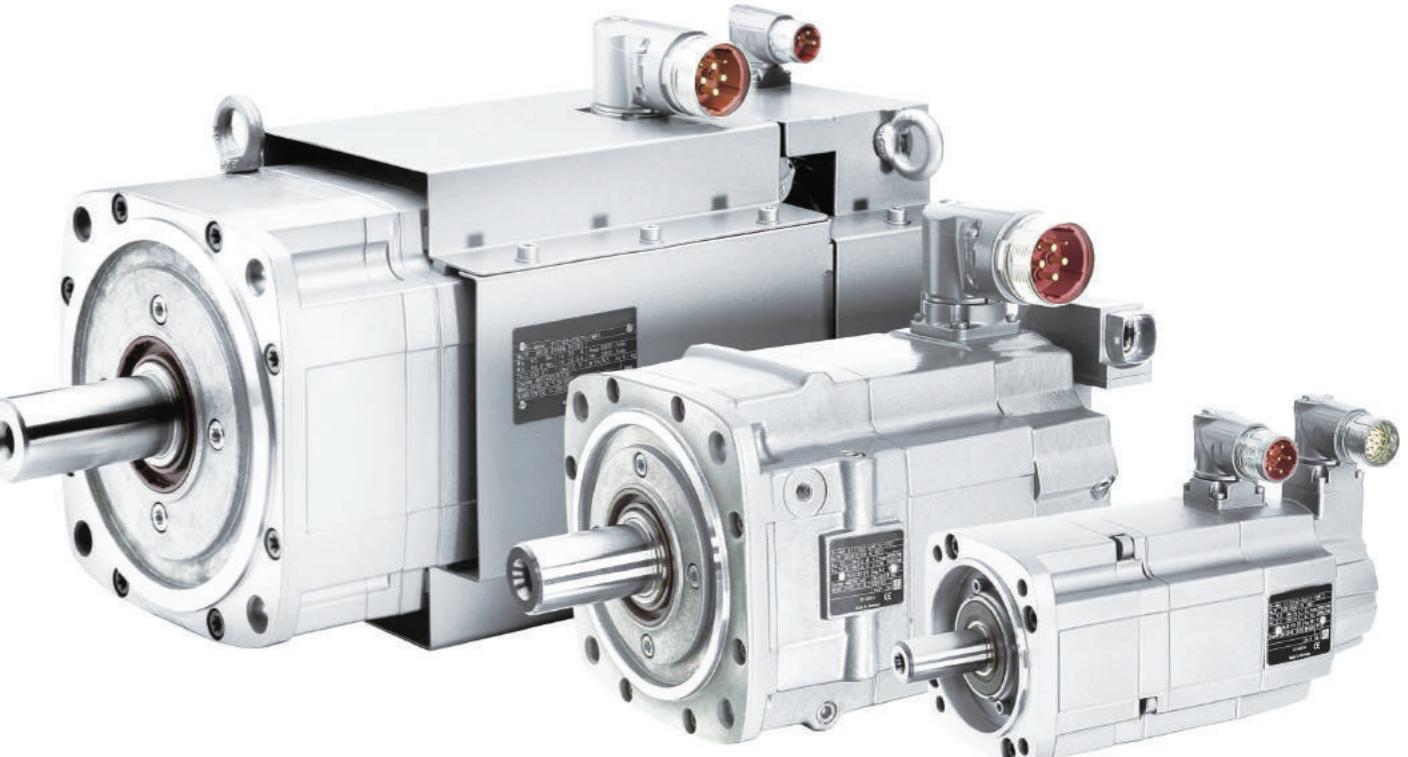
Ultract HX 系列交流永磁同步伺服电机作为一种先进的高性能伺服电机，可满足于自动化工业过程运动控制的广泛需要，特别适用于直接驱动的应用场合。Ultract HX 系列交流永磁同步伺服电机具有较高的转矩 / 体积比和功率 / 体积比，该系列电机配有光学或感应编码器，作为电机标准反馈装置，该编码器能够提供 800 万点 / 转的绝对位置编码，因此在电机极低速情况下仍具有最好的平稳性，或可选择多圈绝对值编码器，该型编码器具有 Endat 接口和电子铭牌。基于以上特点，就可以克服机械传动装置诸多限制，使众多的应用场合完全采用直接驱动技术。

Ultract HX 系列交流永磁同步伺服电机从最小的 3 号基座到最大的 18 号基座，共 6 个系列，3 号基座电机启动转矩为 2NM，适用于法兰尺寸为 75mm 的机壳，用于微小定位及小型零件安装场合，可替代直流和步进电机，13 号基座的大电机，功率 200KW，转矩可达到 700NM，适用于在持续不断的生产线上直接或分布式驱动的场合，以克服长距离传输链的连续动力消耗。标准为 220/240Vac 或 380/460Vac。10 和 13 号基座电机输入电压为 380/440Vac，同时有自然冷却、风冷和水冷的选择，具有转动惯量低、精度高和响应快等特点。适用于在持续不断的生产线上直接或分布驱动的场合，以克服长距离传输链的连续动力消耗。

As a kind of advanced and high performance servomotor, Ultract HX series AC permanent magnet synchronous servomotor can satisfy the extensive need of industrial automation and process control, especially suitable for the application scenarios of direct drive.

