

# *Hannshine* 瀚晟实业

CE TÜV  
CERT  
ISO9001:2000



**SCREW &  
BARREL/ROLLER**

上海瀚晟实业有限公司  
SHANGHAI HANNSHINE PLASTIC MACHINERY CO.,LTD.

## Shanghai Hannshine Plastic Machinery Co.,Ltd.

瀚晟实业



### 上海瀚晟实业有限公司

国内最大的高品质机筒螺杆的专业生产厂家之一。

公司生产的各种螺杆机筒，严格选用优质的合金钢为原料，运用欧美最新的工艺技术和加工检测设备精心制造，确保产品的精度和质量，并具有较长的使用寿命和良好的耐磨耐腐蚀性能。

产品主要用于橡胶挤出机、塑料挤出机、注塑挤出机等，通过调质、定性、氮化、精磨和喷焊合金（双合金）、抛光处理等工业精工制造，严格按照ISO9001国际质量体系，使产品达到国际标准。

公司可承接测绘、设计、来图加工等业务，以优良的品质和及时的服务谋求与客户共同发展。



Shanghai is one of the largest manufactures with high quality screw and barrel in China.

The screw and barrel made by our company are high precise because we use good alloy material, and it processed by latest technology and inspection equipment of European and U.S, So our production is durable and wearable.

All of our products are mainly applied in rubber extrusion machine, plastic extrusion and injection molding machine, through the craft fine manufacture such as

tempering, qualitative, nitriding, wet refining, spray welding alloy (bimetallic), polishing and so on; in strict accordance with the ISO9001 international quality system, the products meet international standards.

We are able to design and make product as per customer's drawing and present parts. Providing high quality products, satisfied and prompt service, pursuing development together with our customers.

## Screw & Barrel For Single screw extruder

单螺杆挤出机螺杆与机筒



### 规格:

Φ15mm-Φ300mm 最大长度: 不大于10000mm

### 1、材料

38CrMoAl A 氮化处理,  
表面硬度: HV ≥ 900  
氮化层深度: 0.5 - 0.8mm

### 2、热处理

渗氮处理  
电镀硬铬层  
高频淬火  
喷涂耐腐蚀  
耐磨双金属  
真空淬火

### 3、材质

表面WC/Co整体喷焊, 能有效提高螺杆的使用寿命

## Single Screw & Barrel For Single

### Specifications:

Diameter: Φ15mm up to Φ300mm Max. length: ≤ 10000mm

### 1. Material

38CrMoAl A  
Nitriding treatment  
Surface hardness: HV ≥ 900 Nitriding depth: 0.5-0.8mm

### 2. Nitride treatment

Hard chrome plating  
High frequency plating  
Spraying bimetallic alloy for corrosion resistance & abrasive resistance  
vacuum quenching

### 3. Material of barrel inside layer:

Tungsten alloy. Surface spraying, prolong life of screw



## Conical twin screw and barrel

锥形双螺杆与机筒



- 1、材质:** 38CrMoAl A  
氮化处理, 表面硬度: HV $\geq$ 900  
氮化层深度: 0.5-0.8mm, 螺杆直线度: 0.015mm, 镀铬层厚度: 0.025-0.085mm
- 2、材质:**  
基材38CrMoAl A, 螺棱表面采用双合金浇铸, 有效的提高了螺杆的寿命
- 3、表面处理:**  
渗氮处理、电镀硬铬层、高频淬火、喷涂耐腐蚀、耐磨双金属
- 4、材质:**  
基材38CrMoAl A, 料口易磨损部分采用进口合金钢 材, 经过特殊处理, 能有效提高机筒的耐磨性, 提高使用寿命

### Conical Twin Screw & Barrel

- 1. Material: 38CrMoAlA**  
Nitriding treatment, Surface hardness: HV $\geq$ 900, Nitriding depth: 0.5-0.8mm, Screw straightness: 0.015mm, Chrome layer hardness after nitride:  $\geq$ 950Hv
- 2. Base material: 38CrMoAl A,** Special alloy is welded on the flight of screw, prolong life of screw.
- 3. Nitride treatment:** Hard chrome plating High frequency plating, spraying bimetallic alloy for corrosion resistance & abrasive resistance
- 4. Easy wearing parts of barrel made from anti-wear alloy can be improved abrasion performance.**



