

# LIANZHONG INDUSTRY CO.,LIMITED



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**LIANZHONG SCREW**  
www.chinascrewbarrel.com





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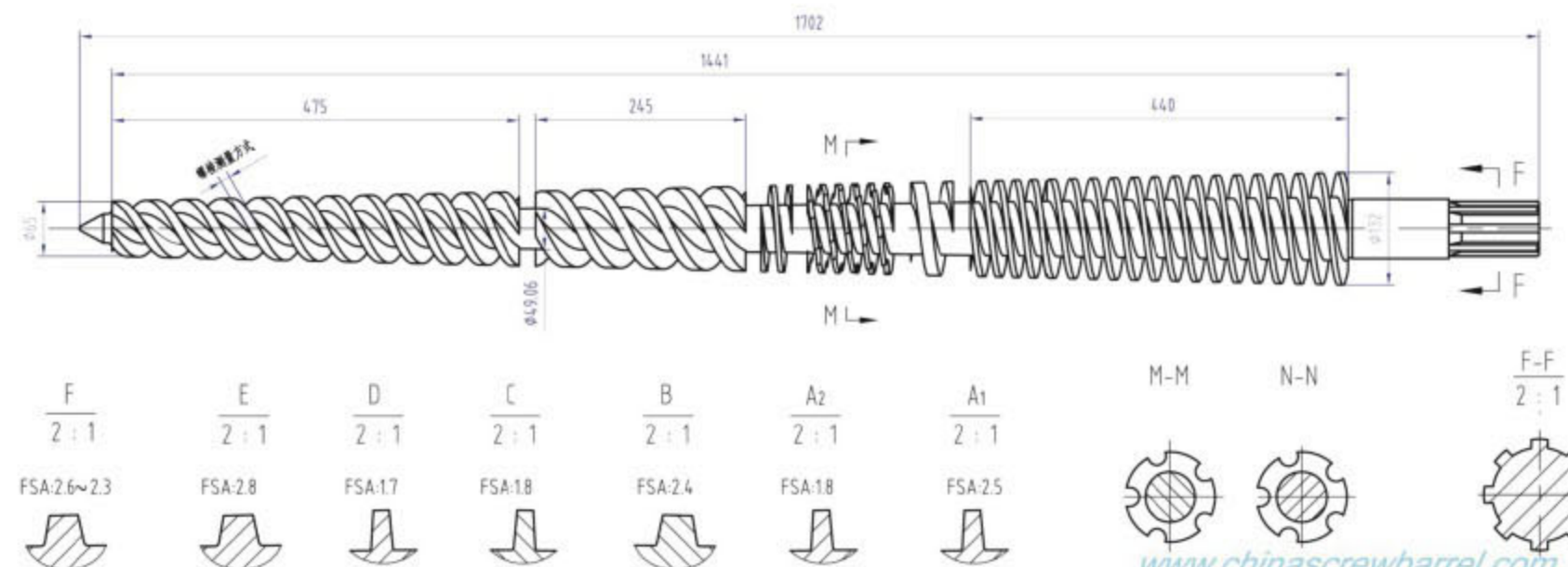
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## 我们要造中国最耐磨的机筒螺杆

To produce the most wear-proof screw and barrel in China



联众实业有限公司联合浙江金佳，是中国最大的双金属机筒螺杆供应商之一。工厂占地面积14000多平方，集“科研、生产、销售”于一体，引进高新技术，致力于研发生产目前国际上领先的镍基碳化钨、高耐磨、耐强腐蚀、高硬度型超硬双金属机筒螺杆，其中高耐磨型镍基钴铬双金属锥形机筒已获国家专利(专利号ZL2005201\*\*\*31.9)，特别在无卤阻燃塑料，高玻纤塑料，磁性塑料，高钙粉塑料，电木塑胶、XPS挤塑板螺杆等工程塑料所需特殊双金属机筒螺杆加工工艺方面有独特见解

工厂拥有四台高温高速全自动大型离心双金属压铸炉、螺杆数控机床、真空热处理及熔覆加工设备及技术以及世界顶尖的双金属机筒合金HIP复合制造设备及技术、电脑高温控制仪、智能化里氏硬度仪及合金层检测设备。同时选用双金属专用精加工机器，德国进口超硬刀具及双金属深孔专用铰磨等加工设备并采用先进的生产工艺、且拥有PVC型材及XPS挤塑板生产线各一条可为客户提供塑料制品的实验数据。生产出能代表当今高水平的双金属机筒螺杆。

公司产品远销土耳其、欧盟、美国、巴西、印度、韩国、伊朗、俄罗斯、东南亚等市场，并依靠过硬的质量和强大的售后服务在国际市场上享有盛誉。在欧美发到国家，90%以上的塑机制造公司使用的双金属机筒和螺杆，不仅提高整台塑机的档次，也为客户提供了物超所值的产品，使用双金属机筒螺杆将成为今后国内外知名塑机制造公司的首选。

为此，工厂依靠强有力的研发创新能力，看同步追踪世界双金属机筒、螺杆行业的先进水平，也看为您量身定制各类高耐磨、耐强腐蚀型机筒螺杆，并提供安装调试及新产品开发等周到的服务。

公司秉承用户第一、品质第一的宗旨，力求提供物超所值的产品和服务，怀着诚信、创新的理念，我们愿与广大客户携手共进，力求打造中国最耐磨的双金属机筒螺杆。

Lianzhong Industry Co., Limited combined Jinjia, is one of the biggest supplier of bimetallic screw and barrel in China. The occupied area is more than 14000 m2. Integration of "Science and technology, production, sales", introducing into the high and new technology, we dedicate to research and develop Cobalt-based Tungsten carbide super hard bimetallic screw and barrel with high wearing resistance, high corrosion resistance, high hardness which lies in the top place in the world now. Especially, Nickel-based Cobalt-chromium bimetallic conical twin barrel with high wearing resistance have already gained the national patent (Patent No. ZL2005201\*\*\*31.9). We have unique view of processing technology of special bimetallic barrel screw barrel in Halogen-free flame-retardant plastic, high fiberglass plastic, magnetic plastic, high calcium powder plastic, Bakelite plastic, XPS etc in engineering plastics.

Our factory has high temperature, high speed fully automatic large-scale centrifugal bimetallic casting furnace which is the most advanced in the world, screw numerical control machine, vacuum heat treatment and cladding processing equipment and technology in the world, Japanese high-temperature computer controller in Fuji, intelligent leeb hardness tester and alloy layer testing equipment. Meanwhile, we choose bimetallic special finishing machine, and adopted super hard knife tool and special bimetallic deep hole reaming produced in Germany and grinding machine etc processing equipments, and utilizes the advanced production processing. So we can produce bimetallic screw and barrel which can represent the highest level nowadays.

Our products are widely export to Turkey, EU, USA, Brazil, India, Iran, Russia, Southeast Asia etc markets. It's one of the companies which has most export volume of bimetallic screw and barrel in China. Depending on excellent quality and strong after-sales service, we get high reputation from customers in abroad.

In the developed countries of Europe and USA, more than 90% plastic machinery manufacturing companies utilize bimetallic screw and barrel, which not only can enhance the level of the whole plastic machine, but also can offer the products with excellent value for the clients, and our products will become the first choice of the famous plastic machinery manufacturing companies in China and overseas with utilizing the bimetallic screw and barrel in the near future.

In addition, with our strong innovation abilities of R&D, our company can trace the advanced level of the world in the same step in bimetallic screw and barrel field. According to your requirement, we also can aid you to order all kinds of screw and barrel with high wearing resistance, high corrosion resistance, and offer you all-round services in the installation, adjusting and developing of new products etc.

Our company, adheres in the purpose of Customer First, Quality First, trying to offer the products and service with excellent value, with the belief of integrity and innovation. We would like to go forward with all of the customers, to make the bimetallic screw barrel with highest wearing resistance in China.





离心铸造镍基碳化钨合金

Centrifugal casting nickel-based tungsten carbide alloy

离心铸造钴基合金

Centrifugal casting co-based alloy



数控堆焊镍基碳化钨合金

CNC welding nickel-based tungsten carbide alloy

我们拥有四台高温高速全自动大型离心双金属浇铸炉，可以批量化加工镍基碳化钨合金、钴基合金，铁基合金等双合金机筒；同时，公司热处理车间拥有全硬螺杆淬火设备和数控螺杆表面堆焊、螺杆表面合金喷涂等设备，可生产技术领先双金属机精密螺杆。

Own four high temperature, high speed fully automatic large-scale centrifugal bimetallic casting furnaces, could produce nickel-based tungsten carbide bimetallic, co-based bimetallic, Fe-based bimetallic screw and barrel in batch, and own the hard screw quenching equipment and CNC screw surface welding, screw surface spray equipment could produce the most accurate screw.



加注合金粉

Put alloy powder in barrel



封盖双合金料筒

Bimetallic barrel without open the gate



大型离心合金铸造设备

The most advanced high temperature and speed centrifugal bimetallic casting furnace



表面附和镍基碳化钨合金

The surface echo nickel-based tungsten carbide alloy



真空淬火炉

Vacuum hardening furnace

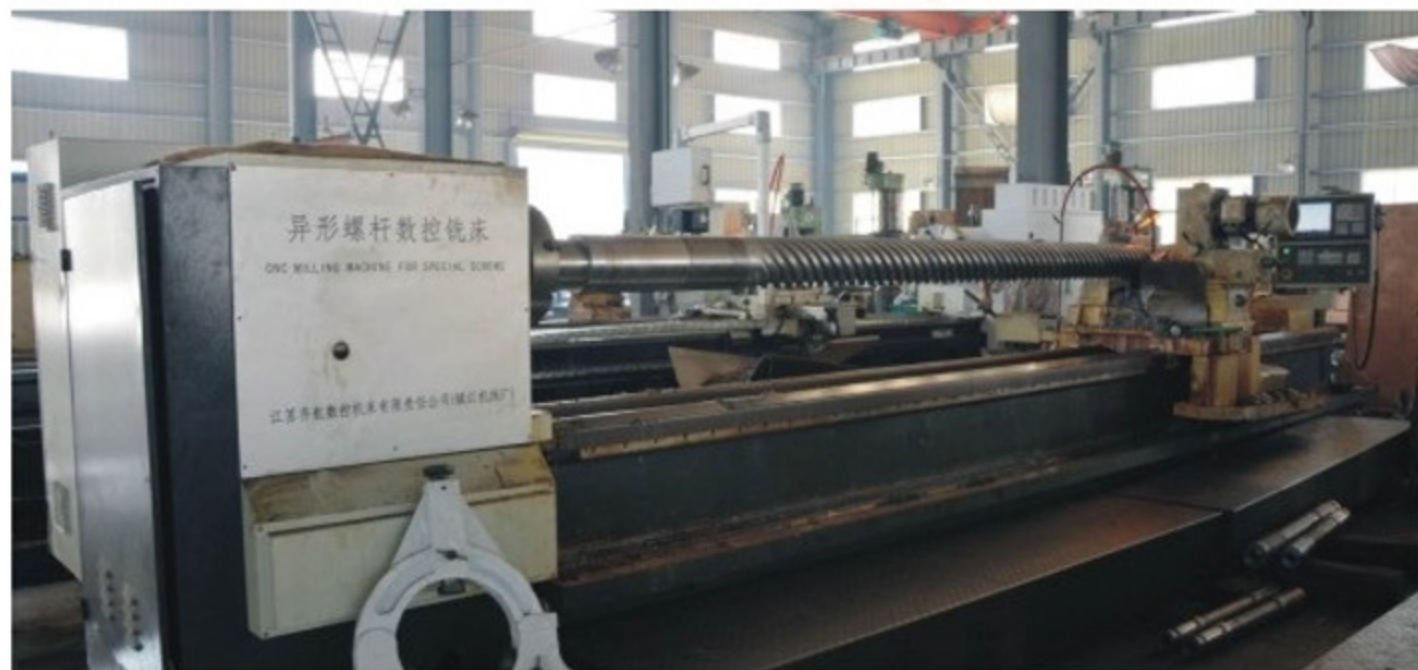




特大型注塑机机筒加工(孔径 $\Phi$ 260mm, 外径 $\Phi$ 1100mm, 长8200mm)  
The largest barrel for injection moulding machine in producing  
(Diameter  $\Phi$ 260mm, outer diameter  $\Phi$ 1100mm, length 8200mm)



$\Phi$ 500mm $\times$ 10000mm发泡螺杆加工  
 $\Phi$ 500mm $\times$ 10000mm screw for XPS board in producing



