



舟山南海亚塑料机械有限公司
ZHOSHAN NANHAIYA PLASTIC MACHINERY CO.,LTD

地址(Add): 浙江省舟山市定海区兴舟大道西段502号C区
Block C, No. 2 West Section, Xingzhou Avenue,
Dinghai District, Zhoushan City, Zhejiang Province
电话(Tel): 0580-8835106
传真(Fax): 0580-8835106
手机(M.T): +86-13866163221
邮箱: info@nhyscrews.com
网站(Web): www.nhyscrews.com



NANHAIYA PLASTIC MACHINERY
舟山南海亚塑料机械有限公司

SCREW BARREL



致力高精度超耐磨机筒螺杆生产
NANHAIYA devotes itself to
producing high-precision
and high wear-resisting screw barrel.

Parallel twin screw barrel

平行双螺杆机筒

通用材质 Common steel

材质 Steel: 38CrMoAlA

调质硬度 Heat treatment hardness: HB260° ~ 320°

氮化硬度 Nitriding hardness: HV950° ~ 1000°

氮化深度 Nitriding depth: 0.50~ 0.7mm

氮化脆性 Nitriding brittleness: ≤二级 grade 2

表面粗糙度 Roughness: Ra0.4

螺杆直线度 Screw straightness: 0.015mm

氮化后表面镀铬硬度 Chrome plating hardness: ≥950HV

镀铬层厚度 Chrome thickness: 0.05 ~ 0.10mm

合金深度 Bimetal depth: 1.0 ~ 2.0mm

双合金硬度 Bimetal hardness: HRC56° ~ 65°



特殊材质 special steel

热作钢 hot processed steel: 1.2344、H13、W360、SKD61、

冷作钢 cold processed steel: 1.2379、K340、D2、DC53、SKD11、W110

高速钢 HSS: 1.3343、1.3243、SKH51、SKH55、

HIP粉末高速钢 HIP powder HSS : CPM9V、SK739、SK726、SK742、GH113

牙顶 PTA 合金 PTA alloy: 螺杆牙顶司太立等离子合金焊接, 合金种类: 钴基、镍基、铁基合金

Screw flight top use Stellite plasma alloy welding, alloy types: cobalt base,nickel base, iron base alloy.

料管镀套合金 Barrel alloy layer: 料管采用离心浇铸合金内孔, 过盈热套工艺, 合金种类: 钴基、镍基、铁基合金

Barrel use centrifugal casting alloy inner bore, shrinkage fit technology. Alloy types: cobalt base ,

nickel base, iron base alloy.

型号model	长径比L/D	PVC产量(kg/h)PVC output capacity	螺杆转速(rpm)screw rotation speed	传动功率(kw)driving motor	螺杆直径(mm)screw dia
NHY75	26-36	220-350	45	45	75
NHY90	26-36	280-460	45	55	90
NHY110	26-36	350-650	45	75	110
NHY120	26-36	500-800	45	110	120
NHY130	26-36	680-1000	45	132	130

Parallel twin screw barrel

平行双螺杆机筒



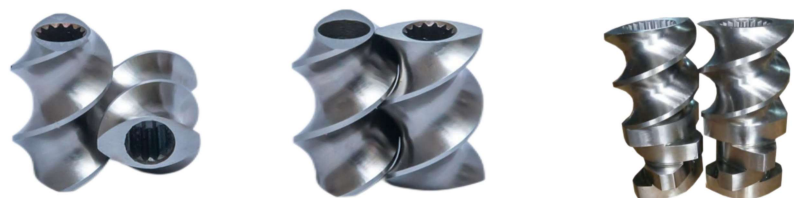
平行双螺杆常用型号 Common size of parallel twin screw

螺杆直径 screw dia: Φ60~Φ150mm

长径比 L/D ratio: 1: 20~30

Segment screw

积木螺杆



产品规格 Product specifications

Φ60/2, Φ65/2, Φ70/2, Φ72/2, Φ75/2, Φ80/2, Φ85/2, Φ90/2, Φ93/2, Φ100/2, Φ105/2, Φ110/2, Φ115/2, Φ120/2, Φ125/2, Φ130/2, Φ140/2, Φ150/2, Φ160/2, Φ170/2, Φ180/2, Φ190/2, Φ200/2, Φ250/2