## Parallel (Co-rotating, counter rotating) twin screw and barrel

平行(同向、异向) 双螺杆与机筒



**材料:**  
优质合金钢: 38CrMoAlA (JIS SACM645)  
42CrMo (AISI 4140)  
9Cr18MoV

热处理: 渗氮处理, 电镀硬铬层, 喷涂双金属合金层

**Material:** Alloy-Steel of High-Quality  
38CrMoAlA (JIS SACM645)  
42CrMo (AISI 4140)  
9Cr18MoV

Heat-treatment: Nitriding treatment, Electroplated hard-chrome, Spray coating Bimetallic-alloy

## Screw and barrel for injection molding machine

注塑机螺杆机筒



### Screw for Injection machine

**1. 材质:** 38CrMoAl A

氮化处理  
表面硬度: HV $\geq$ 900 氮化层深度: 0.5-0.8mm

**2. 材质:**

特殊不锈钢, 淬火处理, 硬HRC55-58, 适合各种透明料及腐蚀性强的物料, 提高螺杆的使用寿命。

**3. 材质:**

表面碳化钨超音速整体喷焊, 提高螺杆的耐磨性

**1. Material:** 38CrMoAl A Nitriding treatment

Surface hardness: HV $\geq$ 900  
Nitriding depth: 0.5-0.8mm

**2. Material:**

Special stainless steel Quenching treatment, hardness: HRC55-58, Suitable for the screw which used for transparent plastic products and high corrosion plastic processing, prolong life of screw.

**3. Material:**

Tungsten alloy. Surface spraying, improve abrasion performance of screw.