Ultract HX series AC permanent magnet synchronous servomotor has high torque/volume ratio and power/volume ratio and is equipped with optical or inductive encoder. As a standard feedback device of servomotor, this encoder can provide the absolute position encoding of 8 million points per turn. Therefore, it has the best stability with extremely low speed of servomotor. Or you can choose multi-ring absolute encoder with Endat interface and electronic nameplate. Based on above characteristics, it can overcome the limitations of mechanical driving device and make numerous application scenarios completely adopt direct drive technology.

There are 6 Ultract HX series AC permanent magnet synchronous servomotor from the smallest No.3 base to the largest No.18 base, a total of six series. The pull-in torque of No.3 base servomotor is 2NM, suitable for chassis with the flange dimension of 75mm, used for minimal localization and the installation of small parts, and able to replace DC and stepping motor; the large servomotor of No.13 base, with the power of 200KW and the maximum torque of 700NM, suitable for direct and distributed driving on the continuous production line, so as to overcome the continuous power consumption of long distance transmission link. The standards are 220/240Vac or 380/460Vac. The input voltage of No.10 and No.13 base servomotor is 380/440Vac. At the same time, there are the choices of natural cooling, forced air cooling and water cooling. With the features of low rotational inertia, high accuracy and fast response, etc, suitable for direct and distributed driving on the continuous production line, so as to overcome the continuous power consumption of long distance transmission link.



TECHNICAL FEATURES OF SERVOMOTOR

伺服电机技术特点

转子

冲片采用高性能低损耗矽钢片，通过有限元方法进行机械强度的模拟分析，在保证提供足够的机械刚度和机械强度，使转子的惯量达到最小；
转子磁钢采用高性能钕铁硼永磁材料形成正弦波气隙磁场；
山轴采用埋键加工方法，同时满足光轴和键轴的要求；

定子

冲片采用高性能低损耗矽钢片；
漆包线绝缘等级 C 级，整体绝缘 F 级；
外壳使用高强度的铝型材外壳，外形和风道经过有限元温度场分析最后优化确定，温度梯度大，散热效果好；

整体

结构合理，功率密度高；
转子惯量非常小，响应速度非常快；
超高内禀矫顽力稀土永磁材料，抗去磁能力强；
在堵转和额定转速范围内可恒转矩输出；
特殊的不对称磁路设计，使得低速转矩脉动小；
平衡精度高、高速运行平稳、噪声低、振动小；
全密封或高防护等级外形结构设计；

THE ROTOR

The stamped steel uses silicon steel sheet of high performance and low loss, carrying out the simulating analysis of mechanical strength through finite element method;

Minimize the inertia of rotor with premise of enough mechanical stiffness and mechanical strength;

The rotor magnet uses NdFeB permanent magnet material of high performance to form sine wave air-gap field;

The shaft uses bond burying processing method, and meet the requirements of optical axis and bond axis at the same time;

THE STATOR

The stamped steel uses silicon steel sheet of high performance and low loss; The level of magnet wire insulation is C while the level of integral insulation is F; The shell uses high-strength aluminum shell, and the shell and air shaft are optimized through finite element temperature field analysis, with large temperature gradient and good heat dissipation effect;

AS A WHOLE

Reasonable structure, and high power density;
Very small rotor inertia, and very fast response;
Rare earth permanent magnetic material of ultra high intrinsic coercive force and strong anti-demagnetization capability;
Constant torque output within locked-rotor and rated speed range;
Special asymmetric design of magnetic circuit makes the pulsation small of torque at low speed;
High balance quality, high speed smooth operation, low noise, and small vibration;
Omniseal and high protection class contour structure design;