适用范围：常用于镜片、透明外壳、化妆品容器类、透明亚克力、尼龙、PVC、PC、PPA、PPO、PPS、PA6T、LCP、ABS防火、电木、PC+玻璃纤维、尼龙+玻璃纤维、磁粉、陶瓷粉、铝镁粉、铁粉、电动注塑机、PVC木塑、PE木塑、超高分子板材、免烧砖托板、1:2以上高钙扣板、50-400份以上高钙管材、50-300高钙型材、软PVC片材、PVC发泡板等普通塑料、PP、PE、ABS、PVC、原料造粒、生产管材、异型材、片材等工程塑料改性造粒。

Scope of application: commonly used in lenses, lenses, etc Transparent shell, cosmetic container, transparent acrylic, nylon, PVC, PC, PPA, PPO, PPS, PA6T, LCP, ABS fire prevention, bakelite, PC + glass fiber, Nylon + glass fiber, magnetic powder, ceramic powder, aluminum magnesium powder, iron powder, electric injection molding machine, PVC wood plastic, PE wood plastic, ultra-high molecular plate, unburned brick supporting plate, 1:2 high calcium gusset plate, 50-400 parts of high calcium pipe, 50-30 parts of high calcium pipe 0 high calcium profile, soft PVC sheet, PVC foam board and other ordinary plastics, PP, PE, ABS, PVC, raw material granulation, production pipe, profile, sheet and other engineering plastics modified granulation.



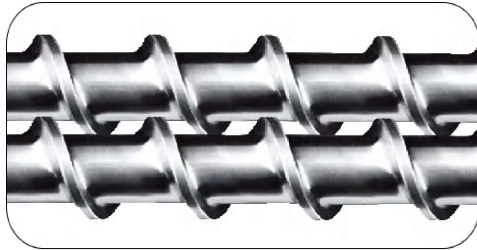
Segment screw

积木螺杆



Bimetallic screw barrel

双合金螺杆机筒



用途区分:

各种立式、卧式射出机、挤出机、注塑机、电木机、橡胶筒、吹膜机等。

产品应用范围:

适用于LCP, PA+GF, PET+GF, PBT+GF, PC+GF等各类塑料添加玻璃纤维、防火剂、碳粉及PPA, PPO, LCP,磁粉, PC等特殊工程塑胶。

加工范围:

双合金螺杆: 外径: $\Phi 15\text{mm}-\Phi 360\text{mm}$; 有效长度: 10000mm

双合金料管: 内径: $\Phi 14\text{mm}-\Phi 200\text{mm}$; 有效长度: 6000mm

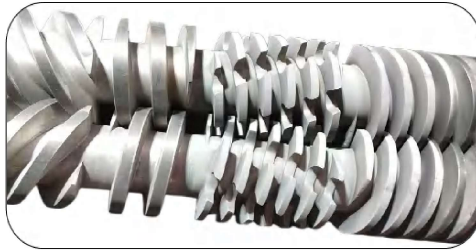
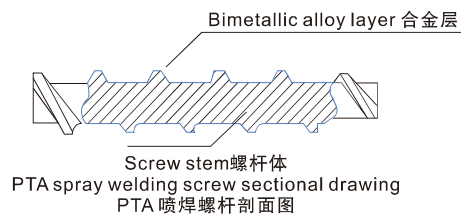
皮膜密度: 98-99.8%

硬度: Hv1100-1400C

密著强度: 10000Psi 以上

双金属机筒: 母材38CrMoAlA, 40Cr, 42CrMo

双金属螺杆: 母材38CrMoAlA, 31CrMoV9(国外)



Distinction of uses:

All kinds of vertical, horizontal injection machine, extruder, injection molding machine, bakelite machine, rubber cylinder, film blowing machine, etc.

