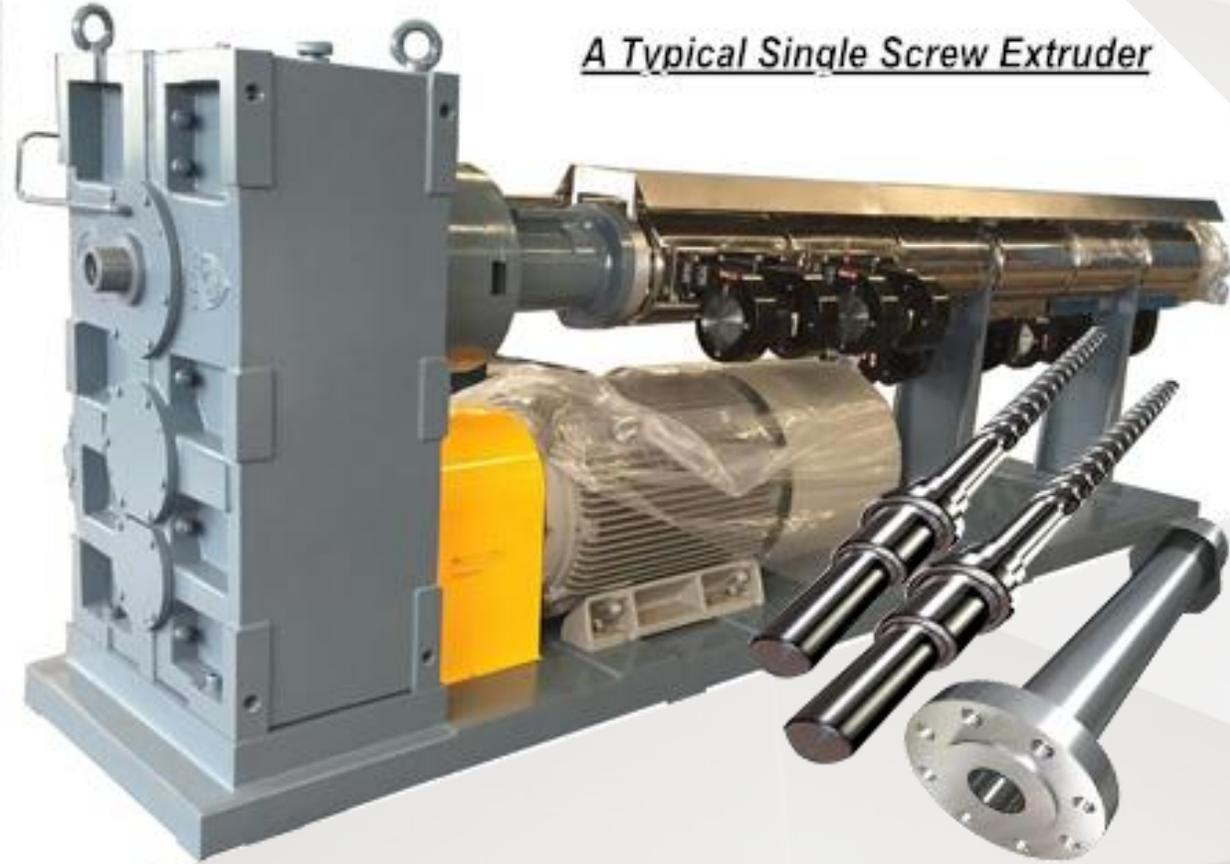




A Typical Single Screw Extruder



SHANGHAI OMEGA

□ Here is the Cradle of Bimetallic Barrel and Bimetallic Screw in China

We spend a lifetime only seek for the extruder service life

So we are more professional, we are more reliable



1

Company Introduction

2

Product Introduction

3

Developing Plan



PART 01

INTRODUCTION

- Company Introduction
- Manufacturing Shop
- Qualification Honor
- Company Philosophy

Company Introduction



- ◆ In China the first Bimetal Barrel was manufactured by us
- ◆ In China the first Bimetal Screw was manufactured by us
- ◆ In China the first Oval Liner made from high-chromium Iron 101A was manufactured by us
- ◆ In China the first Oval Liner made from high-vanadium Iron 102A was manufactured by us
- ◆ On this basis, we are developing various extruders, including micro extruders, ceramic extruders, etc.

