



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.

Extruder screw barrel

挤出机螺杆机筒



产品技术指标 Product technical index

常规材料 Conventional materials: 38CrMoAlA SKD61 Cr12MoV SACM645 Ni

基合金 GH113 氮化硬度 Nitriding hardness: HV900-1000

氮化深度 Nitriding depth: 0.5-0.8mm

淬火硬度 Quenching hardness: HRC55° - 62°

氮化脆度 Nitriding embrittlement: ≤二级

表面粗糙度 Nitriding embrittlement: Ra0.4

螺杆直线度 Straightness of screw: 0.015mm

氮化后表面镀铬硬度 Hardness of chromium plating: HV≥950HV

镀铬层厚度 Thickness of chromium plating layer: 0.05 ~ 0.10mm

合金深度 Alloy depth: 0.8 ~ 2.0mm

产品规格 Product specifications

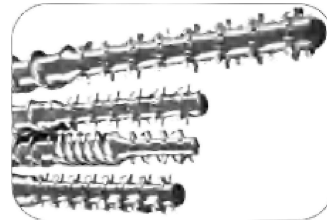
规格(specification): Φ15~Φ300

长径比(ratio of length to diameter): L/D=15-53

螺杆可选用普通型、渐变型、突变型、屏障型、销钉型、DIS开孔风流型、排气型、BM型、分离型螺杆。压缩比可按用户要求进行制造，螺杆头数可以单头或多头。机筒可选择开槽强进料系统分式等，并可代为客户设计。

The screw can be ordinary type, gradual change type, mutation type, barrier type, pin type, dis air flow type, exhaust type, BM type and separate type screw.

The compression ratio can be manufactured according to the requirements of users, and the number of screw heads can be single or multiple. The machine can choose slotting and strong feeding system, and can be designed instead.



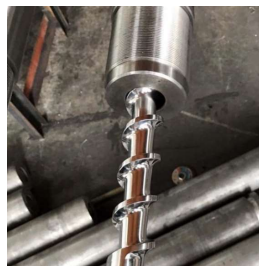
Extruder screw barrel

挤出机螺杆机筒



Screw barrel of injection molding machine

注塑机螺杆机筒



通用材质 common steel

常规材料 Conventional materials: 38CrMoAlA SKD61 Cr12MoV
SACM645 Ni 基合金 GH13

氮化硬度 Nitriding hardness: HV900-1000

氮化深度 Nitriding depth: 0.5-0.8mm

淬火硬度 Quenching hardness: HRC55° - 62°

氮化脆度 Nitriding embrittlement: ≤二级

表面粗糙度 Nitriding embrittlement: Ra0.4

螺杆直线度 Straightness of screw: 0.015mm

氮化后表面镀铬硬度 Hardness of chromium plating: HV≥950HV

镀铬层厚度 Thickness of chromium plating layer: 0.05 ~ 0.10mm

合金深度 Alloy depth: 0.8 ~ 2.0mm



产品规格 Product specifications

理论注塑量(g) Amount of Injection	螺杆直径 X长度(mm) Screw Diameter X Length	料筒外径X长度(mm) Barrel Diameter X Length	理论注塑量(g) Amount of Injection	螺杆直径 X长度(mm) Screw Diameter X Length	料筒外径X长度(mm) Barrel Diameter X Length
30-90	Φ30x900	Φ85x860	80-125	Φ75x1825	Φ170x1725
60-125	Φ35x910	Φ85x860	100-150	Φ80x2000	Φ180x1805
100-150	Φ38x935	Φ95x900	125-200	Φ85x2300	Φ190x1900
125-160	Φ40x980	Φ95x910	200-300	Φ90x2700	Φ210x2000
125-300	Φ42x1030	Φ105x1110	250-500	Φ100x2600	Φ230x2405
250-400	Φ45x1210	Φ115x1165	300-600	Φ110x2800	Φ256x2590
300-500	Φ50x1300	Φ125x1260	400-1000	Φ120x2800	Φ256x2800
450-600	Φ55x1335	Φ130x1320	600-800	Φ130x3010	Φ256x2970
500-700	Φ56x1350	Φ130x1350	800-1000	Φ145x3010	Φ256x3200
500-700	Φ60x1380	Φ140x1350	1000-	Φ160x3500	Φ270x3200
650-800	Φ65x1415	Φ150x1420	15001300-	Φ170x3415	Φ317X3380
700-1000	Φ70x1790	Φ160x1685	2500		

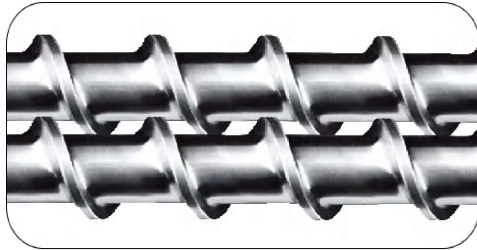
Screw barrel of injection molding machine

注塑机螺杆机筒



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

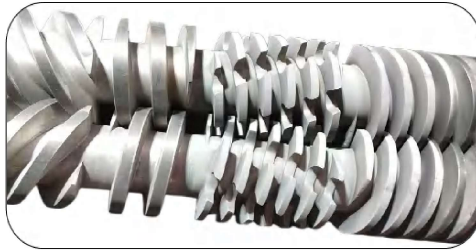
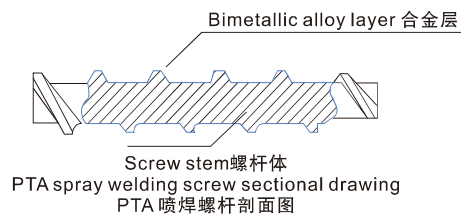
皮膜密度: 98-99.8%

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

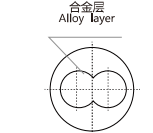
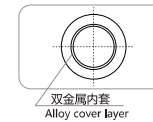
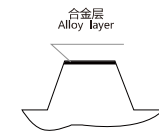
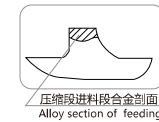
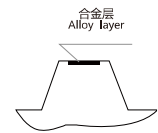
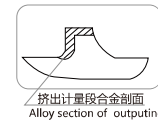
Adhesion strength: above 10000psi

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。

Screw and barrel for rubber machine

橡胶机械螺杆机筒

通用材质 common steel

常规材料 Conventional materials: 38CrMoAlA (JIS SACM645)

氮化硬度 Nitriding hardness: HV900-1050

氮化深度 Nitriding depth: 0.5-0.8mm

淬火硬度 Quenching hardness: HRC55° - 65°

氮化脆度 Nitriding embrittlement: ≤二级

表面粗糙度 Nitriding embrittlement: Ra0.4

螺杆直线度 Straightness of screw: 0.015mm

氮化后表面镀铬硬度 Hardness of chromium plating: HV≥900HV

镀铬层厚度 Thickness of chromium plating layer: 0.025 ~ 0.10mm

合金深度 Alloy depth: 2.0 ~ 3.0mm



产品规格 Product specifications

橡胶销钉螺杆、机筒规格: Φ75mm~Φ200mm

Rubber pinned screw and barrel, specification: Φ75~Φ200mm

橡胶冷、热喂料螺杆、机筒, 规格: Φ30mm~250mm

Rubber cold, hot feeding screw and barrel, specification: Φ30mm~250mm

Screw and barrel for rubber machine

橡胶机械螺杆机筒