9米大型精密外圆磨床  
9 meters ultra-precision cylindrical grinding machine



数控螺杆铣正在加工螺杆  
CNC screw milling machine in producing

车间一角 A corner of workshop



正在加工双孔机筒  
Twin barrel in producing





## 双金属机筒技术参数

## Technical parameters of bimetallic barrel

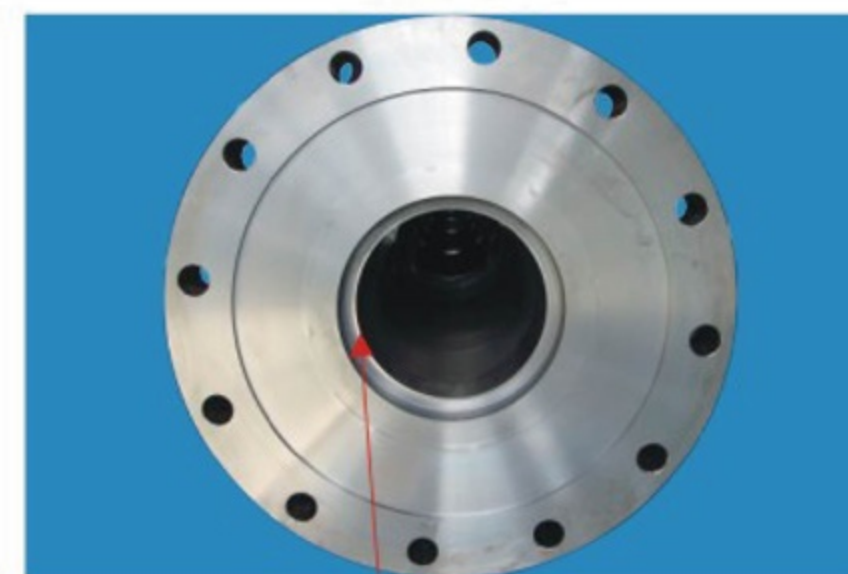
材质 Material	A级 Wc-10碳化钨合金 Grade A Wc-10 tungsten carbide alloy
加工范围 Processing range	内径 $\phi$ 16mm- $\phi$ 450mm,有效长度可达9000mm Inner diameter : $\phi$ 16mm- $\phi$ 450mm ,effective length to 9000mm
加工工艺 Processing technic	离心浇铸 内孔合金层单边厚度1.5mm-2mm,最大可达3mm-6mm Centrifugal casting,alloy layer reach 1.5mm-2mm one side,maximum reach 3mm-6mm one side
合金成分 Alloy powder composition	碳化钨 (50%-60%), 碳, 硅, 铬, 硼, 钼, 钴等 Wc(50%-60%),C,Si,Cr,B,Ni,Mo,Co,etc
硬度指标 The index of hardness	HRC62-65,比氮化机筒使用寿命长5-6倍 HRC62-65,the service life of 5-6 times longer than the nitrided one
合金特性 Characteristics of alloy powder	高耐磨、耐强腐蚀、耐高温 High wearing resistance,high corrosion resistance and high temperature resistance
适用于 Apply to	尼龙加30%-50%玻纤、电木、磁粉、陶瓷粉、铝镁粉、铁粉、LCP以及无卤阻燃塑料 Nylon plus 30% - 50% glass fiber, bakelite, magnetic powder, ceramic powder, aluminum magnesium powder, iron powder, LCP and halogen-free flame retardant plastic
材质 Material	B级 Ni-20镍基合金 Grade B Ni-20 Ni-based alloy
加工范围 Processing range	内径 $\phi$ 16mm~ $\phi$ 450mm,有效长度可达9000mm Inner diameter : $\phi$ 16mm- $\phi$ 450mm ,effective length to 9000mm
加工工艺 Processing technic	离心浇铸 内孔合金层单边厚度1.5mm~2mm,最大可达3~6mm Centrifugal casting,alloy layer reach 1.5mm-2mm one side,maximum reach 3mm-6mm one side
合金成分 Alloy powder composition	碳化钨 (20%-25%), 镍, 碳, 硅, 铬, 硼, 钼, 钴等 Ni,C,Si,Cr,B,Mo,Co,Wc(20%-25%),etc
硬度指标 The index of hardness	HRC60-63,比氮化机筒使用寿命长4-5倍 HRC60-63,the service life of 4-5 times longer than the nitrided one
合金特性 Characteristics of alloy powder	耐强腐蚀, 高耐磨, 耐高温 High corrosion resistance,high wearing resistance and high temperature resistance
适用于 Apply to	PE、PC、PVC、LCP、亚克力、透明塑料、无卤阻燃塑料、腐蚀性强的树脂塑料等 PE, PC, PVC, LCP, acrylic, transparent plastic, halogen free flame retardant plastic, resin plastic, etc
材质 Material	C级 Fe-30铁基合金 Grade C Fe-30 Fe-based alloy
加工范围 Processing range	内径 $\phi$ 16mm~ $\phi$ 450mm,有效长度可达9000mm Inner diameter : $\phi$ 16mm- $\phi$ 450mm ,effective length to 9000mm
加工工艺 Processing technic	离心浇铸 内孔合金层单边厚度1.5mm~2mm,最大可达3~6mm Centrifugal casting,alloy layer reach 1.5mm-2mm one side,maximum reach 3mm-6mm one side
合金成分 Alloy powder composition	铁, 碳, 硅, 铬, 硼, 钼, 镍, 钴等 Fe,C,Si,Cr,B,Mo,Ni, Co,etc
硬度指标 The index of hardness	HRC59-61,比氮化机筒使用寿命长3-5倍 HRC59-61,the service life of 3-5 times longer than the nitrided one
合金特性 Characteristics of alloy	耐磨, 耐腐蚀 Wearing and corrosion resistance
适用于 Apply to	尼龙加10%-30%玻纤、PC加玻纤、PVC加钙粉、回收塑料加工等 Nylon plus 10% -30% glass fiber, PC plus glass fiber, PVC plus calcium powder, recycled plastics processing, etc



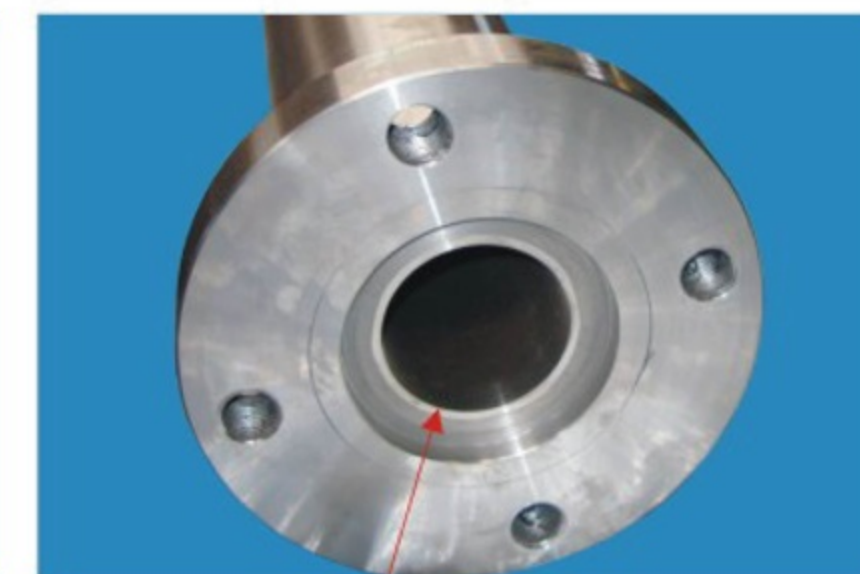
合金层  
alloy layer



合金层  
alloy layer



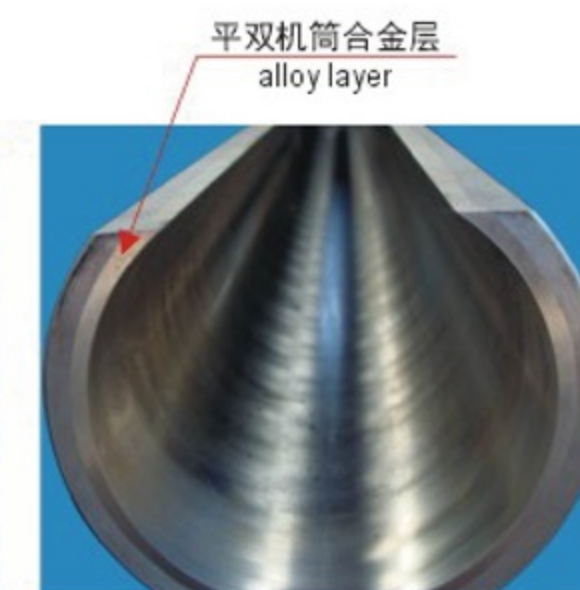
合金层  
alloy layer



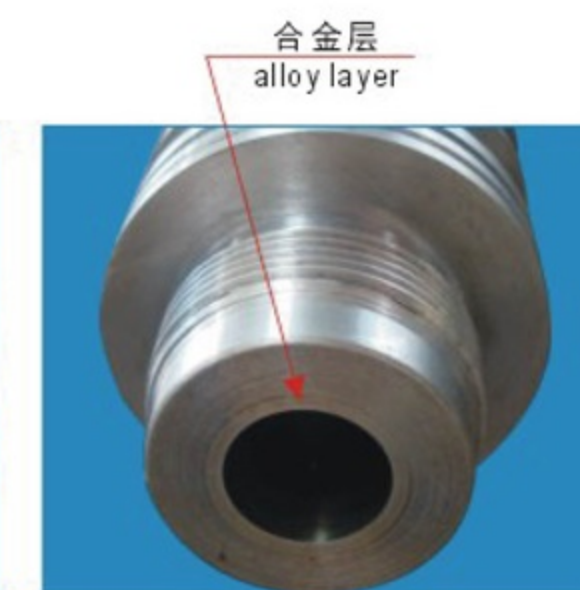
合金层  
alloy layer



加注合金粉末  
Put the alloy powder in barrel



平双机筒合金层  
alloy layer



合金层  
alloy layer



## 双金属螺杆技术参数

## Technical parameters of bimetallic screw

- 1、材质：38CrMoAlA，SACM645，德标1.8519,1.8550  
氮化处理：表面硬度HV900-1100;氮化层深度：0.5-0.8mm
- 2、材质：高速钢，特殊不锈钢，1.4122，M390，CPR  
淬火处理，硬度HRC62-65，适合高玻纤、高钙粉、各种填充料、腐蚀性强的物料，提高螺杆的使用寿命。
- 1) Materials :38CrMoAlA , SACM645 , DIN 1.8519,1.8550  
Nitrided Hardness :HV900-1100,Nitrided Case Depth :0.45-0.7mm
- 2) Materials :high-speed steel , Quality Duplex Stainless Steels , DIN 1.4122 , M390 , CPR  
Surface Treatment : Nitriding Treatment , Electroplated Hard-Chrome Finish , High-Frequency Quenching , Spray Coating Bimetallic-Alloy , Vacuum Quenching



合金层  
Alloy cover layer



本公司生产的螺杆与料筒质量优异，深受国内外挤出机，注塑机厂商的肯定。我们与各大名牌整机厂商建立了长期的合作伙伴关系。多年来我们坚持不断投资引进先进的螺杆机筒加工设备，同时建立起一套完整的质量监控体系。对于产品我们精益求精，从图纸设计，车削，滚牙，合金喷焊，抛光，研磨等，完全在本公司现代化的生产线上专业完成。

Depending on excellent quality and strong after-sales service. we enjoy high honor at home and abroad and establish a long-term partner relationship with name brand injection and extrusion machine manufacturers.



数控合金喷涂设备  
CNC alloy spraying equipment



数控等离子合金喷涂设备  
CNC plasma alloy spraying equipment



数控合金堆焊设备  
CNC alloy welding equipment



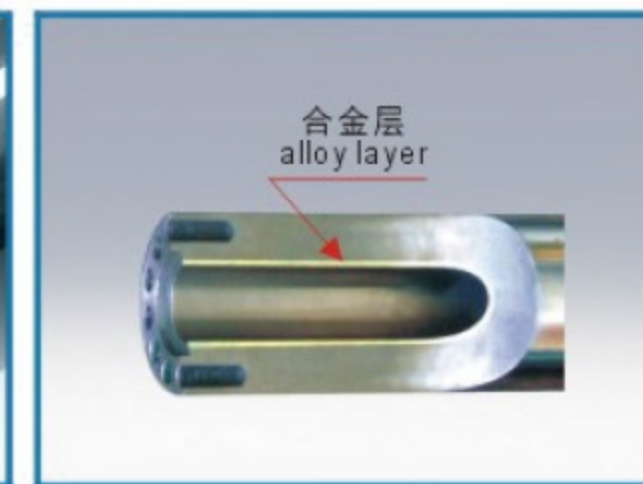
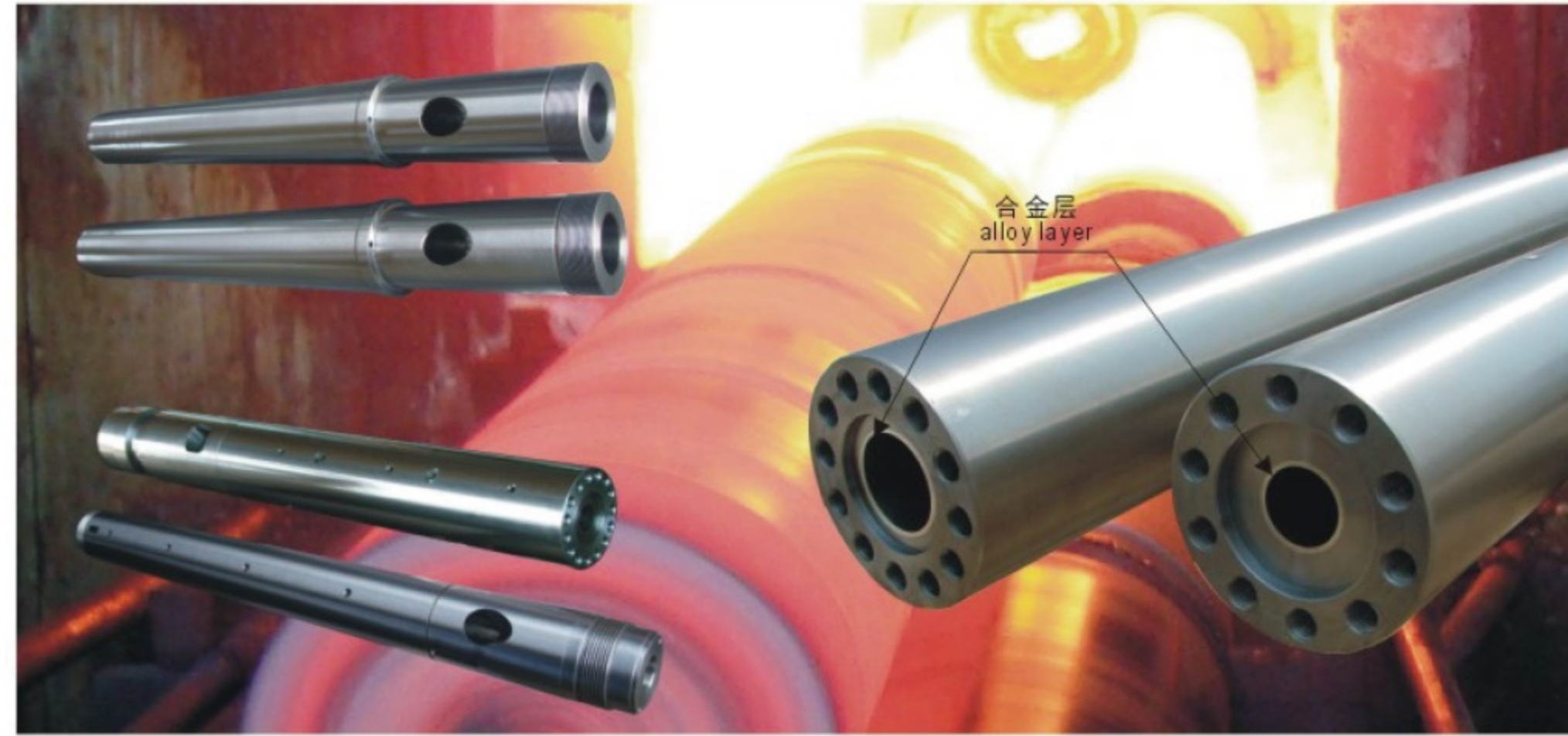
合金粉末喷涂  
Spraying alloy powder