● Manufacturing Shop



Company Office



CNC Machinery

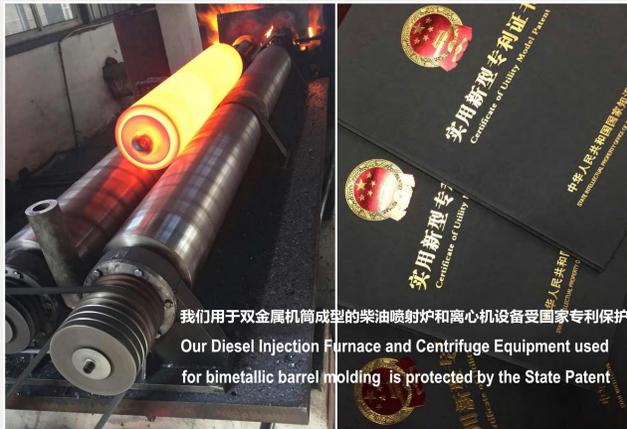


Machining Center



CNC Grinding

Qualification Honor



National patent protection

Bimetal barrel forming equipment is protected by national patent



IS99001 CERTIFICATE



IS99001 认证证书

Company Philosophy

With our Experience



Experience



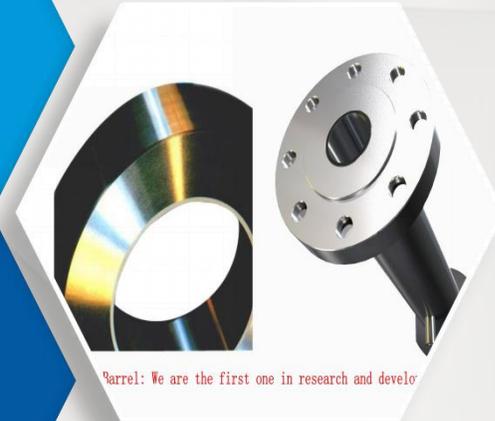
Quality

With our Quality

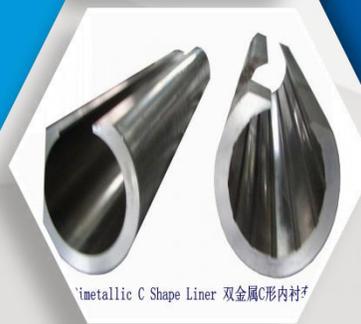


Honest

Innovate



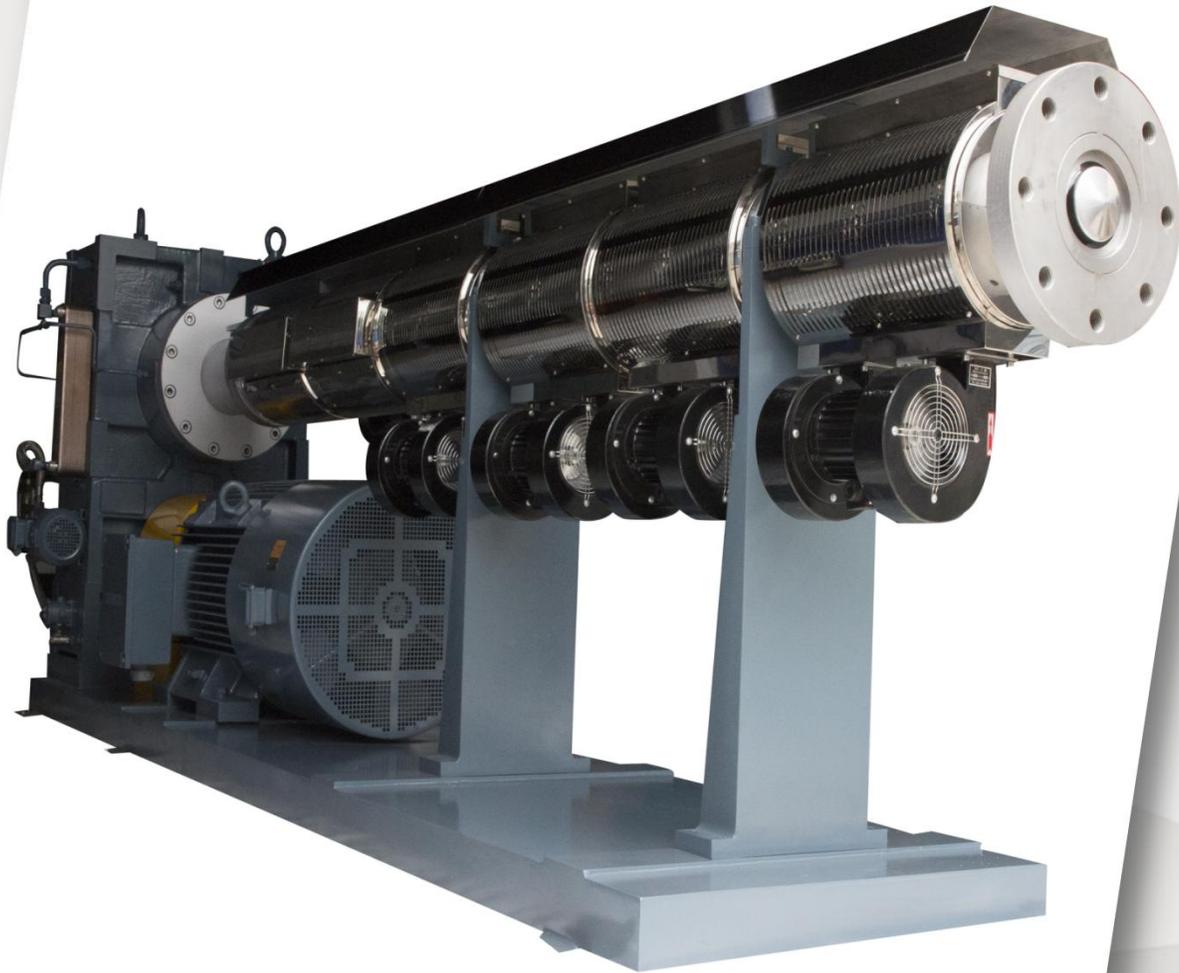
With our Honest



With our Innovate

PART 02

Product Introduction



- Single Screw Extruder
- Twin Screw Extruder
- Recycle Plastic Extruder
- Micro Twin Extruder
- Ceramic Extruder