Field of application:

It is suitable for LCP, PA + GF, pet + GF, PBT + GF, PC + GF and other plastics to add glass fiber, Fire retardant, carbon powder and PPA, PPO, LCP, magnetic powder, PC and other special engineering plastics.



Processing area:

Double alloy screw: outer diameter: $\Phi 15\text{mm} - \Phi 360\text{mm}$; effective length: 10000mm

Double alloy material pipe: inner diameter: $\Phi 14\text{mm} - \Phi 200\text{mm}$; effective length: 6000mm

Membrane density: 98-99.8%

Hardness: Hv1100-1400c

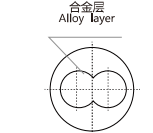
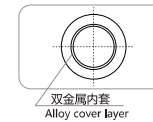
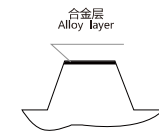
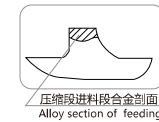
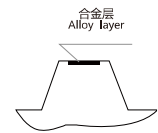
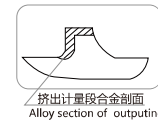
Adhesion strength: above 10000psi

Bimetal barrel: base metal 38CrMoAlA, 40Cr, 42CrMo

Bimetal screw: base metal 38CrMoAlA, 31CrMoV9 (foreign)

Bimetallic screw barrel

双合金螺杆机筒



双金级别:

A级: 含钨40%

B级: 含钨25%

C级: 含钨95%

合金硬度:

HRC 56~65°C

Double gold level:

Grade A: 40% tungsten

Grade B: 25% w

Grade C: 95% w

Alloy hardness:

HRC 56~65°C

技术指标 TECHNICAL TARGETS:

氮化层深度 Depth of nitration case: 0.5~0.8mm

氮化硬度 Hardness of nitration: 950~1020HV

氮化脆度 Fragility of nitration: Less than grade 1

表面粗糙度 Roughness of the surface: Ra 0.4um

螺杆直线度 Linearity on the screw: 0.015mm

双合金硬度 Hardness of double alloys: HRC55-62

双合金深度 Depth of double alloys: >2mm

Technical parameter:

The bimetallic barrel for single screw is a kind of barrel moulding 2-5mm-thick alloy coat on the barrel inner wall which has excellent corrosion resistance, abrasion resistance and high working temperature. And its useful service life is greatly improved contrast to the common nitrided barrel. Bimetal has more obvious advantages when processing special plastics to enhance the abrasion life, such as engineering plastics, fluorine plastics, PPO and etc.

The company uses special alloy powders being sprayed and welded on the screw's ridge, and used different alloys and welding methods for the screw of different functions.

For our bimetallic screw, we have adopted a new technology of surface hardening process by the whole screw surface instead of only hard facing the screw flights by PTA treatment.

For bimetallic barrel, we have raised its tungsten carbide content to 30% and 50% from the previous 10% of tungsten carbide and increased the processing length to 4000mm from the previous length of 3000mm

技术参数:

双金属机筒就是在机筒内壁浇铸一层2—5mm的耐磨耐腐蚀的、耐高温的合金，其有效使用寿命比普通氮化机筒大大提高，对于加工工程塑料、氟塑料、聚砜、PPO特殊类型的塑料等，双金属的优越性尤为明显。

本公司生产的单螺杆双金属螺杆，采用特殊合金粉末在螺杆螺旋部分喷焊合金，可以针对不同功能的螺杆采用不同的合金和焊接方式。

双合金螺杆也从以往的PTA牙顶喷焊，更新设备采用高压速（HP/HVOF）全面合金披覆的熔射技术。WPT1耐腐蚀型合金适用于尼龙、PVE、PC、PMMA等，WPT2耐磨耐高温型合金适用于尼龙玻纤、磁粉、铝镁粉、电木注塑等，WPT3兼有WPT1、WPT2两种特性，耐磨耐腐蚀耐高温。

双合金熔胶机筒方面。从以往的合金含钨10%提升至含碳化钨30%及50%，可加工长度亦从3000mm提升至4000mm。