Ultract HX - U3 SERIES

Ultract HX - U3 系列

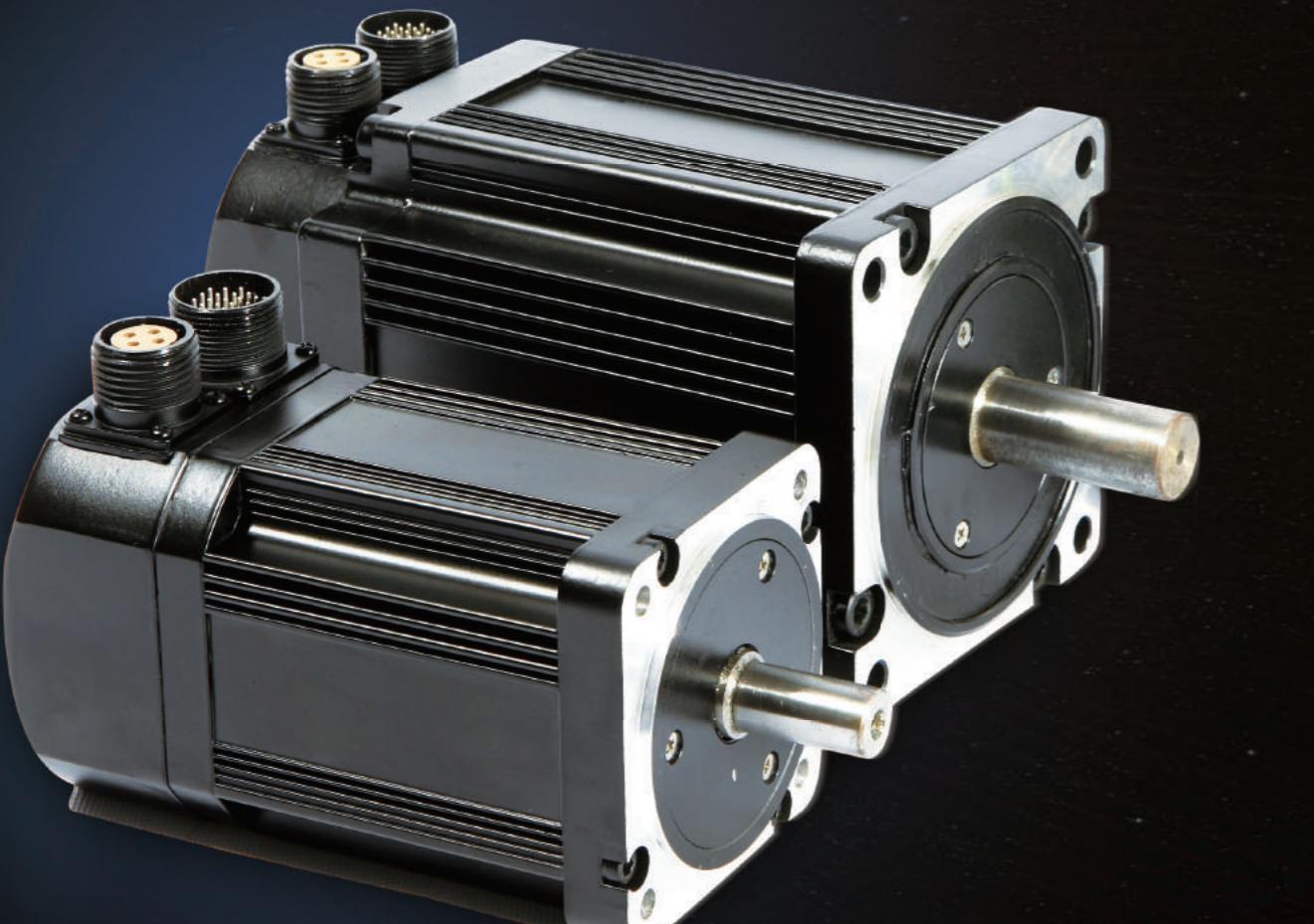


Ultract HX - U3 系列电机的技术参数

Technical Data Summary Ultract HX Frame Size U3										
电机型号 /Motor Code	301A			302A			304A			
	nM	[rpm]	2000	3000	1000	2000	3000	1000	2000	3000
额定转速 /Rated Speed	Md0	[Nm]			1.08			2.1		3.7
堵转转矩 /Stall Torque 2)	Id0	[A]	0.51	0.80	0.58	1.11	2.58	1.04	1.96	2.41
堵转电流 /Current @ Stall Torque 2)	2P							8		
额定值 /Nominal Rating										
额定转矩 /Rated Torque 2)	MdN	[Nm]	1	0.94	1.98	1.87	1.7	3.5	3.2	2.7
额定电流 /Rated Current 2)	IdN	[A]	0.47	0.70	0.55	0.99	2.09	0.99	1.69	1.76
额定功率 /Rated Power	PdN	[Kw]	0.21	0.30	0.21	0.39	0.53	0.37	0.67	0.85
电压常数 /Voltage Constant 3)	Ke	[V/1000rpm]	145	92.4	248.6	129.4	55.9	243.5	130	105.5
扭矩常数 /Torque Constant 3)	Kt	[Nm/A]	2.40	1.53	4.11	2.14	0.92	4.03	2.15	1.74
温升 100°C时扭矩常数 /Torque Constant @130°C 3)	Kt100	[Nm/A]	1.90	1.41	3.80	1.98	0.85	3.49	1.98	1.61
线电阻 /Winding Resistance 3)	Ru-v	[Ω]	119	65.7	171	46.29	8.5	53	17.2	11.3
线电感 /Winding Inductance 3)	Lu-v	[mH]	147	81	294	76.56	14.55	113.4	36.7	24
反电动势常数的温度系数 /Derating Temp.Coeff.Of Back EMF	Dke/Dt	[%/°C]					-0.09			
额定电压 /Nominal Voltage	Vn	[V]	308	321	330	301	186	278	287	336
功率损耗 /Losses	Loss	[KW]	0.084	0.082	0.112	0.108	0.106	0.129	0.129	0.129
效率/Efficiency	Eff	[%]	71	78	65	78	83	74	84	87
电压 380V 时拐点速度 Knee Speed @ 380Vac	nknee1	[rpm]	2558	3626	1191	2598	6402	1439	2706	3415
电压 480V 时的拐点速度 Knee Speed @ 480Vac	nknee2	[rpm]	3343	4685	1585	3356	8157	1869	3465	4354
电压 380V 时最大扭矩下拐点速度 Knee Speed 380Vac and Mmax	nknee3	[rpm]	883	1553	214	1121	3515	515	1328	1771
电压 480V 时最大扭矩下的拐点速度 Knee Speed 480Vac and Mmax	nknee4	[rpm]	1382	2217	469	1605	4618	798	1823	2384
最大值 /Maximum Values										
最大转矩 /Max.Torque	Mmax	[Nm]	5		10			20		
最大电流 /Max.Current (peak value)	Imax	[A]	3	4.1	3.0	5.8	13.5	6.6	11.6	14.3
380V 时最大速度 /Max.Saturation Speed @ 380Vac	nmax1	[rpm]	3057	4113	1529	2937	6798	1662	2923	3602
480V 时最大速度 /Max.Saturation Speed @ 480Vac	nmax2	[rpm]	3862	5195	1931	3709	8587	2100	3692	4550
最大机械速度 /Max.Mechanical Speed	nmax	[rpm]			6000					
机械参数 /Mechanical Data										
转子惯量 /Inertia	Jm	[Kgcm²]		0.6		0.89		1.7		
重量 /Mass	M	[Kg]	2.2		3.2		3.2		3.2	
制动器的机械参数 /Technical Data of Holding Brake										
制动转矩 /Holding Torque	MBr	[Nm]				3.8				
额定电压 (±10%) /Rated Voltage (±10%)	UBr	[Vdc]				24				
额定电流 /Rated Current	IBr	[A]				0.54				
重量 /Mass	MBr	[Kg]				0.55				
惯量 /Inertia	JBr	[Kgcm²]				0.42				
电机增加长度 /Additional motor length	Length	[mm]				30				