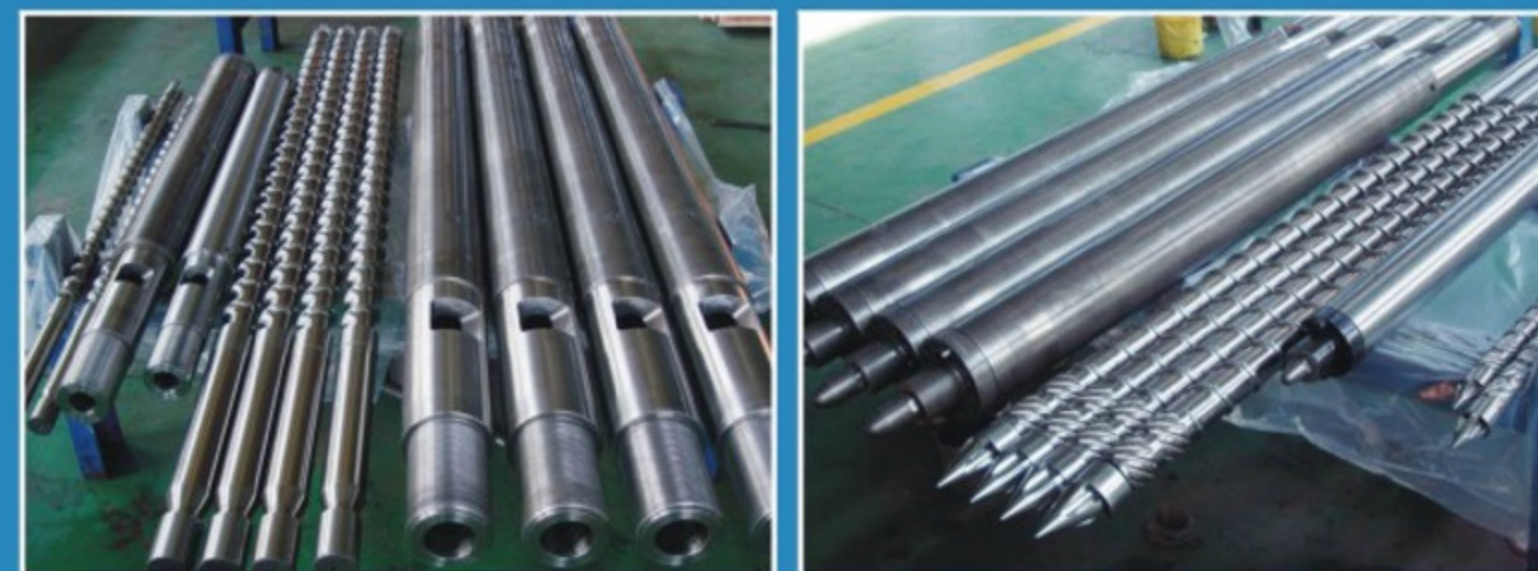


本公司除了普通双金属注塑机机筒制造方面有显著成效外，更针对目前工程塑料大多加入碳酸钙、高岭土、红泥、二氧化硅等进行改性，或加入玻璃纤维、碳纤维、硼纤维及无卤塑料等予以增强，由于这些填充料、增强剂的加入，一方面使得塑胶性能得以改变而适用于制造某些特定产品，而另一方面则加剧了塑胶加工机械，尤其是塑胶注塑机器心脏部件机筒螺杆的磨损和腐蚀，针对这一问题，我公司特别按比例调配适合此类特殊工程塑料生产的合金粉末，合金成分为含钨（Wc）25%-50%，大大延长了双金属机筒的使用寿命。

Our company has not only got the remarkable achievement on the production of normal bimetallic screw and barrel, also we have deeply researched on the barrel and screw for the special engineering plastic, for now much of engineering plastics add the calcium, kaolin, red clay, silica or add Glass fiber, carbon fiber, boron fiber and halogen free plastic to make the original plastic much better to adapt the specific plastic products. On the other hand, it may make the screw and barrel wear and corrosion quickly, In order to solve this problem, we have invented a kind of special alloy powder, whose ingredient contains 25%~50% Wc tungsten carbide. It makes the service life of screw and barrel much more longer than the other kinds of bimetallic screws and barrels.







### XSL-A级超硬高耐磨合金螺杆

XSL-Grade A high hardness and high wearing resistance bimetallic screw



### XSL-A级无卤专用超硬高耐磨强耐腐蚀性合金螺杆

XSL-Grade A strong wearing and corrosion resistance and high hardness bimetallic screw specialized for halogen free plastic



### XSL-B级电木超硬合金螺杆

XSL-Grade B superhard bimetallic screw for Bakelite



### XSL-B级铁氟龙耐强腐蚀合金螺杆

XSL-Grade B strong corrosion resistance bimetallic screw for teflon



### XSL-B级LCP专用高耐磨合金螺杆

XSL-Grade B strong wearing resistance screw for LCP



加工范围：直径Φ12mm~Φ280mm，有效长度可达8000mm

A级超硬高耐磨螺杆	采用瑞典进口Km-22钢材，进口超硬粉末高速钢等材料，具有高耐磨、高韧性，耐腐蚀等特点，硬度HRC59-64，适用于加工尼龙+50%~60%玻纤、电木、磁粉、陶瓷粉、铝镁粉、铁粉、铜粉等特殊塑料，比氮化螺杆使用寿命长5-8倍。
B级耐强腐蚀螺杆	采用进口GRC-276、GH113高温超合金，具有极佳的耐高温强度，650℃高温屈服强度125Ksinh上，具有极佳耐酸碱腐蚀性的特点，可通过固溶+时效硬化，适合超高速、高温、耐磨耐强腐蚀塑料加工以及尼龙加20%-40%玻纤、无卤塑料、PPE阻燃塑料、XPS阻燃塑料等特殊塑料的加工，使用寿命比氮化螺杆长5~8倍。
C级耐磨螺杆	采用38CrMoAla, SKD61, 德标1.8550、1.8519为基材，螺棱和底径采用最先进合金熔覆技术，螺杆表面硬度可达HRC60~62,合金层厚度为1mm~2.5mm,具有极高的耐磨性和耐腐蚀性，适用于PC、PE、PVC等塑料的加工。
PC级专用合金螺杆	采用特种不锈钢、42CrMo为基材，经淬火热处理，适用于加工透明塑料产品，如镜片、白色料、背光板、导光板、亚克力等产品，使用寿命比氮化螺杆长3-5倍。

Processing range: inner diameter  $\phi$  12mm  $\phi$  280mm, the effective length reach 8000mm

Grade-A superhard and high wearing resistance bimetallic screw	The base material is Sweden Km22 steel and superhard high-speed steel with high wearing resistance, high toughness and high corrosion resistance, the surface hardness could reach HRC59-64, applying for producing nylon plus 50% ~ 60% fiber glass, bakelite, magnetic powder, ceramic powder, magnesium powder, iron powder, copper powder, aluminum and other special plastic, the service life of 5-8 times longer than the nitrided one.
Grade B strong corrosion resistance bimetallic screw	The base material is improved GRC-276, GE113 with strong temperature resistance and high corrosion resistance, applying for nylon plus 20% - 40% fiber glass, halogen-free flame retardant plastic, PPE flame retardant plastic, XPS flame retardant plastic etc, the service life of 4-6 times longer than the nitrided one.
Grade-C wearing resistance bimetallic screw	Take base material of 38 CrMoAla, SKD61, din 1.8550 and 1.8519, screw flight and bottom cladding alloy powder, the thickness of alloy layer is 1 mm - 2.5 mm, thus the surface hardness of screw can be reach HRC60 ~ 62, with extremely high wear resistance and corrosion resistance, applicable to PC, PE, PVC and other plastic processing.
Bimetallic screw for PC only	Take base material of special stainless steel, 42 CrMo, then hardening and chroming, suitable for processing transparent plastic products, such as lens, white material, back plate, guide plate, acrylic products, the service life is 3-5 times longer than the nitrided one.