Single Screw Extruder

OPTION 01

Designed screws
for various
purposes

OPTION 02

With wear-
resistant
barrel

Single Screw



Screw with nanostructured ceramic coating 纳米陶瓷涂层螺杆

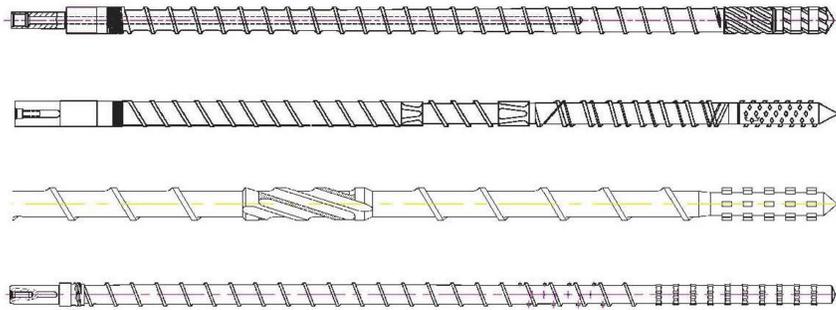
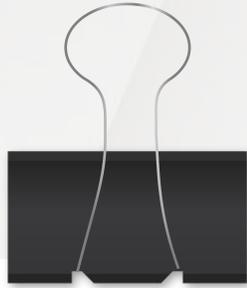


Batch of Screw for Export

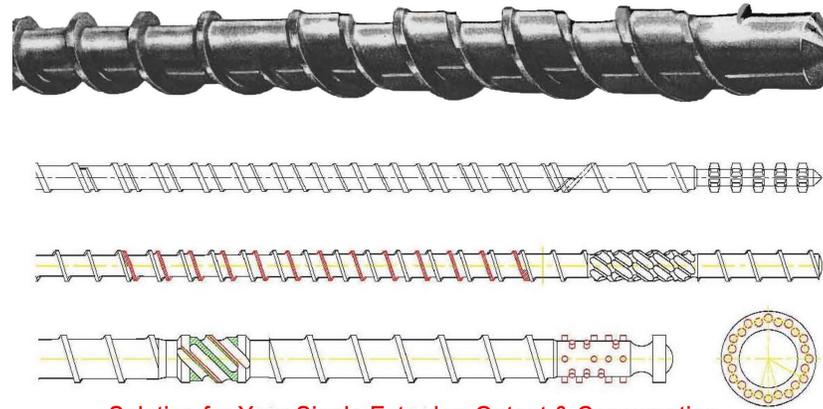
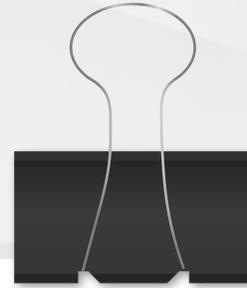
A better screw with a high abrasion-resistance ensures a higher product quality and a longer service life for your single screw extruder.

We are dedicated to the research and develop variety of custom made screws using abrasion resistant materials, including multiple thread screws, barrier screws, vented screws etc.

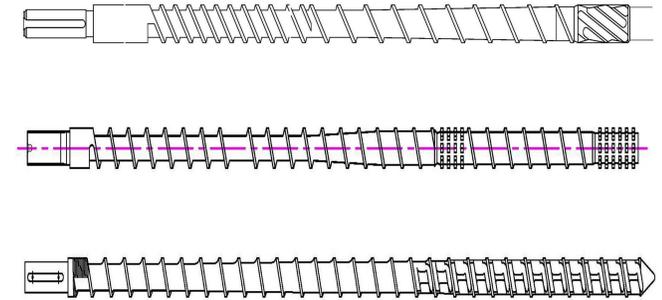
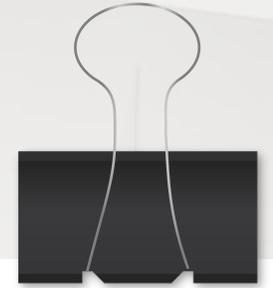
We can design different single-screw extruders according to the different polymer raw materials that users will run, the different products that the customer needs to produce, and their different output, in order to pursue the highest possible specific flow rate and the lowest possible ratio of the power consumption.



Solution for Your Single Extruder: Output & Consumption



Solution for Your Single Extruder: Output & Consumption



Solution for Your Single Extruder: Output & Consumption

Extrusion Barrel



Omega offers customization of extrusion barrels made from different alloys. For a single screw extruder, we offer whole extrusion barrels, and if a big barrel such the ID is 250mm over, we can use bimetallic liner way. The pursuit of the lowest possible cost, a high cost performance, and the pursuit of a longer service life is always our goal..