## Accessories of screw and barrel for injection machine

注塑机螺杆料筒



**用途区分:**

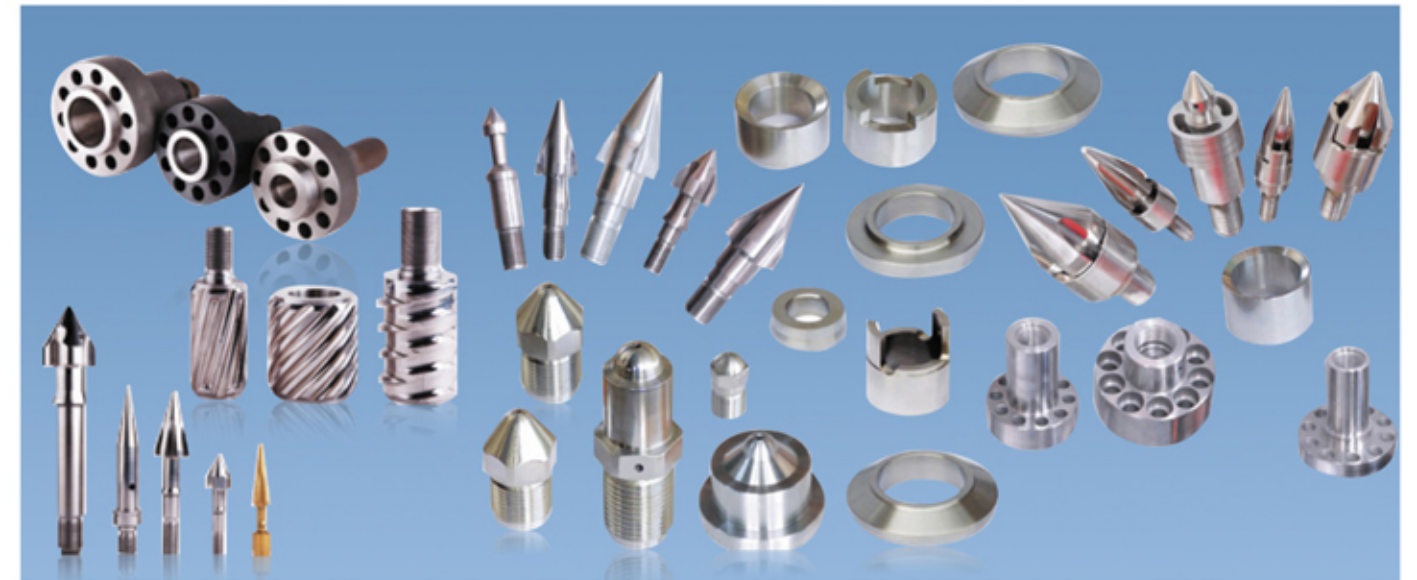
注塑成型机械用 / 挤出机械用

- 加工范围: 内径 $\phi$  12-  $\phi$  300mm
- 有效长度: 12000mm
- 氮化深度: 0.50mm -0.80mm
- 氮化硬度: HV960 以上
- 直线度: 0.015mm /m
- 镀铬厚度: 0.02mm -0.20mm
- 使用塑胶范围: 普通塑料, PP, PE, ABS, AS, PS 等
- 材质成分: SACM-645, 38CrMoAlA

**Application:**

For injection molding machine and extruder

- Product range: Inner diameter:  $\phi$ 12- $\phi$ 300
- Effective length: 12000mm
- Nitrided layer thickness: 0.5-0.8mm
- Hardness:  $\geq$ 960HV
- Straightness: 0.02-0.085mm
- Suitable plastic material: PP,PE,ABS,AS,PS etc
- Material: SACM645,SCM440,38CrMoAlA



## Bimetallic screw and barrel

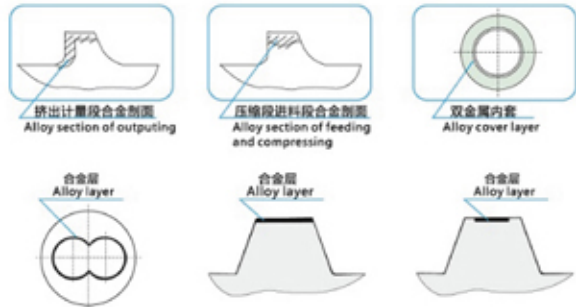
### 双金属螺杆和机筒



#### 用途:

料筒内孔离心浇铸双合金, 双合金螺杆料筒:具有耐磨、耐腐蚀、耐高温、耐高压, 常用于: 镜片、透明外壳、化妆品容器类、透明亚克力、尼龙、PVC、P C、PPA、PPO、PPS、PA6T、LCP、ABS防火、电木、P C + 玻纤、尼龙+玻璃纤维、磁粉、陶瓷粉、铝镁粉、铁粉、电动注塑机等