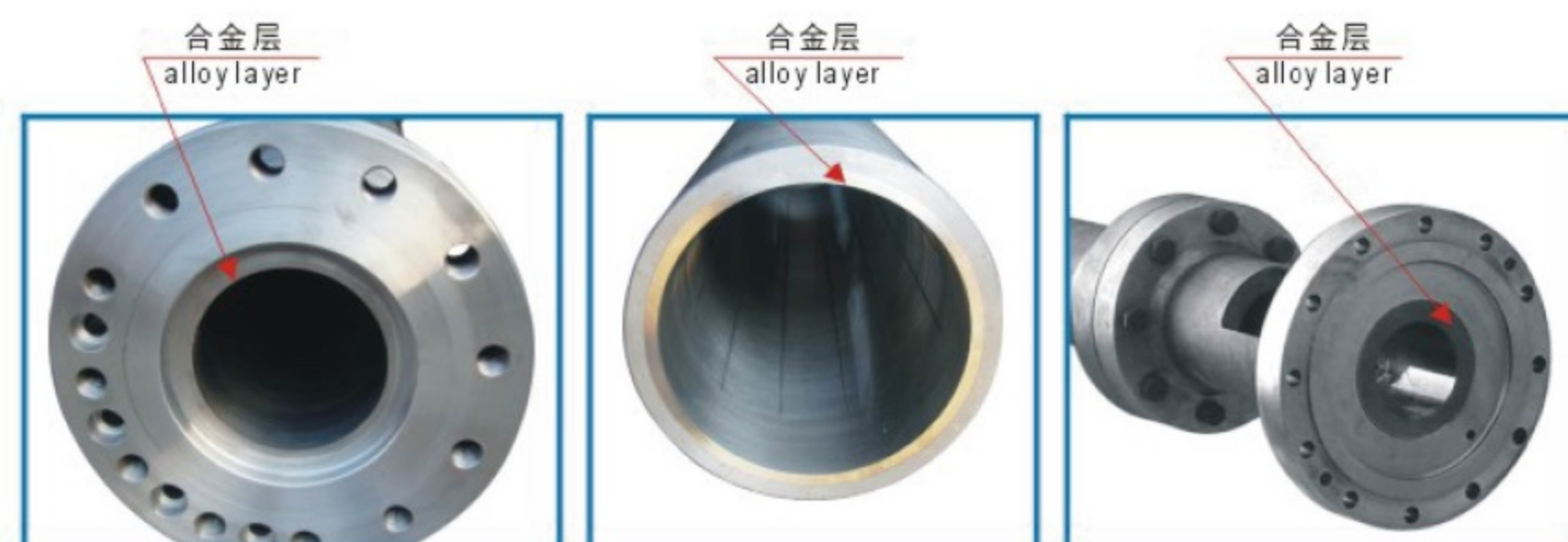
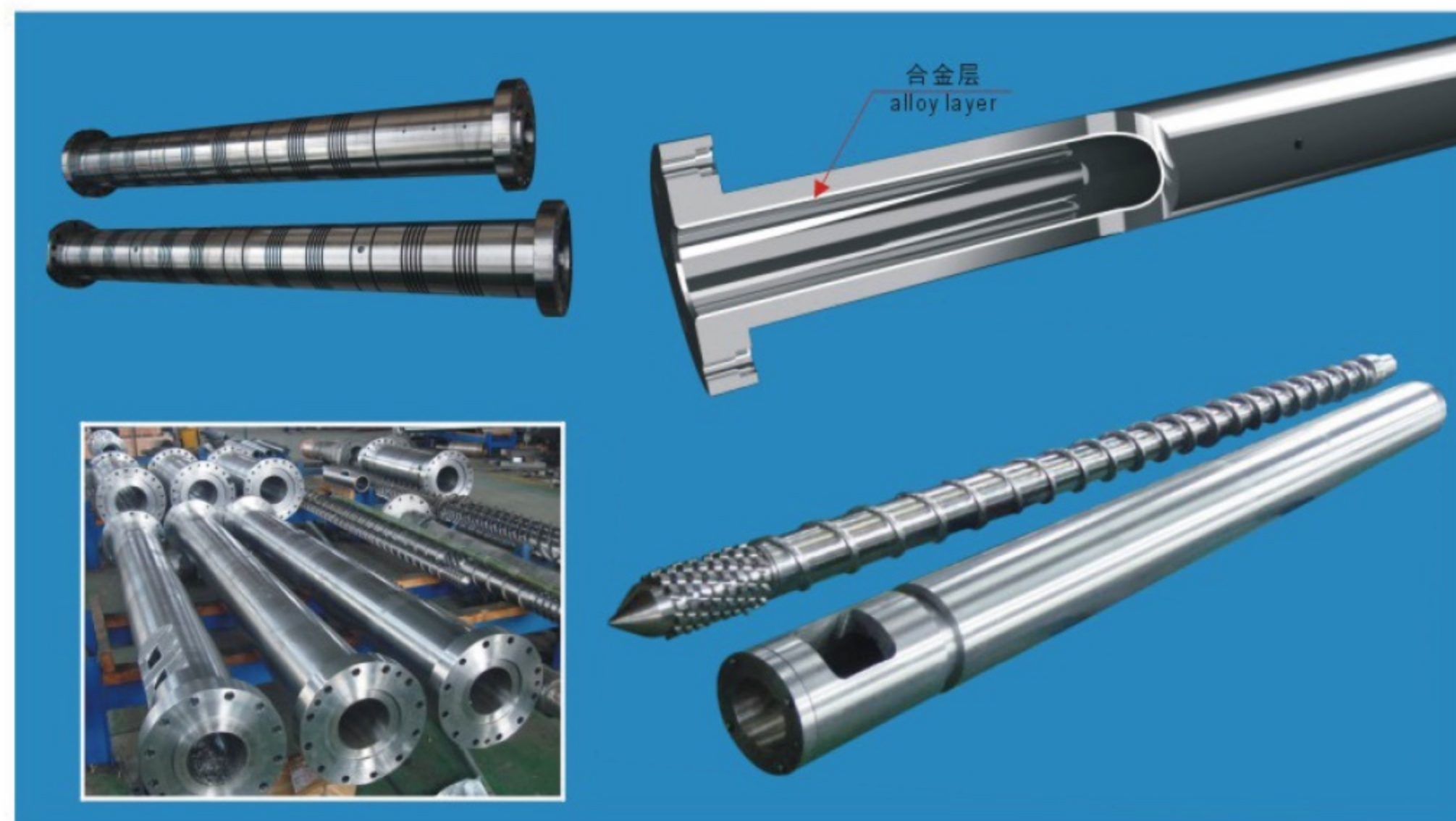


## 双金属挤出机机筒

## Bimetallic barrel for extrusion machine

材质 Material	A级 Wc-10碳化钨合金 Grade A Wc-10 tungsten carbide alloy
加工范围 Processing range	内径 $\phi$ 16mm~ $\phi$ 450mm,有效长度可达9000mm Inner diameter : $\phi$ 16mm- $\phi$ 450mm ,effective length to 9000mm
加工工艺 Processing technic	离心浇铸 内孔合金层单边厚度1.5mm~2mm,最大可达3~6mm Centrifugal casting,alloy layer reach 1.5mm-2mm one side,maximum reach 3mm-6mm one side
合金成分 Alloy powder composition	碳化钨 (50%-60%), 碳, 硅, 铬, 硼, 镍, 钼, 钴等 Wc(50%~60%),C,Si,Cr,B,Ni,Mo,Co,etc
硬度指标 Index of hardness	HRC62-65,比氮化机筒使用寿命长5~6倍 HRC62-65,the service life of 5-6 times longer than the nitrided one
合金特性 Characteristics of alloy	高耐磨、耐腐蚀、耐高温 High wearing resistance,high corrosion resistance and high temperature resistance
适用于 Apply to	PE管材、PVC、PPR、木塑、XPS挤塑板、电线电缆、吹膜机、回收塑料造粒等 PE pipes, PVC, PPR, wood and plastic, XPS extruded plate, wire and cable, blown film machine, recycled plastic, etc

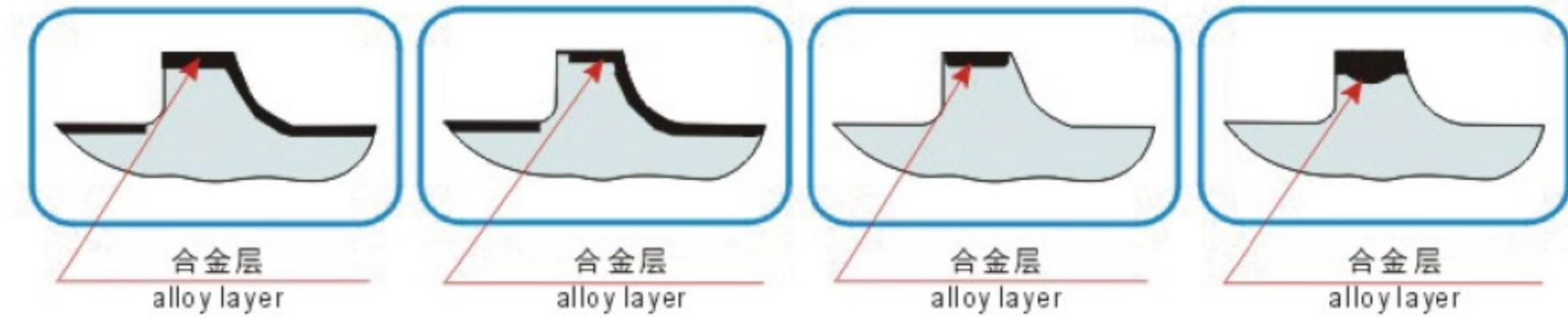
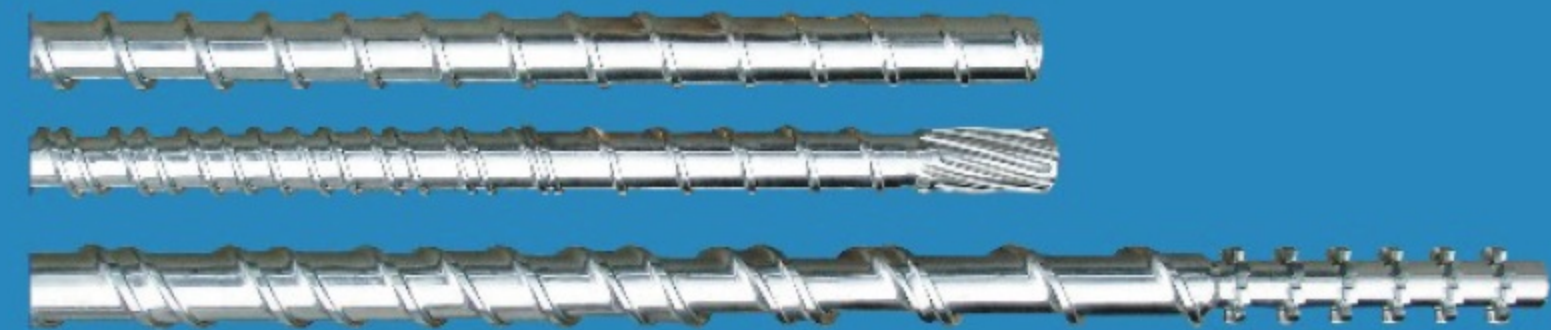
材质 Material	C级 Fe-30铁基合金 Grade C Fe-30 Fe-based alloy
加工范围 Processing range	内径 $\phi$ 16mm~ $\phi$ 450mm,有效长度可达9000mm Inner diameter : $\phi$ 16mm- $\phi$ 450mm ,effective length to 9000mm
加工工艺 Processing technic	离心浇铸 内孔合金层单边厚度1.5mm~2mm,最大可达3~6mm Centrifugal casting,alloy layer reach 1.5mm-2mm one side,maximum reach 3mm-6mm one side
合金成分 Alloy powder composition	铁, 碳, 硅, 铬, 硼, 钼, 镍, 钴等 Fe,C,Si,Cr,B,Mo,Ni, Co,etc
硬度指标 Index of hardness	HRC60-63,比氮化机筒使用寿命长3~5倍 HRC59-61,the service life of 3-5 times longer than the nitrided one
合金特性 Characteristics of alloy	耐磨, 耐腐蚀 Wearing and corrosion resistance
适用于 Apply to	PE管材、PVC、PPR、木塑、XPS挤塑板、吹膜机、回收塑料造粒等 PE pipes, PVC, PPR, wood and plastic, XPS extrusion board, blown film machine, recycled plastic, etc





Bimetallic barrel for extrusion machine

Bimetallic screw for extrusion machine

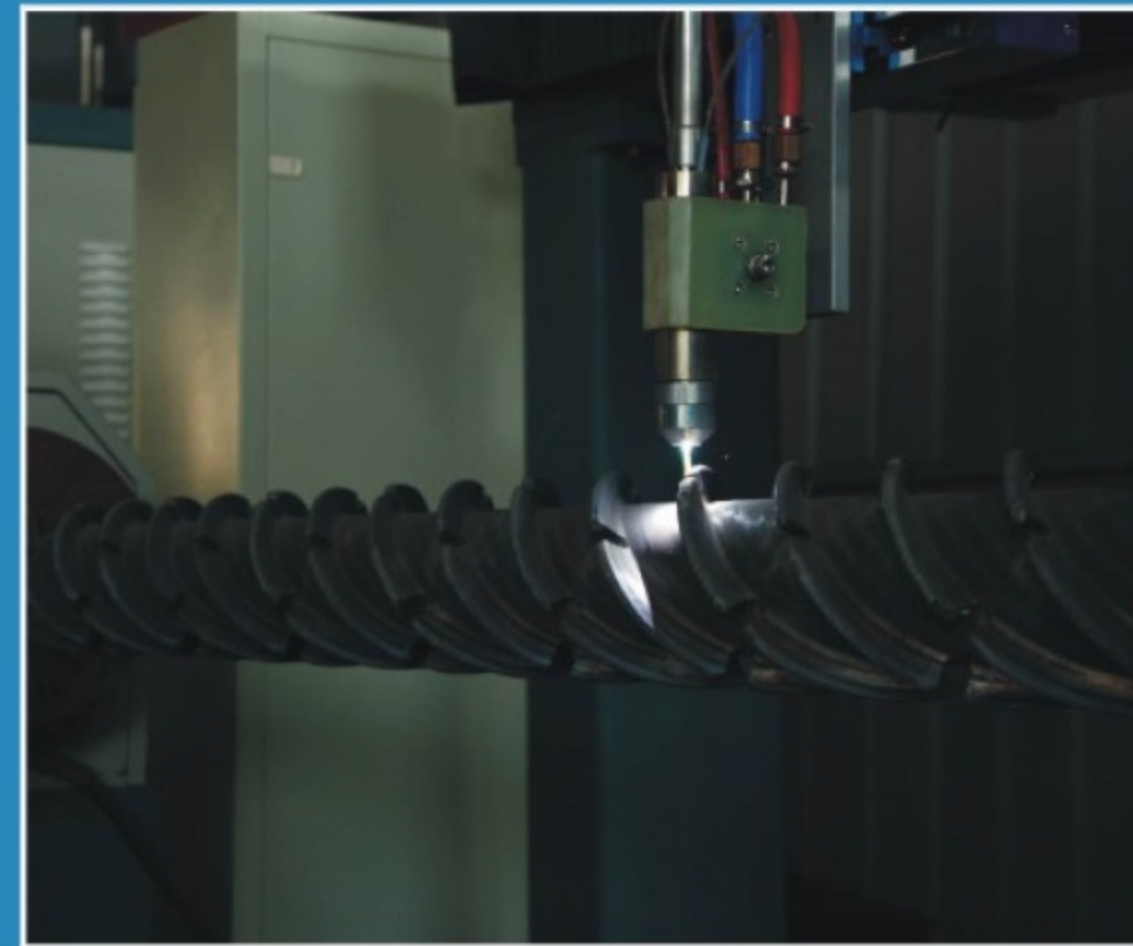
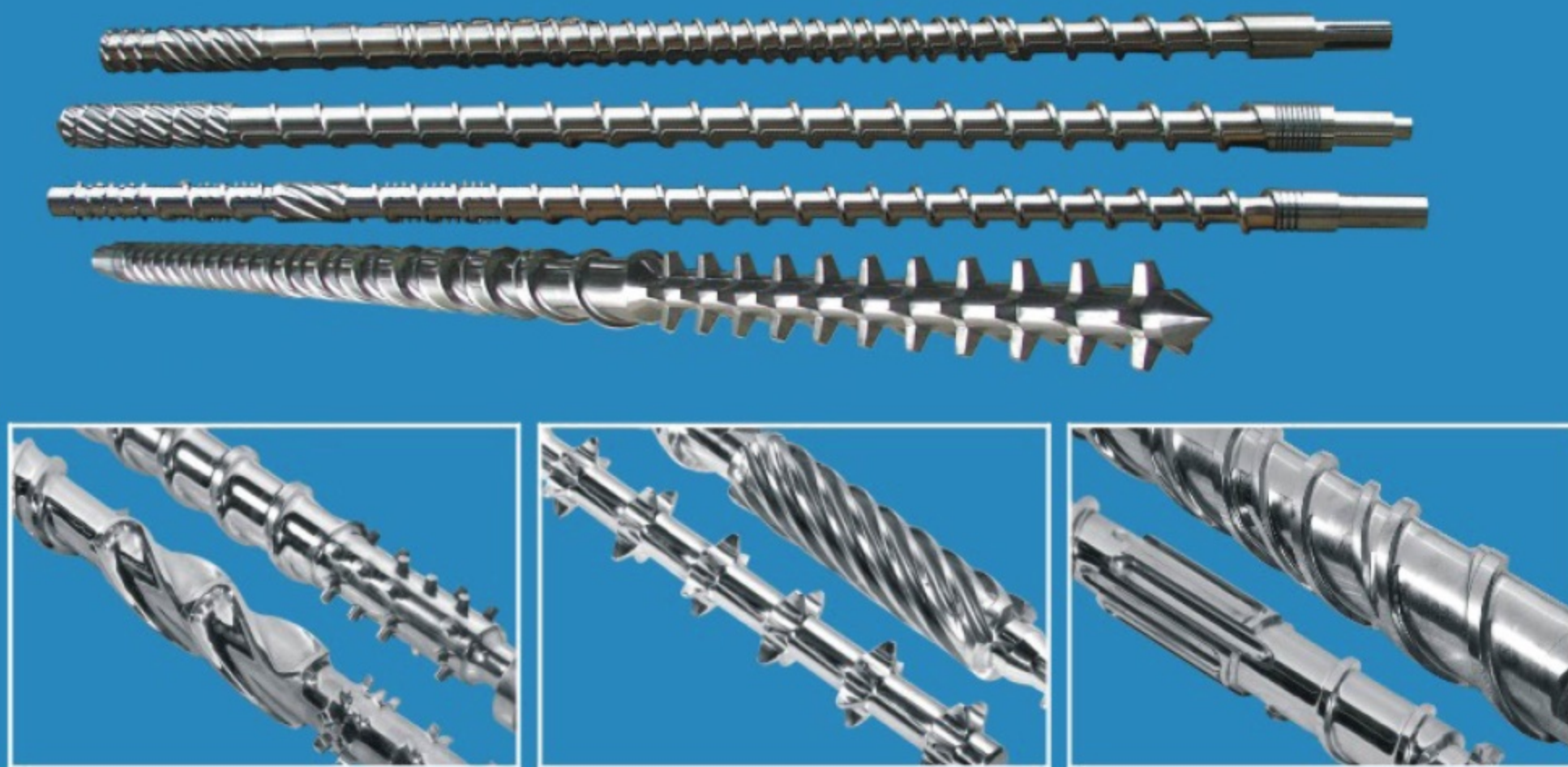