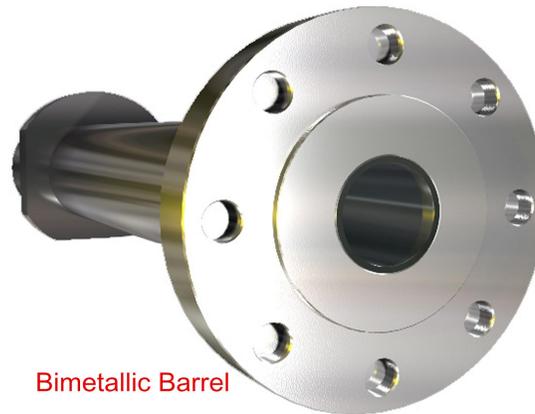
Materials of clad layers and their properties

Properties	Ω101	Ω201	Ω301	
Wear Resistance	★★★	★★	★★★	
Corrosion Resistance	★	★★★	★★★	
Main Elements	Fe-Ni-B	Ni-Co-Cr-B	Fe-Cr-Ni-B-Carbide	
Hardness (HRC)	58~64	50~56	55~65	
Breaking Strain (%)	0.30	0.24	0.20	
Elastic Strain (kgf/mm)	18600	215000	22000	
Coefficient of Thermal Expansion(°C)	15°C~250°C	10.0×10 ⁻⁶	11.9×10 ⁻⁶	11.2×10 ⁻⁶
	15°C~400°C	10.5×10 ⁻⁶	12.6×10 ⁻⁶	11.9×10 ⁻⁶

Mark: ★★★: Excellent; ★★: Very good; ★: Good



Barrier Jacket



Bimetallic Barrel

Twin Screw Extruder

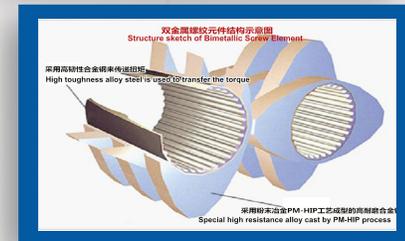
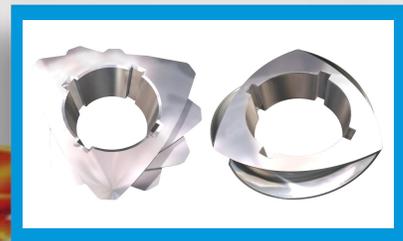
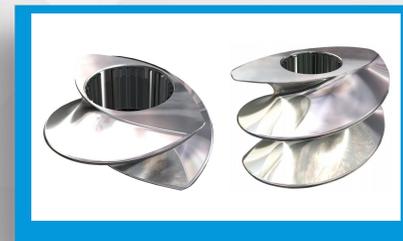
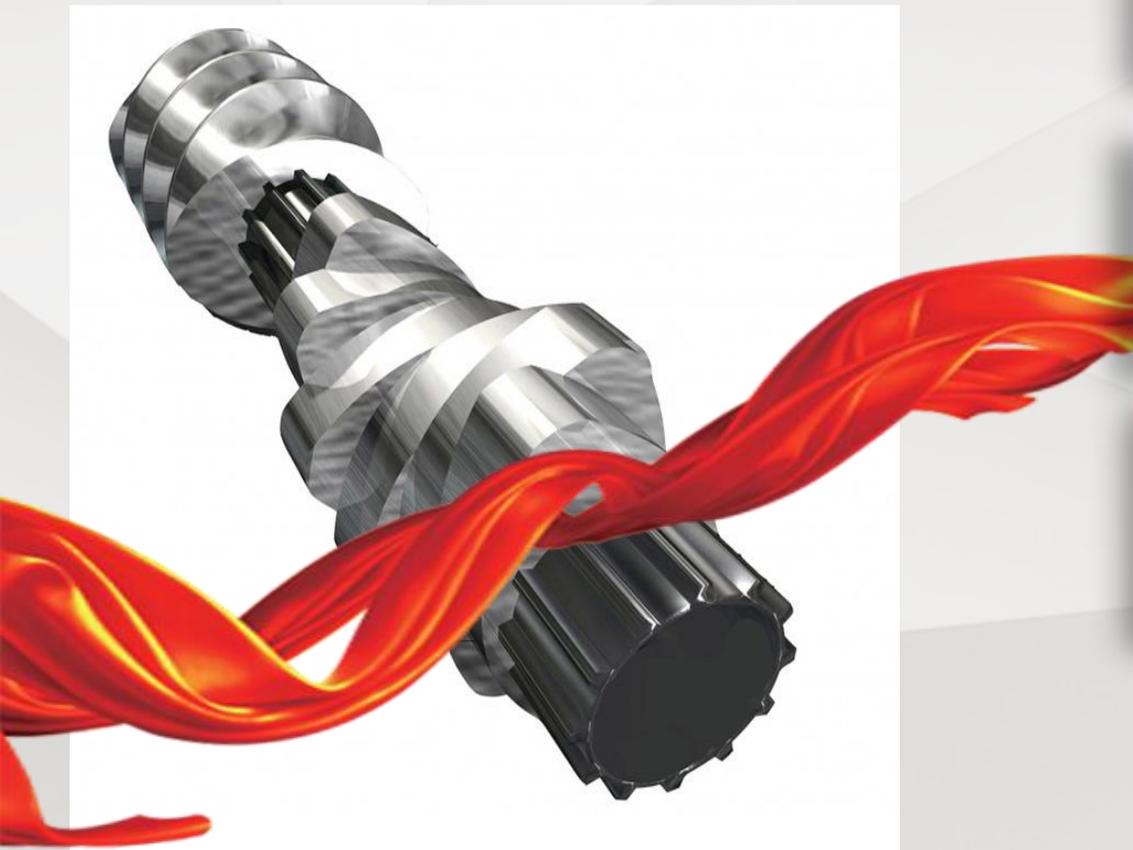
OPTION 01