测试条件 /Test Condition

- 1) 电机水平放置在自由静止空气中，环境温度 30°C /Motor tested in horizontal position in free still air ,ambient temperature 30°C
- 2) 电机使用法兰连接在 300x300x20 的散热台上 /Motor flanged on heatsink 300x300x20
- 3) 典型公差值 ±10% /Typical data tolerance +/-10%
- 4) PTC130 的报警温度 130°C /Threshold of built in PTC 130°C
- 5) 斩波频率 8kHz /Chopper frequency 8kHz



SERVOMOTOR ACCESSORIES

伺服电机配件



Ultract HX - U5 SERIES

Ultract HX - U5 系列



Ultract HX - U5 系列电机的技术参数

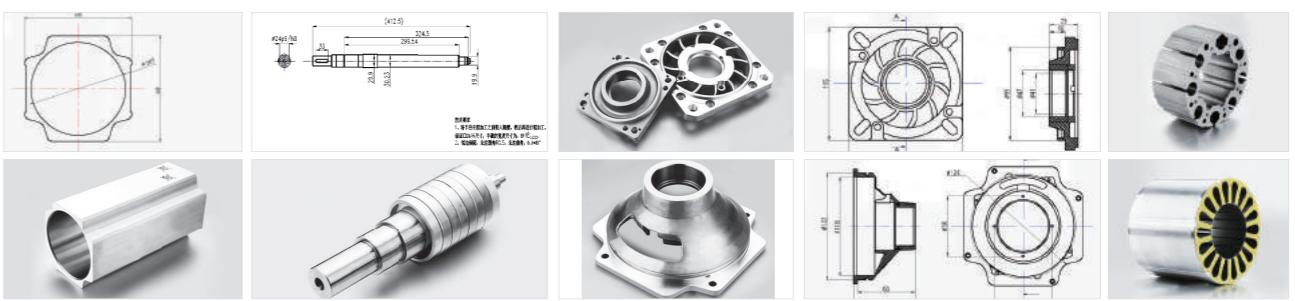
Technical Data Summary Ultract HX Frame Size U5										
电机型号 /Motor Code			503A		506A		509A		512A	
额定转速 /Rated Speed	nM	[rpm]	1500	3000	1500	3000	1500	3000	1500	3000
堵转转矩 /Stall Torque 2)	Md0	[Nm]		3.6		7.2		10.5		14
堵转电流 /Current @ Stall Torque 2)	Id0	[A]	1.3	2.6	2.6	5.2	3.9	7.4	5	9.6
极数 /Number of Poles	2P					8				
额定值 /Nominal Rating										
额定转矩 /Rated Torque 2)	MdN	[Nm]	3.5	3.1	7.9	6	10	8.6	13.2	11.4
额定电流 /Rated Current 2)	IDN	[A]	1.3	2.3	2.9	4.3	3.7	6	4.7	7.8
额定功率 /Rated Power	PdN	[Kw]	0.55	0.97	1.24	1.88	1.57	2.70	2.07	3.58
电压常数 /Voltage Constant 3)	Ke	[V/1000rpm]	177	90	180	92	177	94	184	96
扭矩常数 /Torque Constant 3)	Kt	[Nm/A]	2.93	1.49	2.98	1.52	2.93	1.55	3.04	1.59
温升 100°C 时扭矩常数 /Torque Constant @130°C 3)	Kt100	[Nm/A]	2.68	1.36	2.73	1.39	2.68	1.42	2.79	1.45
线电阻 /Winding Resistance 3)	Ru-v	[Ω]	30.00	8.50	12.50	3.20	7.00	2.00	5.30	1.45
线电感 /Winding Inductance 3)	Lu-v	[mH]	50.26	26.00	39.70	10.33	25.40	7.20	20.65	5.60
反电动势常数的温度系数 /Derating Temp.Coeff.Of Back EMF	Dke/Dt	[%/°C]			-0.09					
额定电压 /Nominal Voltage	Vn	[V]	302	294	308	292	293	296	302	302
功率损耗 /Losses	Loss	[KW]	0.12	0.13	0.19	0.18	0.23	0.23	0.29	0.29
效率 /Efficiency	Eff	[%]	82	88	87	91	87	92	88	93
电压 380V 时拐点速度 Knee Speed @ 380Vac	nknee1	[rpm]	1939	3931	1891	3943	1984	3879	1914	3805
电压 480V 时的拐点速度 Knee Speed @ 480Vac	nknee2	[rpm]	2499	5012	2432	5013	2539	4928	2448	4833
电压 380V 时最大扭矩下拐点速度 Knee Speed 380Vac and Mmax	nknee3	[rpm]	1191	2279	1162	2645	1241	2617	1176	2538
电压 480V 时最大扭矩下的拐点速度 Knee Speed 480Vac and Mmax	nknee4	[rpm]	1672	2979	1567	3438	1654	3393	1566	3287
最大值 /Maximum Values										
最大转矩 /Max.Torque	Mmax	[Nm]	14	28	42	58				
最大电流 /Max.Current (peak value)	Imax	[A]	6.0	11.8	11.8	23.0	17.9	33.8	23.8	45.7
380V 时最大速度 /Max.Saturation Speed @ 380Vac	nmax1	[rpm]	2147	4222	2111	4130	2147	4043	2065	3958
480V 时最大速度 /Max.Saturation Speed @ 480Vac	nmax2	[rpm]	2712	5333	2667	5217	2712	5106	2609	5000
最大机械速度 /Max.Mechanical Speed	nmax	[rpm]			6000					
机械参数 /Mechanical Data										
转子惯量 /Inertia	Jm	[Kgcm²]	1.7	3.2	4.6	6				
重量 /Mass	M	[Kg]	5	7	9	11				
制动器的机械参数 /Technical Data of Holding Brake										
制动转矩 /Holding Torque	MBr	[Nm]			10					
额定电压 (±10%) /Rated Voltage (±10%)	UBr	[Vdc]			24					
额定电流 /Rated Current	IBr	[A]			0.65					
重量 /Mass	MBr	[Kg]			0.7					
惯量 /Inertia	JBr	[Kgcm²]			1.07					
电机增加长度 /Additional motor length	Length	[mm]			33					