技术参数	Technical Specification
调质硬度: HB280-320	Hardness After Hardening & Tempering: HB280-320
氮化硬度: HV850-1000	Nitrided Hardness : HV850-1000
氮化层深度: 0.45~0.7mm	Nitrided Case Depth : 0.45-0.7mm
氮化脆度: ≤ 二级	Nitrided Brittleness : Less Than Grade 2
表面粗糙度: Ra 0.4	Surface Roughness : Ra 0.4
螺杆直线度: 0.015mm	Screw Straightness : 0.015mm
氮化后表面镀铬层硬度 ≥ 900HV	Surface Chromium-Plating's Hardness After Nitriding: > 900HV
镀铬层厚度: 0.025~0.10mm	Chromium-plating Depth : 0.025~0.10mm
双合金硬度: HRC50-65	Alloy Hardness : HRC56-65
双合金深度: 0.8~2.0mm	Alloy Depth : 0.8~ 2.0mm



## 双金属挤出机螺杆

## Bimetallic screw for extrusion machine



造粒机螺杆 Screw for granulating machine

PC专用螺杆 Screw for Pc only

PVC专用螺杆 Screw for PVC only

PAA6加玻纤螺杆

Screw for PAA6 plus fiber glass

LCP螺杆 screw for LCP

电木高耐磨螺杆

screw with high wearing resistance for bakelite

PMMA螺杆 screw for PMMA

PE木塑螺杆 screw for WPC

PVC高钙管材螺杆

screw for PVC plus calcium pipe

化纤螺杆、真空成型螺杆、

XPS聚苯乙烯发泡板材螺杆、

EPE珍珠棉发泡螺杆、铁氟龙耐腐蚀螺杆、

高低压吹膜高速螺杆、Pe吹膜螺杆、

铝塑板螺杆、PPR高速管材螺杆、

EVA挤出螺杆、PET打包带螺杆、电线电缆螺杆、

食品膨化螺杆、硅胶挤出螺杆、积木式双螺杆

规格:  $\phi 15\text{mm} \sim \phi 250\text{mm}$  长径比L/D=15~45

螺杆基材采用38CrMoAla或SACM645,SKD61,德标1.8519、1.8550材料,螺棱表面经高温喷涂镍基碳化钨合金,合金厚度1.5~3.5mm,硬度达HRC62-65,具有高耐磨,耐腐蚀特点,主要用于PVC管、PE铝塑板、EPE珍珠棉发泡板、XPS挤塑板、PE管、PPR管、电缆机、化纤机、木塑、吹膜机、回收造粒机,使用寿命比普通氮化螺杆长3~5倍。

螺杆可选用普通型、渐变型、销钉型、屏障型、分离型、排气型等。螺杆的压缩比根据不同的原料设计,也可按用户的要求进行设计。

**Specification:**  $\phi 15\text{ mm} - \phi 250\text{ mm}$ , L/D = 15 ~ 45

Screw takes base material of 38 CrMoAla or SACM645, SKD61, din 1.8519 and 1.8550, the screw flight spraying nickel based tungsten carbide alloy, alloy layer thickness is 1.5mm ~ 3.5 mm, hardness reach HRC62-65 with the high wearing resistance and corrosion resistance, thus applying for the PVC pipes, PE plastic foam, EPE pearl cotton board, XPS extruded plate, PE pipe, PPR pipe, cable machine, chemical fiber machine, WPC, blown film machine, recycling granulator machine, the service life is 3-5 times longer than the nitrided one.

Screw can be selected from ordinary, gradual, pinned, shielding, separating and exhausting type, the compression ratio of screw can be designed according to different raw materials and machinery.





## XPS双合金机筒螺杆

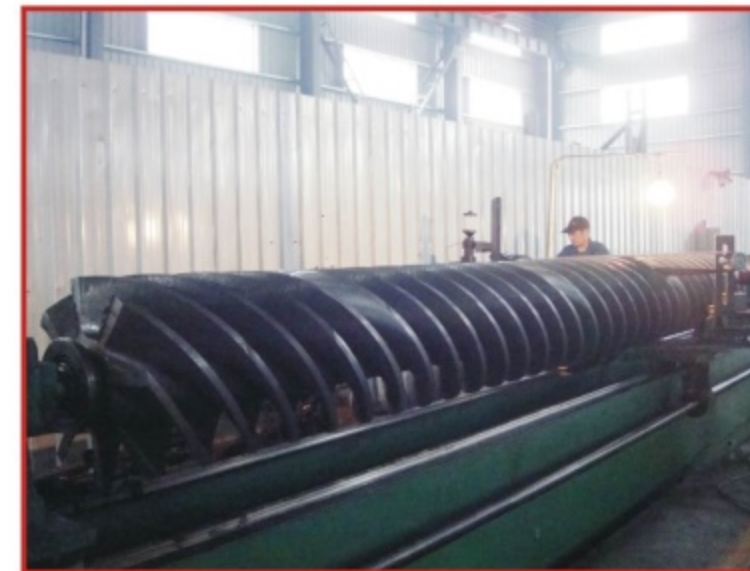
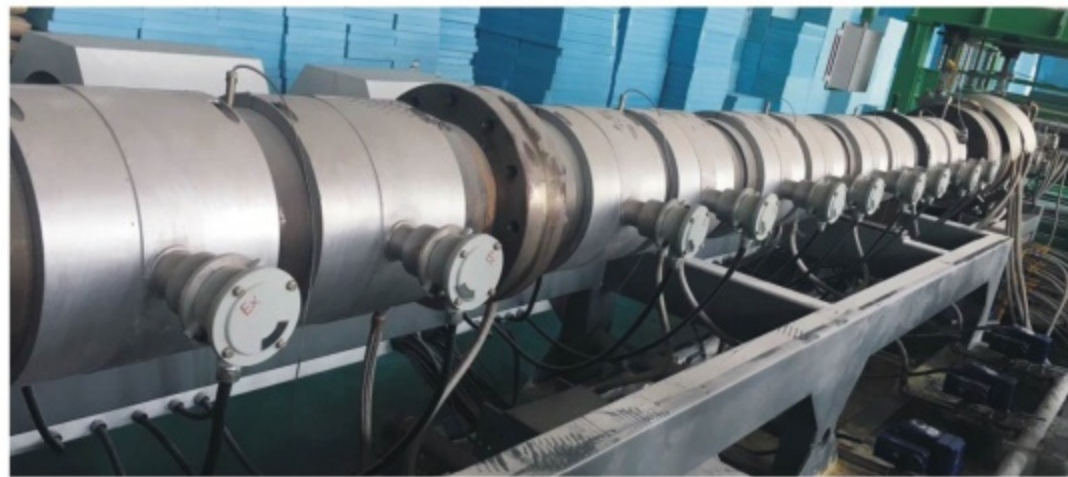
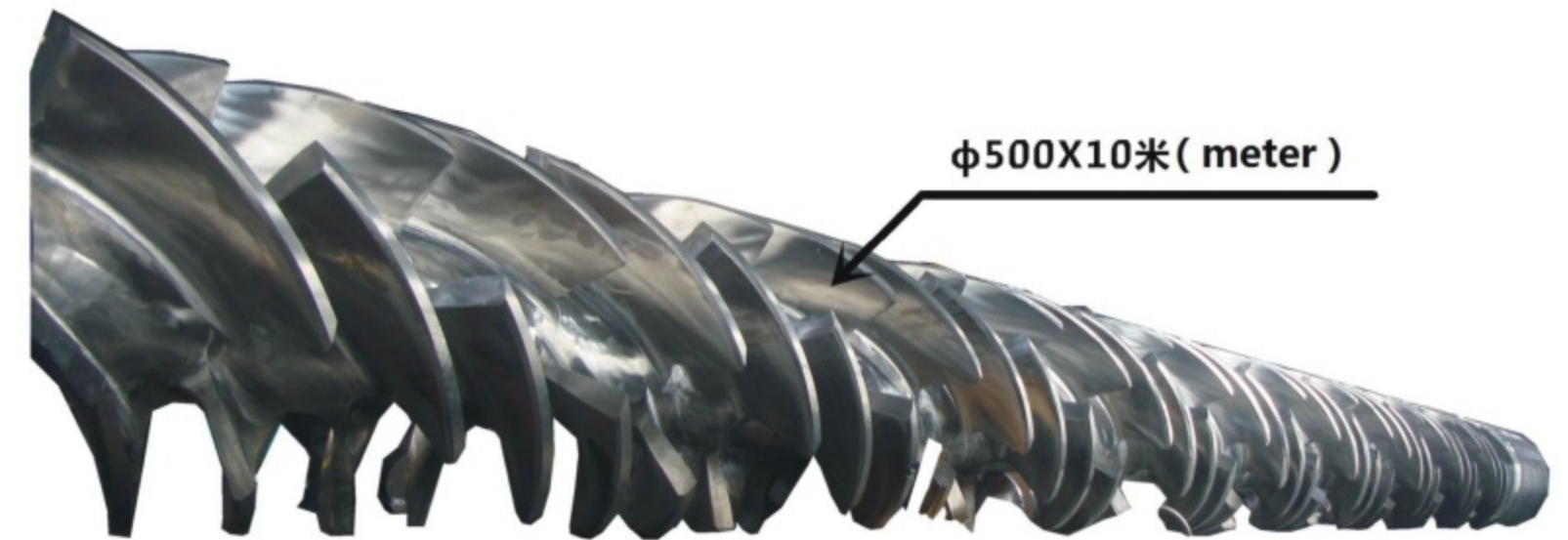
## Bimetallic barrel and screw for XPS