**Screw
Element**

OPTION 02

**Segment
Barrel**

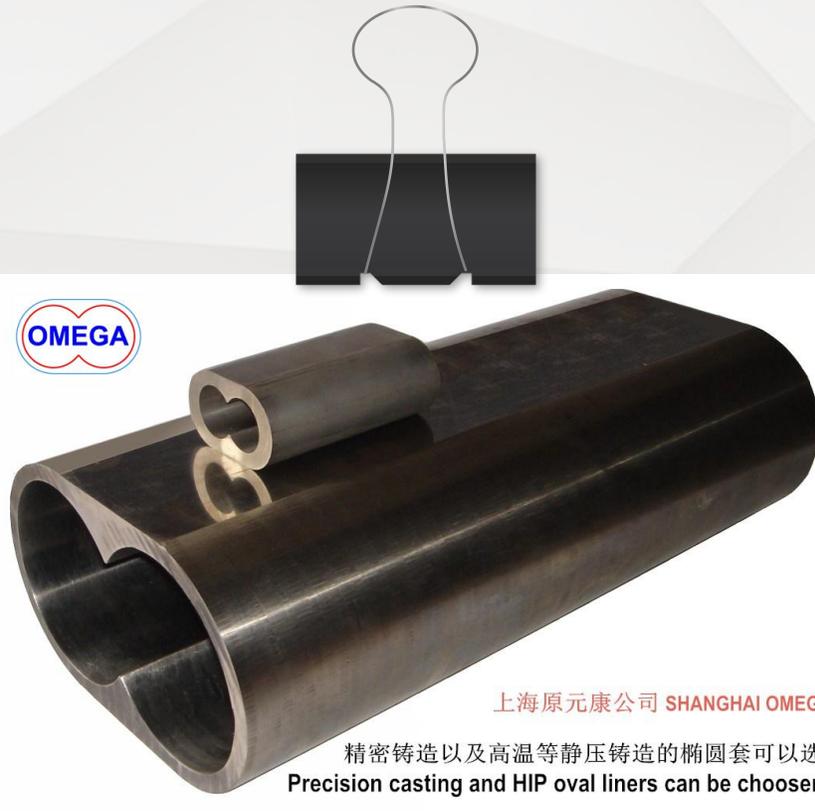
Screw Element



For Segment Barrel



Bimetallic Barrel



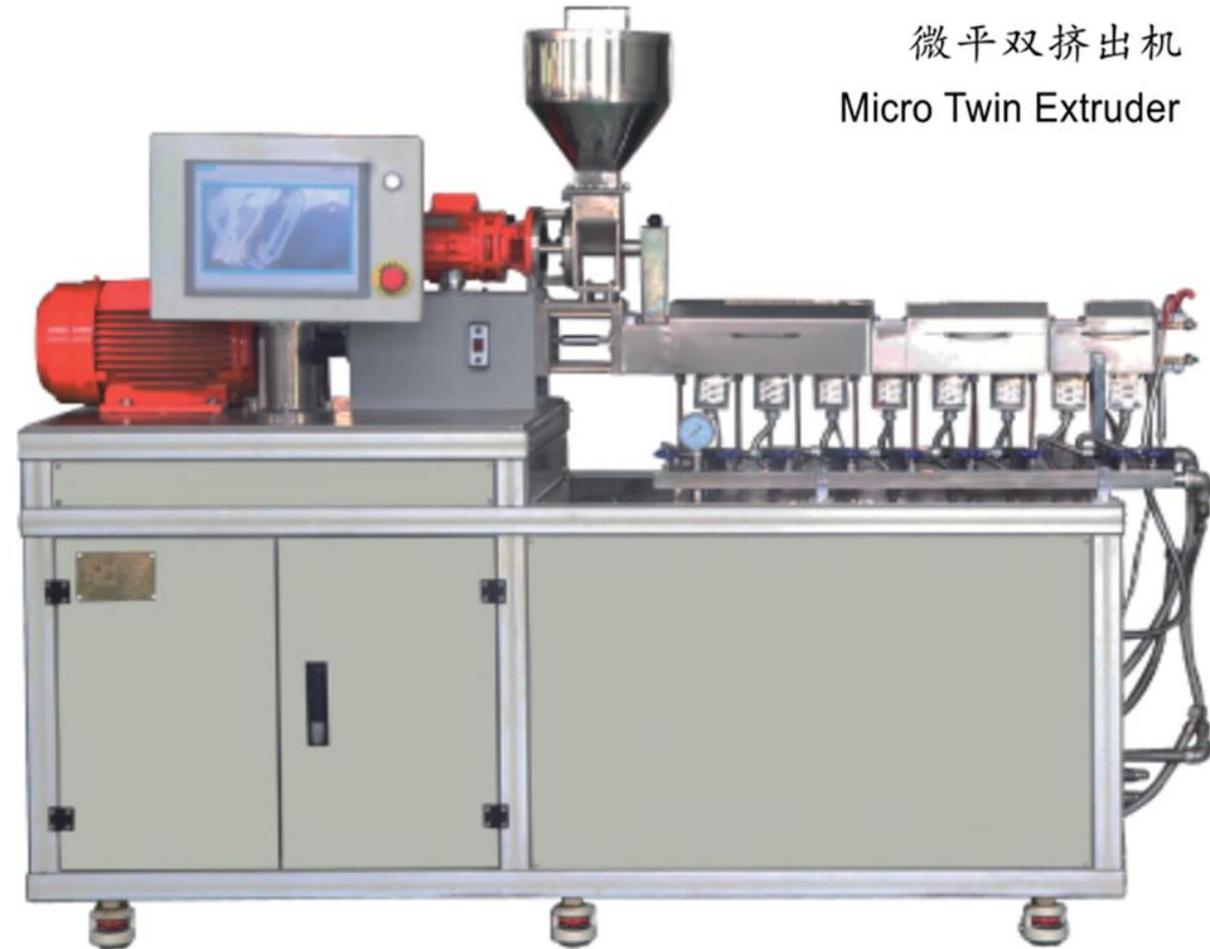
Various of Oval Liner



Hinge Bushing

Micro Twin Extruder

In recent years, we has put the company's core material technology into R&D for various of micro-extruder. We can provide the entire extruder/production line for different, we can also provide assembly parts for these extruders, everything depends on your needs.