测试条件 /Test Condition

- 1) 电机水平放置在自由静止空气中 , 环境温度 30°C /Motor tested in horizontal position in free still air , ambient temperature 30°C
- 2) 电机使用法兰连接在 300x300x20 的散热台上 /Motor flanged on heatsink 300x300x20
- 3) 典型公差值 ±10% /Typical data tolerance +/-10%
- 4) PTC130 的报警温度 130°C /Threshold of built in PTC 130°C
- 5) 斩波频率 8kHz /Chopper frequency 8kHz

Ultract HX - U7 SERIES

Ultract HX - U7 系列

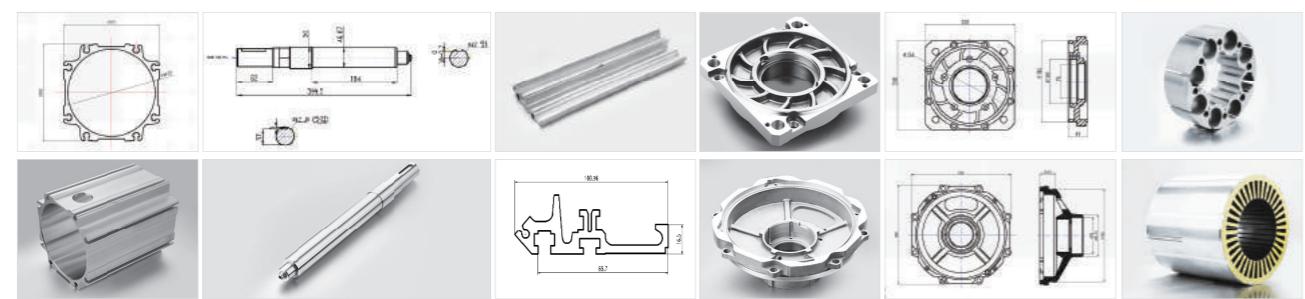


Ultract HX - U7 系列电机的技术参数

Technical Data Summary Ultract HX Frame Size U7											
电机型号 /Motor Code			710A		720A		730A		740A		
额定转速 /Rated Speed	nM	[rpm]	1500	2000	3000	1500	2000	3000	1500	2000	3000
堵转转矩 /Stall Torque 2)	Md0	[Nm]			10			19			35
堵转电流 /Current @ Stall Torque 2)	Id0	[A]	3.4	4.2	6.1	6.0	7.8	11.7	8.3	11.1	19.9
极数 /Number of Poles	2P								8		
额定值 /Nominal Rating											
额定转矩 /Rated Torque 2)	MdN	[Nm]	9.1	9	8.5	17	16	11	24	23	18
额定电流 /Rated Current 2)	IDN	[A]	3.1	3.8	5.2	5.4	6.5	6.7	7.4	9.4	13.3
额定功率 /Rated Power	PdN	[Kw]	1.4	1.9	2.7	2.7	3.3	3.5	3.8	5.7	5.2
电压常数 /Voltage Constant 3)	Ke	[V/1000rpm]	202	162	112	218	168	112	224	167.6	93
扭矩常数 /Torque Constant 3)	Kt	[Nm/A]	3.34	2.68	1.85	3.61	2.78	1.85	3.70	1.54	3.70
温升 100°C 时扭矩常数 /Torque Constant @130°C 3)	Kt100	[Nm/A]	2.94	2.36	1.63	3.17	2.45	1.63	3.26	2.44	3.26
线电阻 /Winding Resistance 3)	Ru-v	[Ω]	9.13	5.84	2.80	3.85	2.30	1.01	2.348	1.32	0.41
线电感 /Winding Inductance 3)	Lu-v	[mH]	38.40	24.91	12.46	22.70	13.90	8.40	16.30	9.60	3.65
反电动势常数的温度系数 /Derating Temp.Coeff.Of Back EMF	Dke/Dt	[%/°C]			-0.09						
额定电压 /Nominal Voltage	Vn	[V]	334	350	356	351	355	347	357	352	289
功率损耗 /Losses	Loss	[KW]	0.23	0.23	0.30	0.30	0.30	0.35	0.35	0.41	0.41
效率 /Efficiency	Eff	[%]	86	89	92	90	92	92	93	94	95
电压 380V 时拐点速度 Knee Speed @ 380Vac	nknee1	[rpm]	1724	2180	3212	1630	2145	3286	1601	2163	3966
电压 480V 时的拐点速度 Knee Speed @ 480Vac	nknee2	[rpm]	2208	2784	4086	2079	2729	4164	2039	2749	5022
电压 380V 时最大扭矩下拐点速度 Knee Speed 380Vac and Mmax	nknee3	[rpm]	1152	1503	2257	1128	1504	2038	1096	1491	2539
电压 480V 时最大扭矩下的拐点速度 Knee Speed 480Vac and Mmax	nknee4	[rpm]	1529	1971	2921	1477	1952	2611	1429	1926	3242
最大值 /Maximum Values											
最大转矩 /Max.Torque	Mmax	[Nm]	33		65		100		130		
最大电流 /Max.Current (peak value)	Imax	[A]	12	15	22	23	29	44	34	45	81
380V 时最大速度 /Max.Saturation Speed @ 380Vac	nmax1	[rpm]	1881	2346	3393	1					