XPS挤塑发泡板在生产过程中注入了阻燃剂，氟利昂，二甲醚等催化剂，使螺杆极易腐蚀。

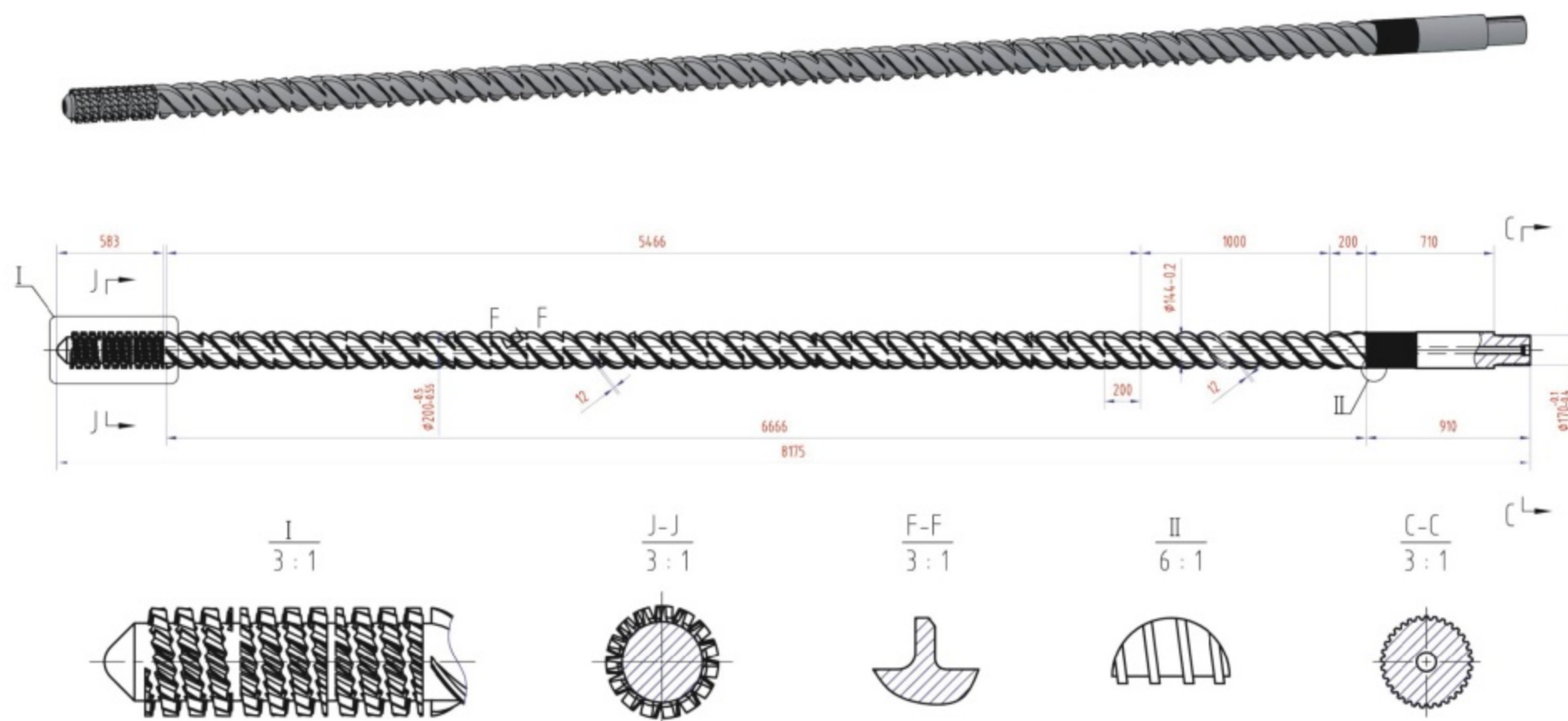
我公司专业生产XPS专用螺杆，生产工艺采用出口高标准，表面经钛合金全覆盖耐腐蚀处理，具有高耐磨性，超高耐腐蚀性，耐高温等特点，大幅度提高了螺杆的使用寿命，成功为德国设备生产公司加工φ500、φ400、φ300、φ250、φ200、φ150、φ120等发泡螺杆，并得到极高的满意度。

Our company is specialized in producing XPS screw, with the characteristics of high wearing resistance, high corrosion resistance, and high hardness, the service life is much longer than the normal one.

We also produce size φ500, φ400, φ300, φ250, φ200, φ150, φ120, etc and exported to German, and get a high satisfaction.



XPS-500特大型螺杆加工 (孔径φ500, 长10000)



XPS-500特大型螺杆 (孔径φ500, 长10000)



## XPS机筒螺杆

## Bimetallic barrel and screw for XPS



XPS-150发泡螺杆 (Φ150 XPS freon foam screw)



XPS-200发泡螺杆、机筒 (Φ200 XPS freon foam screw)



XPS-300二氧化氮发泡螺杆机筒  
Φ300 XPS Nitrogen dioxide foam screw and barrel



XPS-225机筒螺杆 (孔径Φ250mm, 长15000mm)  
Φ220 XPS screw and barrel  
(DiameterΦ250mm, length15000mm)



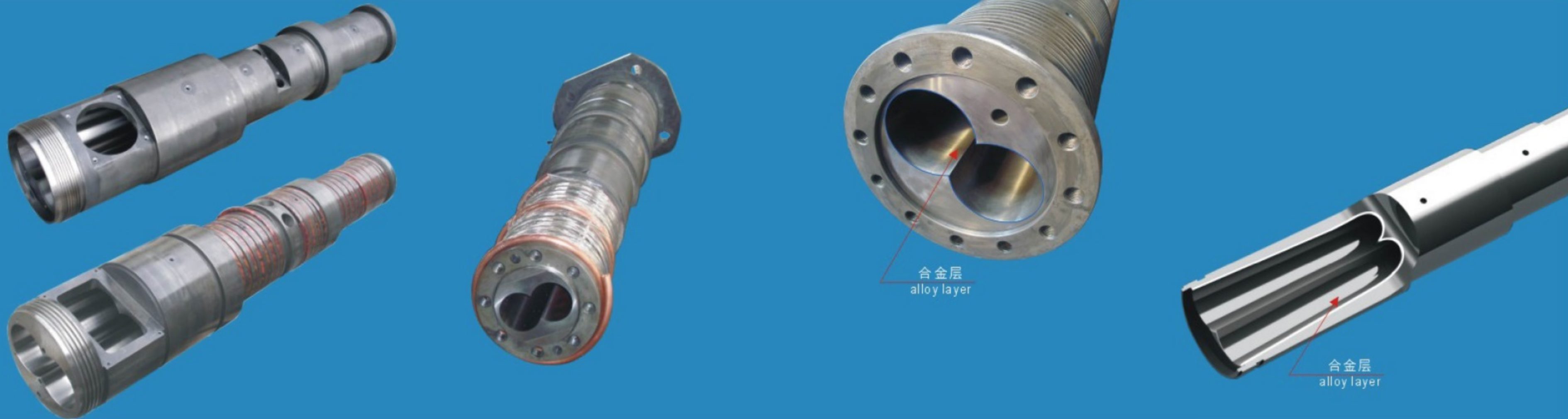
XPS-250二氧化碳发泡机筒螺杆  
Φ250 XPS Nitrogen dioxide foam  
screw and barrel





## 双金属锥形螺杆机筒

## Bimetallic conical twin screw and barrel



双金属锥双机筒已获国家专利，是中国唯一生产双金属锥双机筒的厂家。采用离心铸造合金，在机筒内壁浇铸一层厚度为2mm~3mm的合金层，从而使合金的致密性和耐磨性与单孔双金属机筒完全一致，解决了氮化锥双机筒使用寿命短，不耐磨的缺陷，改写了国内只能生产单孔双金属机筒而不能生产双金属锥双机筒的历史。

Wc-10碳化钨合金，具有高硬度，高耐磨，耐腐蚀，耐高温的特点，合金层硬度达到HRC60~65,比普通氮化机筒使用寿命长5~8倍，适用于PVC加高钙粉，建筑塑料模板，管材，片材，型材，木塑，挂壁板等塑料的加工。

A级螺杆：螺杆基材采用SKD61,德标1.8519，1.8550，经淬火氮化处理，螺杆表面硬度可达HRC60~65,具有高耐磨，耐腐蚀的特点。

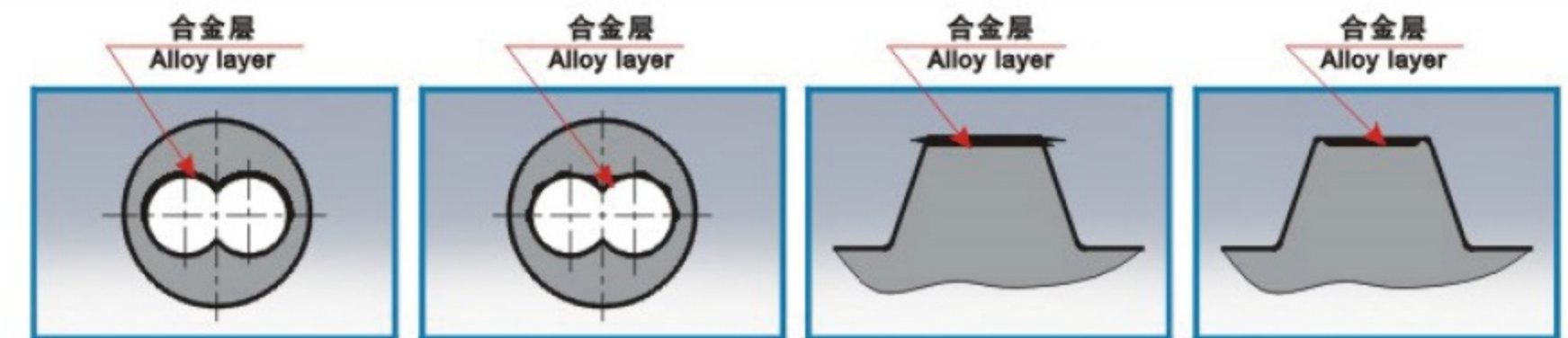
B级螺杆：螺杆基材选用38CrMoAla,螺棱表面经高温喷涂镍基合金，表面硬度可达HRC58~62,具有耐磨，耐腐蚀的特点。

**Bimetallic conical twin barrel has got the nation patent, and we are the only company in manufacturing the bimetallic conical twin barrel. Adopting the technique of rotary casting alloy, it makes the alloy powder's compactness and wearing resistance the same as the bimetallic single barrel thus solving the defect of short service life and low wear-resisting of nitrided conical twin barrel, and rewrite the history of only manufacturing bimetallic single barrel but no bimetallic conical twin double barrel in domestic land.**

Wc-10 tungsten carbide alloy, with the characteristics of high hardness, high hard-wearing and corrosion resistance, and high temperature resistance, the hardness of alloy layer reaches HRC60-65, thus having the service life of 5-8 times longer than the nitrided one. It is suitable for processing PVC plus calcium powder, building plastic template, pipe, sheet, WPC, hanging plate and other engineering plastics.

Grade A screw: the base material is SKD61, Din 1.8519 or 1.8550, with the hardening then nitriding, the surface hardness of screw can reach HRC60-65, thus having the characteristics of high wearing and corrosion resistance.

Grade B screw: the base material is 38CrMoAla, the screw flight through the high temperature spraying Ni-based alloy powder, the surface hardness can reach HRC58-62, thus having the characteristics of high wearing and corrosion resistance.



锥形双螺杆双孔机筒规格

Specification of bimetallic conical twin barrel and screw

螺杆规格(d/D) Specification of screw	工作长度(mm) Effective length	挤出能力(kg/h) Out of capacity	螺杆转速(rpm) Rotation speed of screw
φ35/φ77	810	10-70	5-50
φ45/φ90	990	50-80	5-45
φ50/φ105	1070	100-150	4-45
φ51/φ105	1220	100-150	4-45
φ55/φ110	1220	120-180	4-40
φ60/φ125	1320	150-200	4-40
φ65/φ120	1440	200-250	4-40
φ65/φ132	1440	200-250	4-40
φ70/φ140	1460	220-300	4-40
φ75/φ150	1480	250-320	4-35
φ80/φ143	1800	300-360	4-35
φ80/φ156	1660	300-360	4-35
φ92/φ188	2000	400-500	3-35



## 双金属锥形螺杆机筒

*Bimetallic conical twin screw and barrel*



## 双金属平双螺杆机筒

*Bimetallic parallel twin screw and barrel*



双金属平双机筒已获国家专利,采用离心铸造合金,在机筒内壁浇铸一层厚度为2mm~3mm的合金层,从而使合金的致密性和耐磨性与单孔双金属机筒完全一致,解决了氮化平双机筒使用寿命短,不耐磨的缺陷,改写了国内只能生产单孔双金属机筒而不能生产双金属平双机筒的历史。

Wc-10碳化钨合金,具有高硬度,高耐磨,耐腐蚀,耐高温的特点,合金层硬度达到HRC60~65,比普通氮化机筒使用寿命长5~8倍,适用于PVC加高钙粉,建筑塑料模板,管材,片材,型材,木塑,挂壁板等塑料的加工。

A级螺杆:螺杆基材采用SKD61,德标1.8519,1.8550,经淬火氮化处理,螺杆表面硬度可达HRC60~65,具有高耐磨,耐腐蚀的特点。

B级螺杆:螺杆基材选用38CrMoAla,螺棱表面经高温喷涂镍基合金,表面硬度可达HRC58~62,具有耐磨,耐腐蚀的特点。

**Bimetallic twin barrel has got the national patent, and we are the only company in manufacturing the bimetallic twin barrel. Adopting the technique of rotary casting alloy, it makes the alloy powder's compactness and wearing resistance the same as the bimetallic single barrel thus solving the defect of short service life and low wear-resisting of nitrided twin barrel, and rewrite the history of only manufacturing bimetallic single barrel but no bimetallic twin double barrel in China.**

Wc-10 tungsten carbide alloy, with the characteristics of high hardness, high hard-wearing and corrosion resistance, and high temperature resistance, the hardness of alloy layer reaches HRC60-65, thus having the service life of 5-8 times longer than the nitrided one. It is suitable for processing PVC plus calcium powder, building plastic template, pipe, sheet, WPC, hanging plate and other engineering plastics.