微平双挤出机
Micro Twin Extruder

Micro Twin Extruder



We Exert Force On Micro Extruder And Its Core Parts

In the early formulation development of new drugs, scientists often need to configure a micro-twin(micro-conical) compounding extruder that can be used for pharmaceutical materials even as small as nanometers



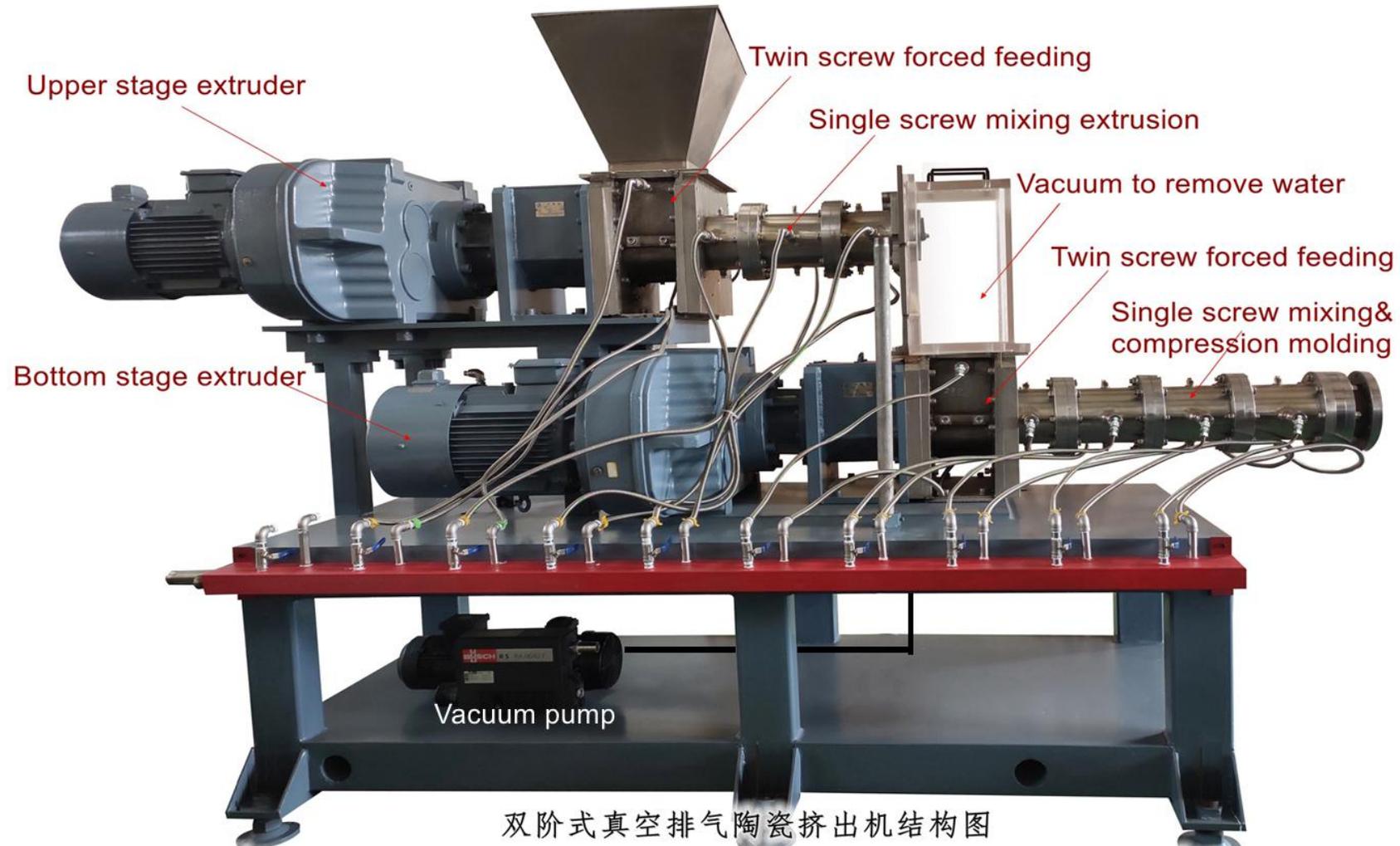
Recycle Plastic Extruder



Technical Parameters Of PP/PE Film Pelletizing Production Line With Output Of 400~500kg/hr