Ultract HX - U10 SERIES

Ultract HX - U10 系列

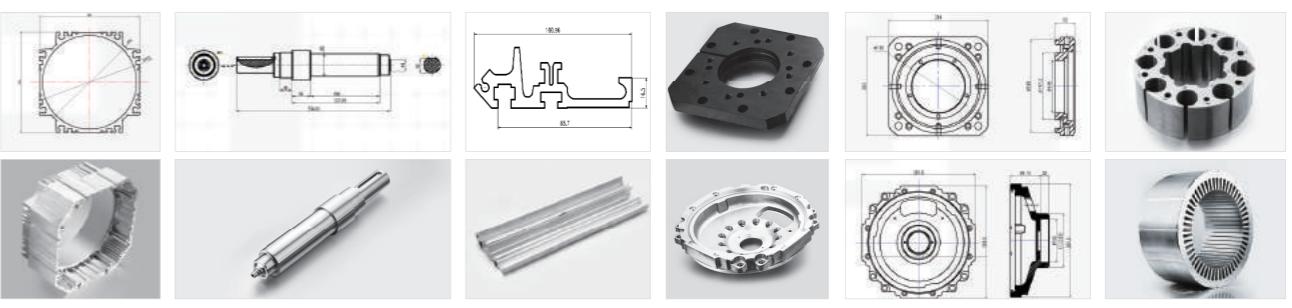


Ultract HX - U10 系列电机的技术参数

Technical Data Summary Ultract HX Frame Size U10																				
电机型号 /Motor Code	1004A				1007A				1010A				1013A							
额定转速 /Rated Speed	nM	[rpm]	1000	1500	2000	3000	1000	1500	2000	3000	1000	1500	2000	3000	1000	1500	2000	3000		
堵转转矩 /Stall Torque 2)	Md0	[Nm]		35					60				88				105			
堵转电流 /Current @ Stall Torque 2)	Id0	[A]	9	11	14	24	15	19	28	45	20	31	36	55	25	33	49	64		
极数 /Number of Poles	2P																8			
额定值 /Nominal Rating																				
额定转矩 /Rated Torque 2)	MdN	[Nm]	32	32	31	27	57	52	50	30	84	78	73	32	95	90	80	45		
额定电流 /Rated Current 2)	IdN	[A]	8	10	13	18	14	18	23	22	19	28	30	20	22	28	38	28		
额定功率 /Rated Power	PdN	[Kw]	3.3	5	6	8	6	9	10	9	9	12	15	10	10	14	17	14		
电压常数 /Voltage Constant 3)	Ke	[V/1000rpm]	277	213	166	102	274	221	148	93	304	193	166	110	293	221	146	112		
扭矩常数 /Torque Constant 3)	Kt	[Nm/A]	4.58	3.52	2.75	1.68	4.54	3.65	2.44	1.53	5.02	3.19	2.74	1.82	4.85	3.65	2.42	1.85		
温升 100°C 时扭矩常数 /Torque Constant @130°C 3)	Kt100	[Nm/A]	4.03	3.10	2.42	1.48	4.00	3.21	2.15	1.35	4.42	2.81	2.41	1.60	4.27	3.21	2.13	1.63		
线电阻 /Winding Resistance 3)	Ru-v	[Ω]	3.400	2.000	1.220	0.458	1.290	0.820	0.370	0.145	0.908	0.370	0.270	0.120	0.620	0.350	0.154	0.090		
线电感 /Winding Inductance 3)	Lu-v	[mH]	34.00	18.80	8.00	4.30	16.00	10.20	4.55	1.80	13.90	5.60	4.10	1.84	9.10	5.12	2.30	1.28		
反电动势常数的温度系数 /Derating Temp.Coeff.Of Back EMF	Dke/Dt	[%/°C]																-0.09		
额定电压 /Nominal Voltage	Vn	[V]	316	353	354	323	301	357	312	284	333	310	350	335	314	348	304	340		
功率损耗 /Losses	Loss	[KW]	0.55	0.55	0.55	0.55	0.63	0.62	0.62	0.62	0.78	0.79	0.78	0.78	0.81	0.81	0.81	0.81		
效率 /Efficiency	Eff	[%]	86	90	92	94	90	94	94	94	92	94	95	93	92	95	95	95		
电压 380V 时拐点速度 Knee Speed @ 380Vac	nknee1	[rpm]	1219	1619	2153	3536	1278	1598	2445	4029	1149	1848	2174	3410	1219	1640	2507	3356		
电压 480V 时拐点速度 Knee Speed @ 480Vac	nknee2	[rpm]	1559	2065	2740	4484	1627	2032	3101	5096	1463	2346	2756	4312	1549	2081	3175	4244		
电压 380V 时最大扭矩下拐点速度 Knee Speed 380Vac and Mmax	nknee3	[rpm]	730	1021	1577	2270	782	1005	1551	2521	694	1137	1343	2039	754	1032	1578	2146		
电压 480V 时最大扭矩下的拐点速度 Knee Speed 480Vac and Mmax	nknee4	[rpm]	953	1323	2039	2901	1013	1294	1984	3209	897	1456	1716	2595	973	1325	2014	2733		
最大值 /Maximum Values																				
最大转矩 /Max.Torque	Mmax	[Nm]			105				210				310			410				
最大电流 /Max.Current (peak value)	Imax	[A]	29	37	48	78	58	72	108	172	77	121	141	213	106	140	212	277		
380V 时最大速度 /Max.Saturation Speed @ 380Vac	nmax1	[rpm]	1372	1786	2286	3741	1384	1722	2576	4108	1252	1970	2294	3453	1296	1722	2597	3397		
480V 时最大速度 /Max.Saturation Speed @ 480Vac	nmax2	[rpm]	1733	2255	2887	4726	1749	2175	3254	5189	1582	2489	2897	4362	1637	2175	3281	4291		
最大机械速度 /Max.Mechanical Speed	nmax	[rpm]															6000			
机械参数 /Mechanical Data																				
转子惯量 /Inertia	Jm	[Kgcm²]			50				90				130			170				
重量 /Mass	M	[kg]			32				52				64			70				
制动器的机械参数 /Technical Data of Holding Brake																				
制动转矩 /Holding Torque	MBr	[Nm]							143									300		
额定电压 (±10%) /Rated Voltage (±10%)	UBr	[Vdc]							24									24		
额定电流 /Rated Current	IBr	[A]							1.78									1.74		
重量 /Mass	MBr	[kg]							11									18		
惯量 /Inertia	JBr	[Kgcm²]							48.6									200		
电机增加长度 /Additional motor length	Length	[mm]							65									80		
测试条件 /Test Condition																				
1) 电机水平放置在自由静止空气中，环境温度 30°C /Motor tested in horizontal position in free still air ,ambient temperature 30°C																				
2) 电机使用法兰安装 (法兰温度 30°C) /Motor flanged (Flange=30°C), to use on baseplate derate -30°C																				
3) 无法工作在 S1 工作制，达不到温升 100°C / Not available in S1 duty and DT100°C																				
4) 典型公差值 ±10% /Typical data tolerance +/-10%																				
5) PTC130 的报警温度 130°C /Threshold of built in PTC 130°C																				
5) 斩波频率 8kHz /Chopper frequency 8kHz																				