Grade A screw: the base material is SKD61, Din 1.8519 or 1.8550, with the hardening then nitriding, the surface hardness of screw can reach HRC60-65, thus having the characteristics of high wearing and corrosion resistance.

Grade B screw: the base material is 38CrMoAla, the screw flight through the high temperature spraying Ni-based alloy powder, the surface hardness can reach HRC58-62, thus having the characteristics of high wearing and corrosion resistance.



## 双金属平双螺杆机筒

## Bimetallic parallel twin screw and barrel

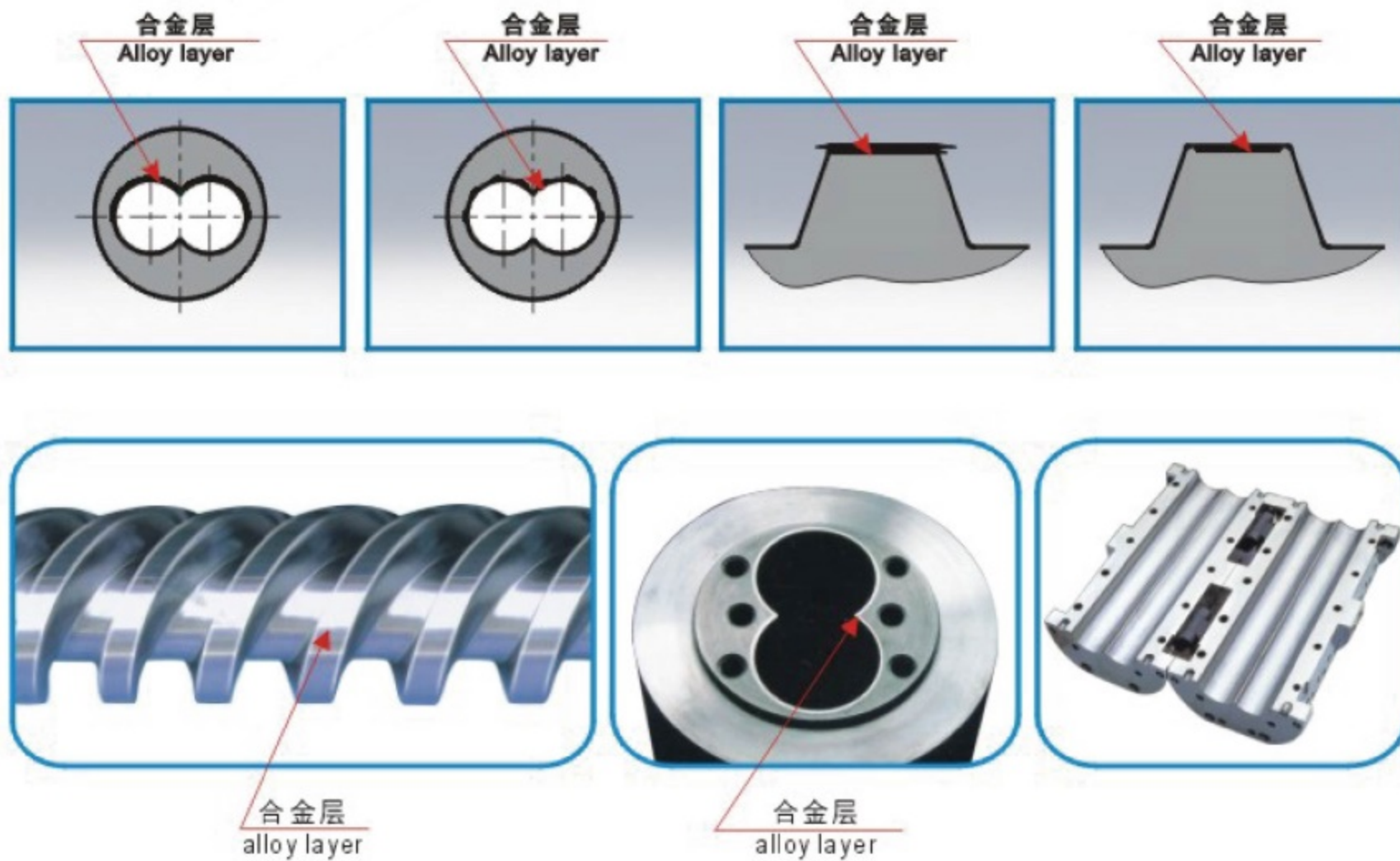
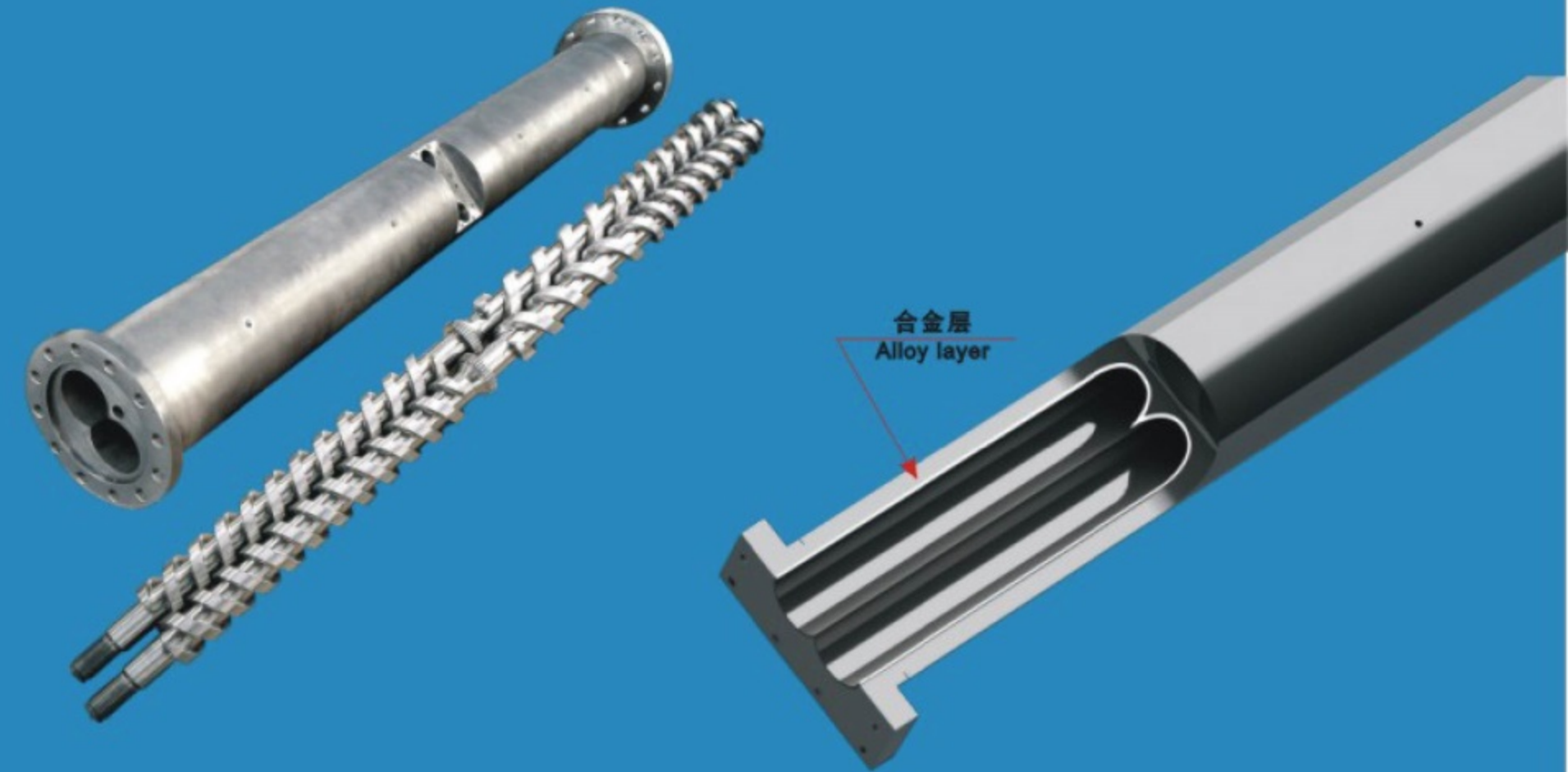
### 平行双螺杆双孔机筒规格:

平双机筒螺杆规格:  $\phi 60/2$ ,  $\phi 65/2$ ,  $\phi 70/2$ ,  $\phi 72/2$ ,  $\phi 75/2$ ,  $\phi 80/2$ ,  $\phi 88/2$ ,  
 $\phi 90/2$ ,  $\phi 93/2$ ,  $\phi 107/2$ ,  $\phi 105/2$ ,  $\phi 110/2$ ,  $\phi 115/2$ ,  $\phi 108/2$ ,  $\phi 125/2$ ,  
 $\phi 130/2$ ,  $\phi 140/2$ ,  $\phi 150/2$ ,  $\phi 160/2$ ,  $\phi 170/2$ ,  $\phi 180/2$ ,  $\phi 190/2$ ,  $\phi 200/2$ ,  
 $\phi 250/2$ , 螺杆根据不同的原料设计, 也可按用户的要求进行设计。

### Specification of bimetallic twin barrel

$\phi 60/2$ ,  $\phi 65/2$ ,  $\phi 70/2$ ,  $\phi 72/2$ ,  $\phi 75/2$ ,  $\phi 80/2$ ,  $\phi 88/2$ ,  
 $\phi 90/2$ ,  $\phi 93/2$ ,  $\phi 107/2$ ,  $\phi 105/2$ ,  $\phi 110/2$ ,  $\phi 115/2$ ,  
 $\phi 108/2$ ,  $\phi 125/2$ ,  $\phi 130/2$ ,  $\phi 140/2$ ,  $\phi 150/2$ ,  $\phi 160/2$ ,  
 $\phi 170/2$ ,  $\phi 180/2$ ,  $\phi 190/2$ ,  $\phi 200/2$

The compression ratio of the screw can be designed according to different products and mixtures.





**Barrel and screw for pipe**
**Pe波纹管高速螺杆、机筒**

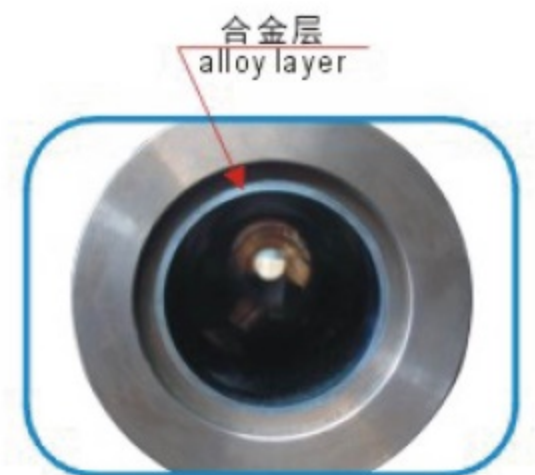
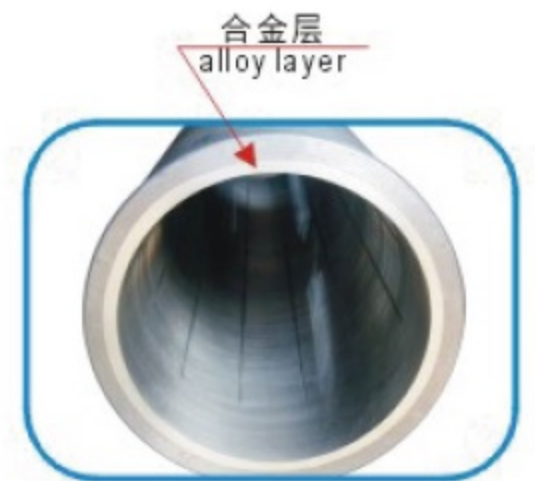
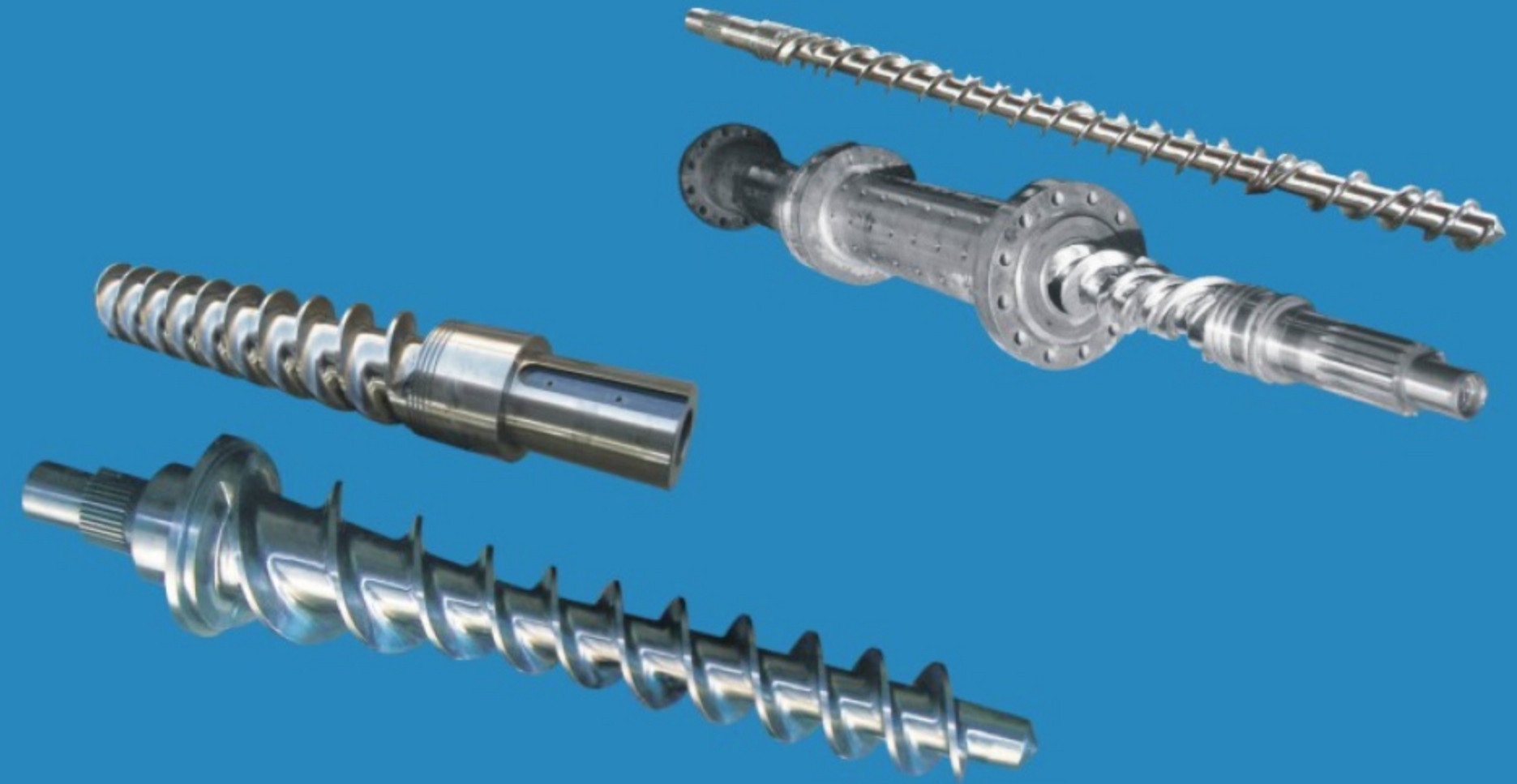
机筒内孔整体离心浇铸合金，合金层单边厚度2-3mm，螺杆螺棱表面合金层1.2-1.5mm，具有耐磨损、耐腐蚀、耐高温、塑化好、稳定性好、产量高、寿命长等特点，使用寿命是普通氮化的3-5倍。用我们的螺杆不仅能提高机器的档次还能为你带来丰厚的效益。