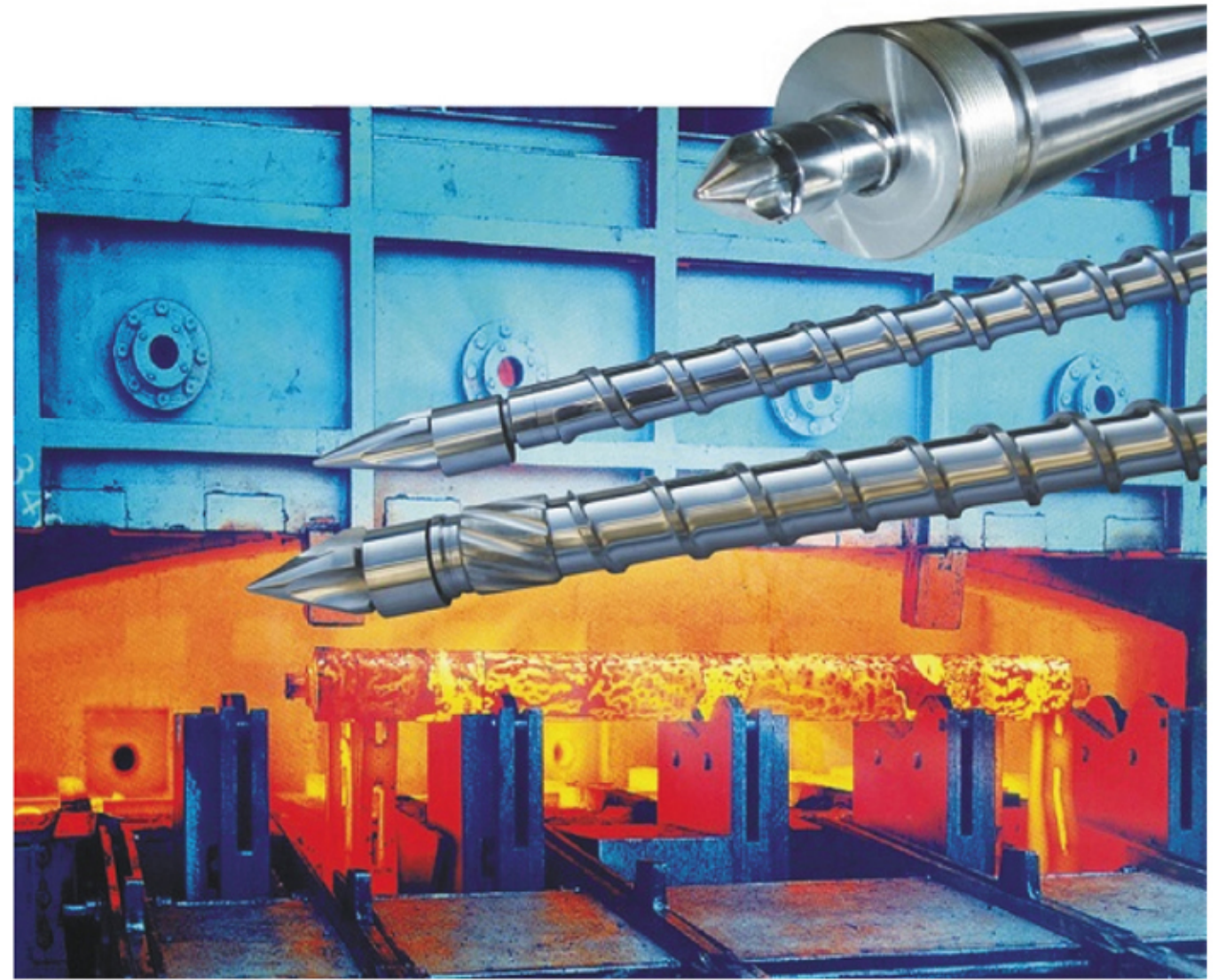
产品类别: 料筒内孔离心浇铸双合金  
加工范围: 内径15mm到500mm 有效长度: 80000 mm  
加工工艺: HP/HVOF+冶金结合  
合金成份: Ni+Cr+Wc等  
硬度指标: HRC62-64  
密着力: >126MPA  
直线度: 0.015mm/m



#### Application:

The barrel inner hole centrifugal casting of metal alloy screw and barrel with wear and corrosion resistance, high temperature resistance, high pressure resistance, commonly used: lens, transparent shell, cosmetics containers, transparent acrylic, nylon, PVC, PC, PPA, PPO, PPS, PA6T, LCP, ABS, Bakelite, fire, PC+glass fiber, Nylon+glass fiber, powder, ceramic powder, aluminum powder, iron powder, electric injection molding machine

product category : bimetallic hole centrifugal casting barrel  
Working Range : inner diameter 15mm-500mm,  
effective length: 80000mm  
processing technic: HP/HVOF+Metallurgical Bonding  
alloying component: Ni+Cr+Wc and so on  
hardness scale: HRC62-64  
adhesion power: >126MPA  
straightness: 0.015mm/m  
surface roughness: Ra0.4um  
Alloy nameplate: Sweden  
Product note: Patent all alloy sintering technology, super wear resistance, super corrosion resistance, it is suitable for halogen free material



#### 双金属材料筒内层合金化学成分

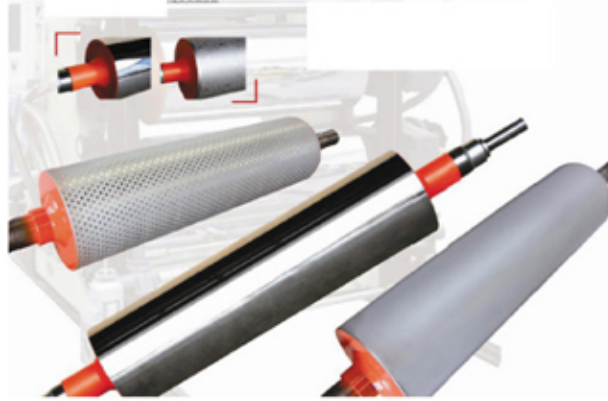
碳化钨	矽	硼	铁	铬	钨	镍
Tungsten carbide	Silicon	Boron	Iron	Chrome	Tungsten	Nickel