Equipment Name	Technical Parameter		
Leather belt moving rail with a metal detector	<ul style="list-style-type: none"> ◆Model: DS40 ◆Motor power: 1.5KW, Frequency control ◆Available moving length: 4000mm ◆Moving height could be adjusted freely ◆Metal detector made in China and it follows overseas advanced technology 	SJB-150/30 Single extruder	<ul style="list-style-type: none"> ◆Screw Diameter: ϕ150mm ◆L/D=30:1 ◆Motor power: 132KW, Frequency control ◆Heating power on barrel: 8×10KW, total 80KW ◆Cooling power on barrel: 8×0.24kw, total 1.92KW ◆Heating power on model: 2×4KW, total 8KW ◆Model is made of 40Cr, after hammering, thermal refining, it is precision machined ◆A bimetallic barrel and a bimetallic screw with wear-resistant working alloy layer to extend the extruder service life to be much longer ◆ Capacity Max.: 500kg/hr
Cutting and Compacting machine	<ul style="list-style-type: none"> ◆Motor power: 90KW ◆Cutting disk rotate speed: 900r/min ◆Cutting silo diameter: ϕ1100mm ◆Quantity of rotate cutting blade: 4 PCs/ 2 Sets ◆Quantity of fixed blade: 15PCs ◆Temperature measuring point inside silo: 1PC ◆Equipped with cleaning plant which is better to be sealed up, it is convenient to clean the residuum ◆ There is a sight window with a searchlight, to monitor the running case in real time easily 	Hydraulic Screen changer	<ul style="list-style-type: none"> ◆Network diameter: Φ250mm ◆Hydraulic device power: 3KW
		Water-ring pelletizing machine	<ul style="list-style-type: none"> ◆Pump motor power: 2.2KW ◆Granulator motor power: 1.1kw, Frequency control ◆Quantity of granulator blade: 2PCs ◆Blade rest and shaft made of stainless steel