Ultract HX - U13 SERIES

Ultract HX - U13 系列



Ultract HX - U13 系列电机的技术参数

Technical Data Summary Ultract HX Frame Size U																	



“品质源于标准，品质源于聚焦”，对于品质的态度，更是恒旭铝业的企业立身之本，从原材料到成品，每一件产品都要通过层层检测。首先从原材料采购环节开始，通过品质检测人员对原材料进行品质鉴定，不合格的原材料全面淘汰。在制造过程中，每一项设计和工艺，都必须经历多次的研究室实验与论证，并由现场技术指导与品管人员根据国内行业质量标准以及国际行业质量标准，全程进行生产管理与质量跟踪。

公司建立实行德国TUV管理体系，通过ISO9001:2008质量管理体系认证、ISO14001：2004环境管理体系认证、OHSAS18001：2001职业健康安全管理体系标准认证。并建立SPC系统，全方位、全过程，覆盖整个产品的形成过程，并具体、详细规定了每个过程要完成的工作，这不仅保证了产品质量而且为质量改进提供了大量的技术数据。

通过严格合理的管理和长时间在本领域的积累，具有在铸造铝及铝型材挤压、铝型材表面处理、铝型材精加工和伺服电机配件制造方面的专有技术、更高的加工精度、产品质量和加工效率，并且能够根据客户的应用需求提供产品解决方案。基于广泛的销售服务网络服务重视每一个细节，不断修正、不断改善，公司可以为客户提供优质的售前、售中和售后服务。



"Quality is the result of standard and focus", which is the HENGXU ALUMINUM's attitude of quality and foundation of doing business. From raw materials to finished products, each product shall pass many times of inspections. Begin from the procurement procedures of raw materials, quality inspection personnel shall inspect the quality of raw materials, and unqualified raw materials shall be fully eliminated. In the process of manufacture, each design and process must go through many times of laboratory experiment and demonstration, and the on-site technical director and quality control personnel shall carry out production management and quality tracking through the whole course according to the domestic industry quality standards and the international industry quality standard. The company has established and practiced German TUV Management System which has passed the quality management system certification of ISO9001:2008, environment management system certification of ISO14001:2004, and occupational health and safety management system standard certification of OHSAS18001:2001. The company has established SPC system, comprehensively and fully covering the formation process of the whole product, and specifying the specific and detailed work to be completed for each process, which not only ensures product quality, but also offers a wide range of technical data for quality improvement.