#### 物理常识和机械性质

硬度Hardness	HRC56-65	导磁系数Magnet conductivity coefficient	1.005
比重Specific gravity	10.09(g/cm3)	热传导率heat conductivity	0.036cal/cm2/cm°C/S
摩擦系数Friction coefficient	0.10	抗折力Break resistance	4092kgf
热膨胀系数Heat swollen coefficient	12pm/350°C/S	屈服极限Yield point	102kg/mm2
极限抗拉强度Limit tensile strength	18kgf/mm2		

## Bimetallic screw and barrel

### 双金属螺杆和机筒



压光辊:镜面辊,花纹辊,砂目辊,雾面辊  
流涎辊:雾面辊,镜面  
过渡涂覆辊:网纹辊,铝合金辊,不锈钢辊。

#### 辊筒特点:

辊筒加工范围:最大直径:Φ1000mm,最大长度:6000mm  
辊面加工手段: 镜面抛光,喷砂,化学腐蚀,激光雕刻,刀具雕刻;  
辊面材料选择: 45钢,40Cr,锻打42 CrMoA 20钢等  
轴头材料:45钢整体锻打  
冷却水流动:大螺距,多条流动或交叉双流动。  
辊筒两头温差:±1℃

#### 辊筒用于下列产品

PET、PETG、CPET片材  
PP、EVA、EVOH、PS、PC、PE片材  
PC、PMMA、PS、HIPS、PP、PE板材  
ABS、PS、HIPS、PMMA洁具板、冰箱板  
PVC硬板、软板、发泡板  
PE铝塑复合板  
PC、PET、PVC、PP高透明片材  
PC、PMMA光学片材  
PP+石粉、PP+木粉、PP+麻纤维片板材  
各种用途的流涎薄膜

#### Calendering roll and casting roll

Calendering roll: mirror roll, embossed roll, chamotte sand roll, matte roll  
Casting roll: matte roll, mirror roll  
Transmit coating roll: net embossed roll, alloy roll, stainless steel roll

#### Character of roll:

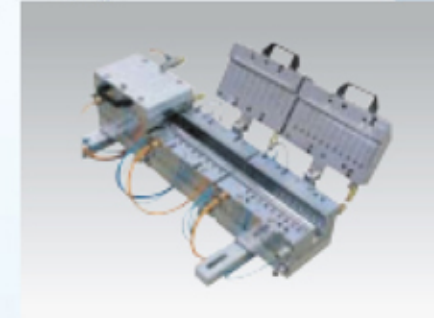
Specification: Max diameter of Φ1000mm, Max. length of 6000mm  
Processing: polishing, sand spray, chemical corruptive, laser curved, cutter curved  
Material 45# steel, 40Cr, forging 42CrMoA, 20# steel  
Shafting: 45 steel, integrate forging  
Cooling water: big screw pitch, multi flow or cross twin flow  
Temperature difference: ±1℃

#### Rollers for producing the following products

PET、PETG、CPET sheet  
PP、EVA、EVOH、PS、PC、PE sheet  
PC、PMMA、PS、HIPS、PP、PE plate  
ABS、PS、HIPS、PMMA sanitaryware plate, refrigerator plate  
PVC hard plate, soft plate, foamed board  
PE aluminum composite sheet  
PC、PET、PVC、PP transparency sheet  
PC、PMMA optical sheet  
PP+calcium powder、PP+wood powder、PP+linen fiber sheet  
Different kinds of cast film

## Linkage of Relating auxiliary equipment

### 相关产品产品链接



各类型材模具  
All kinds of profile tooling



各类型材模具  
All kinds of profile tooling



挤出机  
Extruder



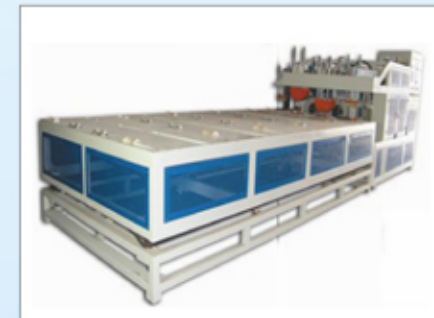
混料机  
Mixer



破碎机  
Crusher



空压机  
Air Compressor



扩口机  
Belling machine



真空泵  
Vacuum pump



轴承  
Bearing