Ceramic Extruder

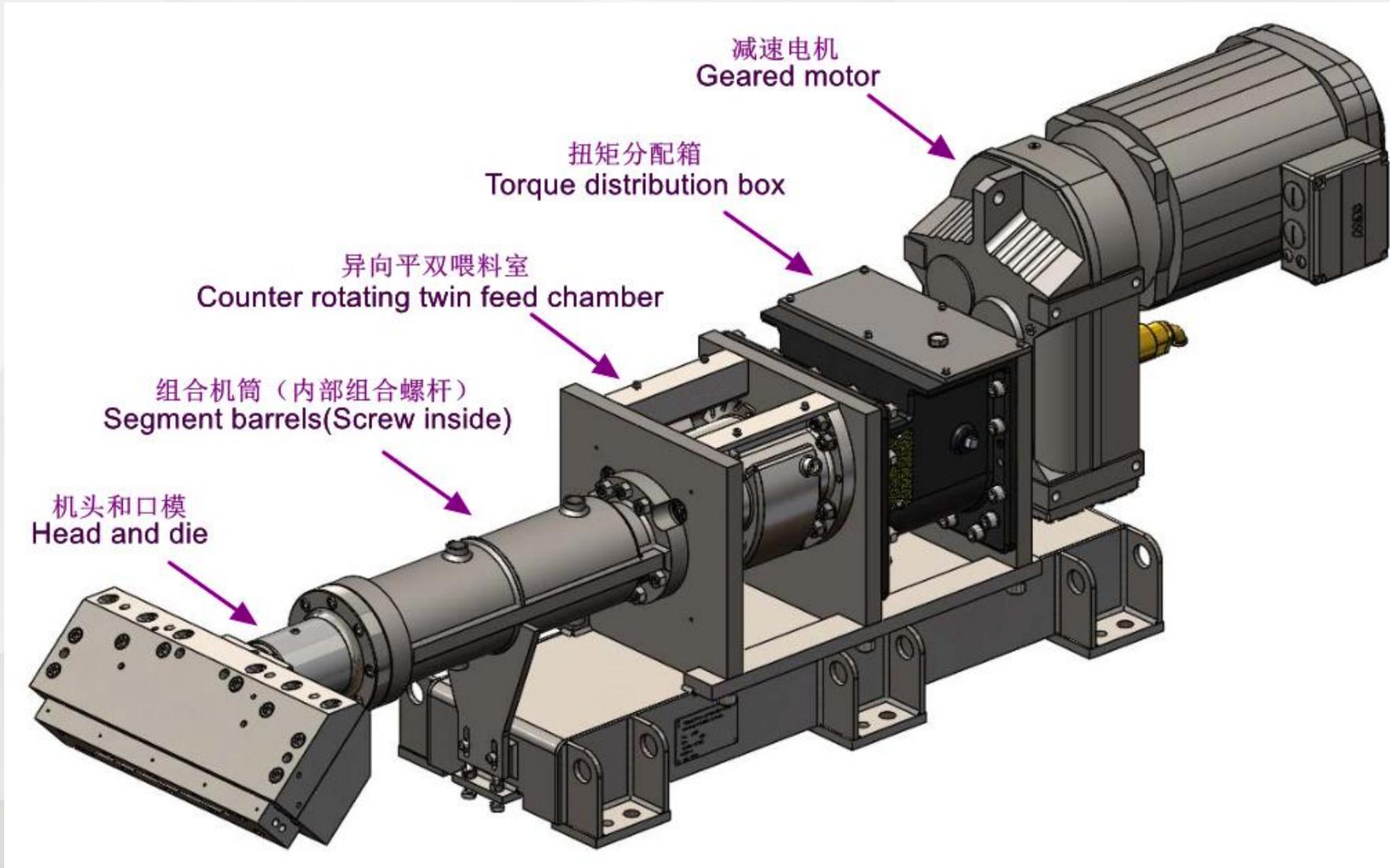


双阶式真空排气陶瓷挤出机结构图
Structure diagram of double-stage vacuum exhaust ceramic extruder

Main technical parameters of EX-200 spiral ceramic film extruder

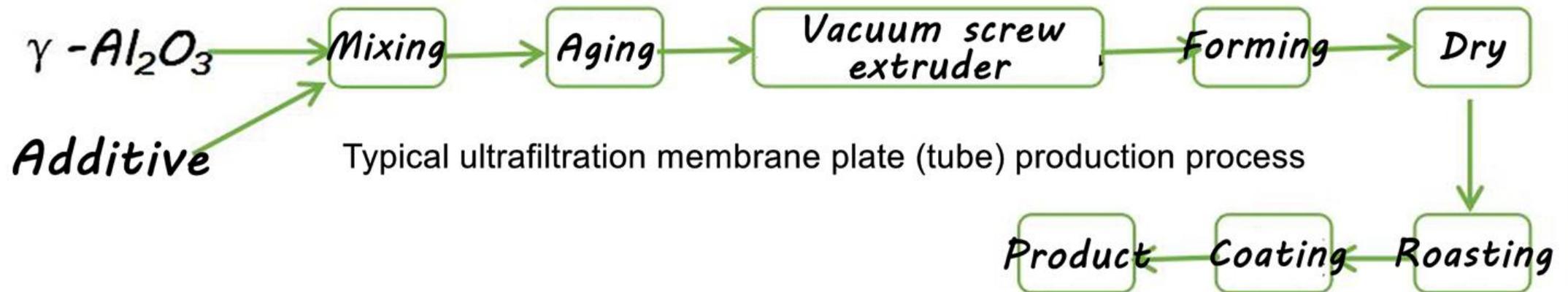
Feeding system	120L volume 304 stainless steel hopper, counter rotating feed screw provide a more positive feed and consistent flow of material
Main Motor and Power	75kw, High reliable variable frequency gear motor of China
Screw diameter (mm) and manufacturing material	∅198.5, stainless steel
Screw ratio (L/D)	8
Screw Speed (Wax.)	50rpm
Screw maximum thrust (Max.)	50Mpa
Bearing torque (Max.)	28650Nm
Temperature control way	Constant temperature and soft water circulation inside both barrel and screw
Temperature control range	10°C~100°C
Temperature control section for barrel	5 Sections
Head pressure measurement and feedback	Equipped with American DYNISCO brand pressure sensor, with measuring range of 5000PSI
Screw center height	900mm
Extrusion yield range	500kg~800kg/hr, output varies with the ceramic membrane formula (such as alumina, titanium oxide, activated carbon, etc.) and the mold type
Total installed capacity (kw)	95

Composition of EX-200 spiral ceramic extruder



Ceramic Ultrafiltration Membrane Product And Its Production Process

Ceramic ultrafiltration plate membrane can effectively remove organic matter, suspended matter, toxic and harmful substances (such as radium, arsenic), microorganism, algae and oil in liquid, and is the core and key component of new efficient separation technology.



Contact

01



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02



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03



WECHAT

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04



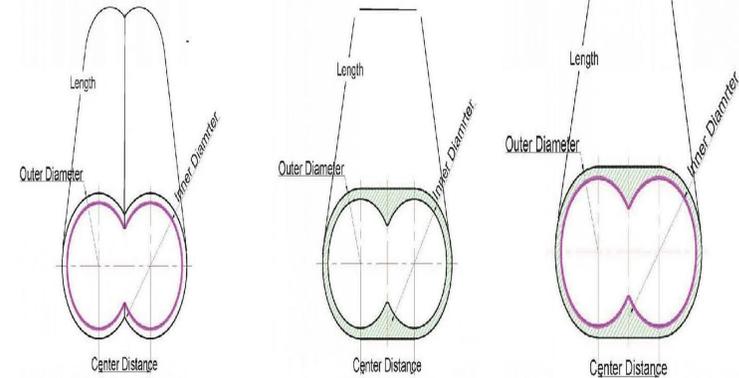
E-MAIL

alphawu@126.com

Technical Support

On our website, you will be able to find out what makes our different alloys so special. They are carefully formulated by our team of experts to maximize performance to meet our customers' production needs. Links to sites:

<https://www.omegabarrelscrew.com/technical-support-t-2.html>



Two "C" form Bimetallic Liners combined

Oval Liner

Bimetallic Oval Liner

Liner three forms for twin segment barrel

平双组合机筒内衬套的三种形态



Innovation Thanks for Watching

Looking forward to working
with your company