规格：Φ45-Φ150

**High-speed bimetallic screw and barrel for PE**

Our company is specialized in manufacturing high-speed bimetallic screw and barrel for PE. this kind of bimetallic screws and barrels own the characteristics of high wearing resistance, high corrosion resistance, high temperature resistance, good plasticizing, good stability and high output, the service life about 3-5 times longer than the normal one. with our bimetallic screw and barrel can not only enhance the grade of machine also can bring huge benefits for you.

Specification: Φ45- Φ150

**Bimetallic screw and barrel for rubber machine**

**橡胶螺杆机筒规格**

类型Type	直径Diameter	长径比L/D
销钉冷喂料挤出合金螺杆机筒	Φ60mm~Φ250mm	12~18
普通冷喂料挤出合金螺杆机筒	Φ45mm~Φ300mm	8~20
排气式冷喂料挤出合金螺杆机筒	Φ45mm~Φ250mm	4~6
新型热喂料挤出合金螺杆机筒	Φ45mm~Φ250mm	4~6
滤胶挤出合金螺杆机筒	Φ45mm~Φ250mm	12~18
橡胶注射合金螺杆机筒	Φ18mm~Φ200mm	4~18
橡胶磁条挤出合金螺杆机筒	Φ45mm~Φ200mm	4~18



## 双金属橡胶螺杆、机筒

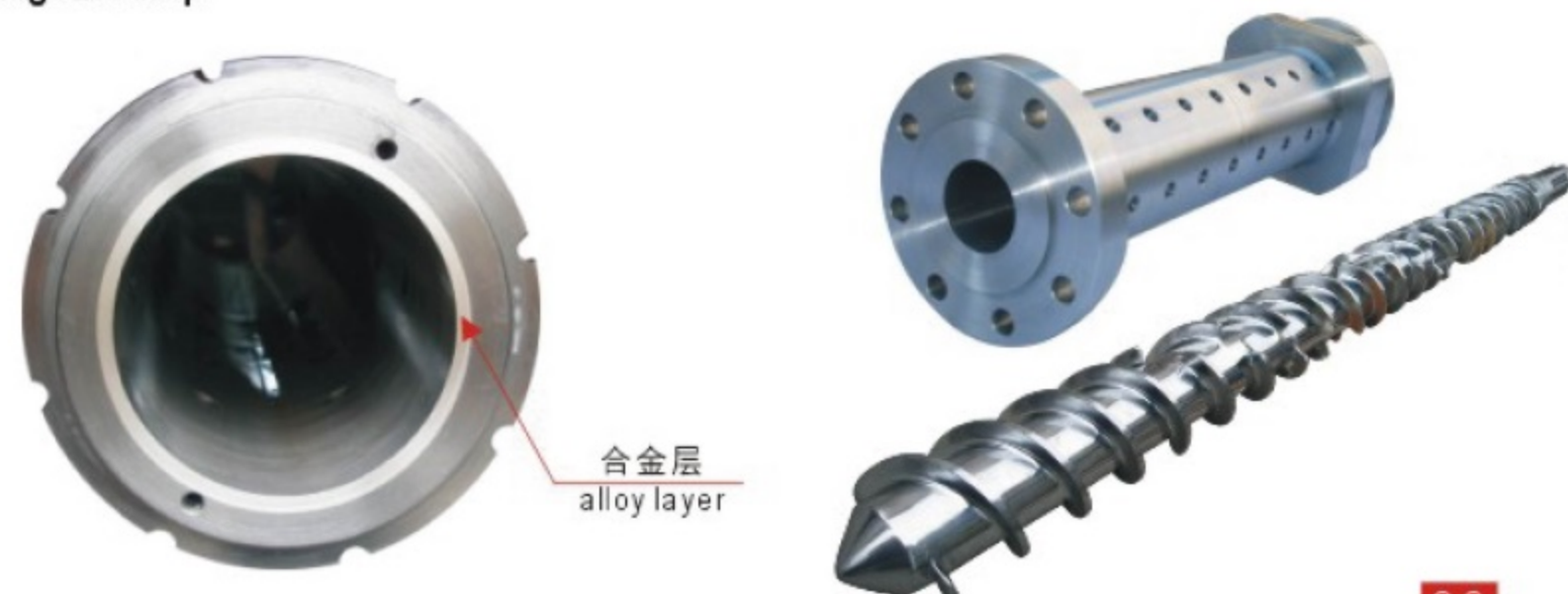
## Bimetallic screw and barrel for rubber machine



双金属橡胶机筒采用高温、高速离心铸造而成，合金层单边厚度为2mm~3mm，机筒内壁具有高硬度、高耐磨、耐腐蚀等特点。螺杆螺棱表面经高温喷涂碳化钨合金，厚度为1.5mm~3.5mm,合金硬度达HRC58~62,适用于销钉冷喂料，普通冷喂料，排气式冷喂料，新型热喂料，橡胶挤出，橡胶注射，橡胶磁条等橡胶产品的生产。

The bimetallic barrel for rubber machine is produced through high-temperature and speed centrifugal casting, the thickness of the alloy layer could reach 2mm-3mm one side, thus having the characteristics of high hardness, high wearing and high corrosion resistance.

The screw flight spray the WC-10 tungsten carbide alloy powder, the thickness of alloy layer is 1.5mm-3.5mm, the hardness can reach HRC58-62. It is suitable for the rubber machine of the pinned cold feeding, ordinary cold feeding, exhaust cold feeding, new kind of hot feeding, rubber filtering, rubber injection, magnetic strip.





## 双金属行星螺杆机筒

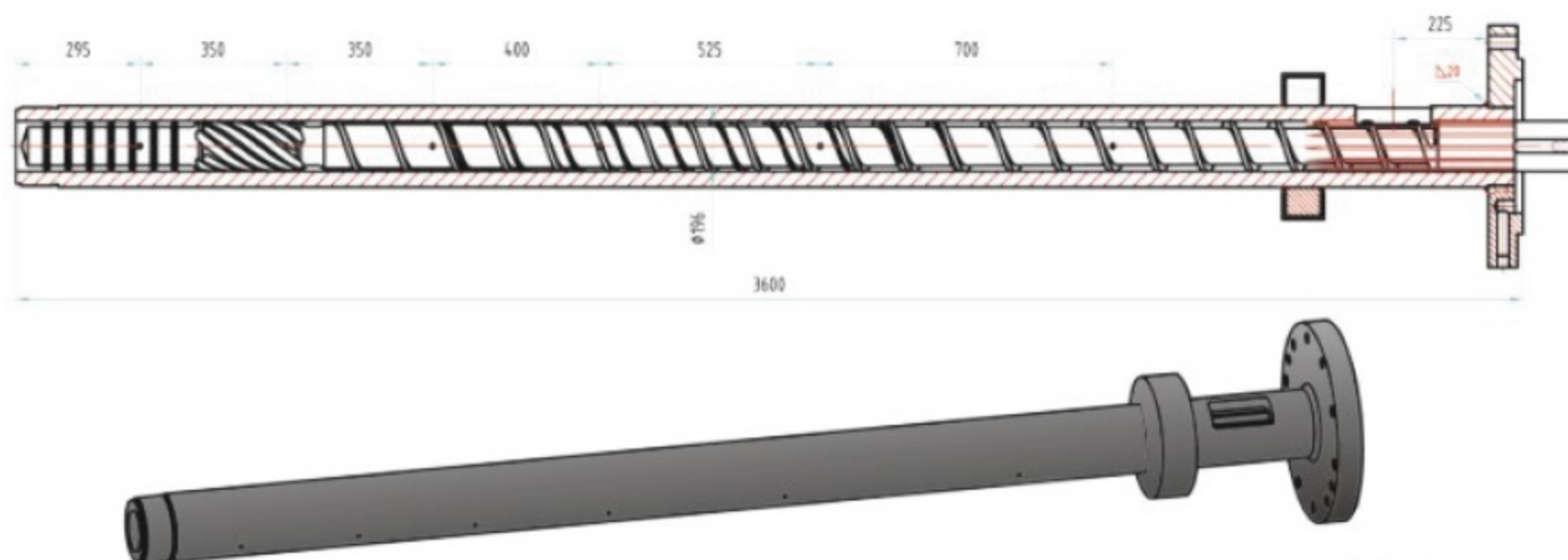
### Bimetallic screw and barrel for planetary extrusion machine

行星挤出机是单螺杆挤出机与多螺杆挤出机的组合，其进料段相当于单螺杆挤出机的进料段。挤出机最重要的部分为行星混炼段，主要起使聚合物熔融、混炼的作用。该段由一根主螺杆、若干根行星螺杆以及壁上开设螺旋齿的机筒构成，行星螺杆与机筒齿底面之间的间隙为0.2~0.4mm，行星螺杆的根数与行星段直径成正比，一般为6~18根。

Planetary extrusion machine is the combination of single extruder and multi screw extruder ,the feeding zone is equal to the feeding zone of single screw extruder ,the most important part is the mixing section, it consists of a main screw and numbers of planetary screws with a barrel ,the gap between planetary screw and the bottom of barrel is 0.2~0.4mm, the number of planetary screw needed is proportional to the diameter of planet section, generally is 6~18 pieces.



### PVC挤出生产线 PVC extrusion line



## 注塑机螺杆、机筒附件

### Accessories of screw and barrel for injection molding machine



注塑机、挤出机机筒螺杆附件 螺杆、熔胶筒配件、分离头（止逆环、介子圈）、熔胶法兰、射嘴、尼龙专用内外弹弓射嘴、液压式法兰

原材料：钨合金，SKD61，SACM645，SACM425，SACM440

处理方式：铸造、淬火、氮化、发黑

加工范围：内径 $\Phi 16 \sim \Phi 200$

有效长度：1200mm

氮化深度：0.50mm~0.80mm

淬火硬度：HRC58-63

直线度：0.015mm/m

镀铬厚度：0.02mm~0.085mm

Accessories of screw and barrel for injection and extrusion machine 、back-up ring、sealing ring、flange、nozzle、screw head, inside and outside nozzle for specialized nylon, hydraulic flange

Base material : tungsten alloy , SKD61 ,SACM645 ,SACM425 ,SACM440

Processing method: casting hardening nitriding black coating

Processing range: inner diameter  $\phi 16 - \phi 200$

Effective length: 1200mm

Nitriding depth: 0.50mm~0.80mm

Hardening hardness: HRC58-63

Straightness: 0.015mm/m

thickness of Chrome plated : 0.02mm~0.085mm

Applying to: normal plastic、PP、PE、ABS、AS、PS and so on.