Through strict and reasonable management and long-term accumulation in this area, the company has proprietary technology, higher machining precision, product quality and processing efficiency in casting aluminum and aluminum profile extrusion, aluminum profile surface treatment, aluminum profile fine machining and servomotor accessories manufacturing, able to provide product solutions according to the customer's application requirements. Based on extensive sales and services network service, the company attaches great importance to every detail, continuously modifying and improving, so as to provide customers with high-quality pre-sale, medium-sales and after-sales service.

QUALITY CONTROL

质量控制

Ultract HX - U18 SERIES

Ultract HX - U18 系列



Ultract HX - U18 系列电机的技术参数

Technical Data Summary Ultract HX Frame Size U18					
电机型号 /Motor Code		18035A	18070A	18100A	
额定转速 /Rated Speed	nM	[rpm]	1000	1000	1000
堵转转矩 /Stall Torque 2)	Md0	[Nm]	300	560	730
堵转电流 /Current @ Stall Torque 2)	Id0	[A]	53	99	145
极数 /Number of Poles	2P			12	
额定值 /Nominal Rating					
额定转矩 /Rated Torque 2)	MdN	[Nm]	200	300	290
额定电流 /Rated Current 2)	IDN	[A]	35	53	57
额定功率 /Rated Power	PdN	[Kw]	21	31	30
电压常数 /Voltage Constant 3)	Ke	[V/1000rpm]	390	390	347
扭矩常数 /Torque Constant 3)	Kt	[Nm/A]	6.45	6.45	5.74
温升 100°C时扭矩常数 /Torque Constant @130°C 3)	Kt100	[Nm/A]	5.68	5.68	5.05
线电阻 /Winding Resistance 3)	Ru-v	[Ω]	0.16	0.059	0.032
线电感 /Winding Inductance 3)	Lu-v	[mH]	2.2	1.1	0.65
反电动势常数的温度系数 /Derating Temp.Coeff.Of Back EMF	Dke/Dt	[%/°C]		-0.09	
额定电压 /Nominal Voltage	Vn	[V]	396	393	349
功率损耗 /Losses	Loss	[KW]	0.97	1.24	1.44
效率 /Efficiency	Eff	[%]	95	94	95
电压 380V 时拐点速度 Knee Speed @ 380Vac	nknee1	[rpm]	959	966	1090
电压 480V 时的拐点速度 Knee Speed @ 480Vac	nknee2	[rpm]	1215	1222	1378
电压 380V 时最大扭矩下拐点速度 Knee Speed 380Vac and Mmax	nknee3	[rpm]	795	822	924
电压 480V 时最大扭矩下的拐点速度 Knee Speed 480Vac and Mmax	nknee4	[rpm]	1023	1052	1180
最大值 /Maximum Values					
最大转矩 /Max.Torque	Mmax	[Nm]	1300	2500	3500
最大电流 /Max.Current (peak value)	Imax	[A]	252	484	762
380V 时最大速度 /Max.Saturation Speed @ 380Vac	nmax1	[rpm]	794	974	1095
480V 时最大速度 /Max.Saturation Speed @ 480Vac	nmax2	[rpm]	1231	1231	1383
最大机械速度 /Max.Mechanical Speed	nmax	[rpm]		4000	
机械参数 /Mechanical Data					
转子惯量 /Inertia	Jm	[Kgcm²]	2820	5340	7010
重量 /Mass	M	[Kg]	240	425	510
制动器的机械参数 /Technical Data of Holding Brake					
制动转矩 /Holding Torque	MBr	[Nm]		n.a.	
额定电压 (±10%) /Rated Voltage (±10%)	UBr	[Vdc]		n.a.	
额定电流 /Rated Current	IBr	[A]		n.a.	
重量 /Mass	MBr	[Kg]		n.a.	
惯量 /Inertia	JBr	[Kgcm²]		n.a.	
电机增加长度 /Additional motor length	Length	[mm]		n.a.	
测试条件 /Test Condition					
1) 电机水平放置在自由静止空气中，环境温度 30°C /Motor tested in horizontal position in free still air ,ambient temperature 30°C					
2) 电机使用法兰安装 (法兰温度 30°C) /Motor flanged (Flange=30°C), to use on baseplate derate -30°C					
3) 典型公差值 ±10% /Typical data tolerance +/-10%					
4) 无法工作在 S1 工作制，达不到温升 100°C / Not available in S1 duty and DT100°C					
5) PTC130 的报警温度 130°C /Threshold of built in PTC 130°C					
6) 斩波频率 8kHz /Chopper frequency 8kHz					

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SALES NETWORK

销售网络

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全球销售服务网络，战略性布局占据行业制高点

凭借先进的技术、卓越的品质、诚信共赢的战略合作方针，依托布局完善的国内市场，放眼世界，以战略性的眼光，建立起遍及全球的营销服务网络，给世界各地的客户以强有力的服务与支持。

The global sales services network and strategic layout have occupied the commanding height of the industry.

With advanced technology, excellent quality, integrity and win-win strategic cooperation policy, based on the domestic market with perfect layout, the company has the whole world in view, and has established a global sales services network, which provides the

现恒旭铝业客户遍布全国各地，在国内拥有近 30 个办事处，产品出口至美国、德国、加拿大、日本等 20 多个国家和地区，在全球享有极高的声誉。恒旭铝业以战略性的布局、完善的销售服务网络占据着行业的制高点。

customers around the world with good service and strong support. Now the customers of Hengxu Aluminum are all over the country, with nearly 30 offices in China, and its products are exported to more than 20 countries and regions including the United States, Germany, Canada, Japan and so on, enjoying high reputation in the world. Hengxu Aluminum has occupied the commanding height of the industry with strategic layout and perfect sales services network.

