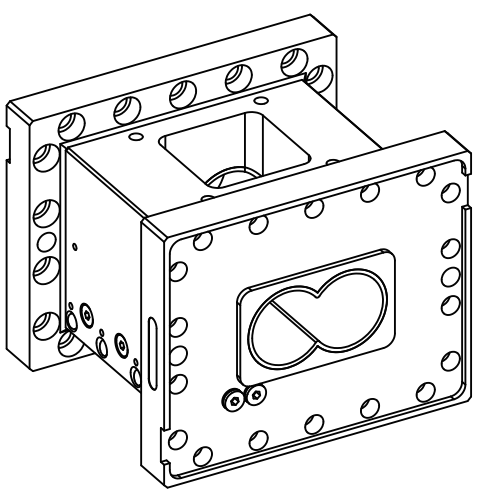


挤出机配件性能优化

Extruder Spare Parts

Modular Screw Barrels & Elements

积木式筒体和螺纹元件



Since 2006

南京智田机电有限责任公司

Nanjing Zhitian Mechanical And Electrical Co., Ltd.

筒体 SCREW BARREL

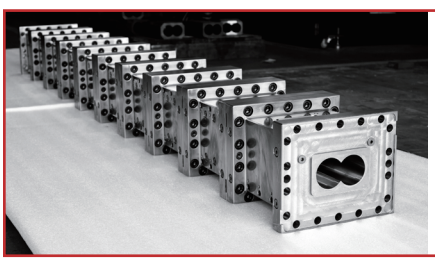
来样定制
Customization

衬套更换
Liner
Replacement

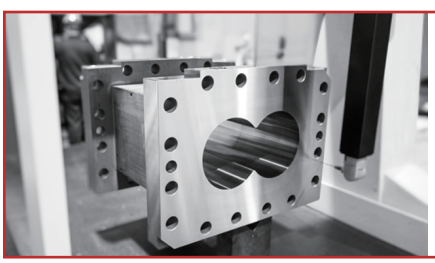
机筒翻新
Barrel
Refurbishment

疏通水道
Cooling
Channel Repairs

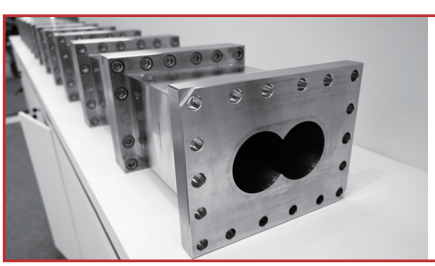
应用领域 Application Fileds



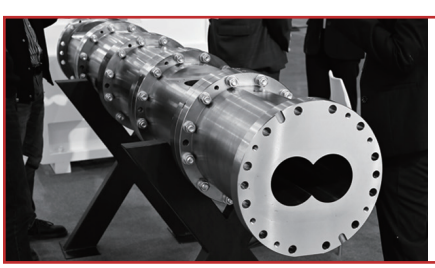
橡塑行业挤出机 Rubber and Plastic



石化挤压造粒机 Petrochemical Granulation



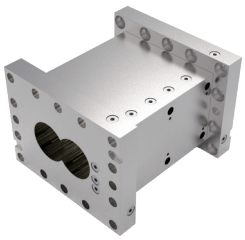
电池浆料连续匀浆 Battery Electrode Slurry



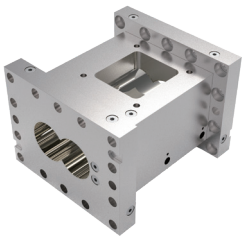
食品饲料膨化机 Food and Feed

其它

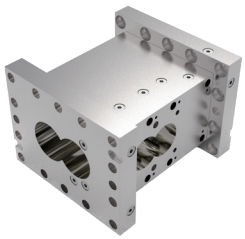
筒体分类 Types of Barrels



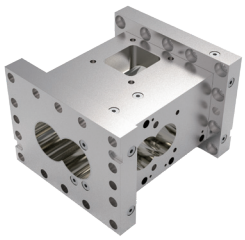
闭口
Normal



开口（喂料、排气等）
Open(Feed,Vent,etc)



侧喂料
Side Feed



开口侧喂料
Combi

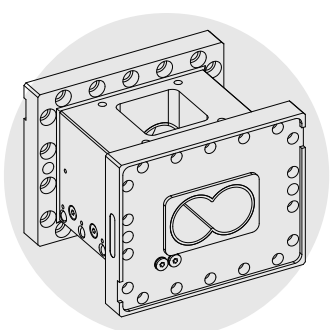
其它

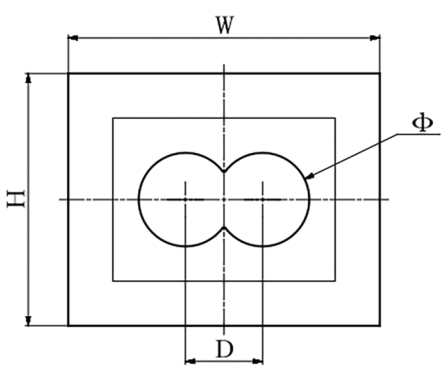
国内标准筒体尺寸 Standard Dimensions

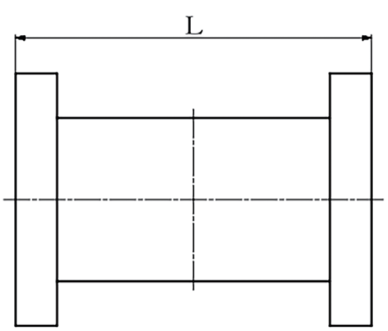
型号Model ▲	外形尺寸/L*W*H(mm)	八字孔尺寸/Φ(mm)	中心距/D(mm)
35(36)	150*160*140	Φ36	30
40	160*175*145	Φ41.6	34.5
50	190*190*150	Φ51	42
52	210*200*155	Φ52	43
58	240*220*175	Φ58	48
60	240*230*180	Φ60	52
65	240*230*180	Φ63	52
75	290*260*200	Φ71.8	60
85	320*280*215	Φ81.9	67.8
92	360*310*240	Φ92	78
95	360*310*240	Φ94	78

▲ 加工范围 15-400 PROCESSING RANGE: 15-400

注意!如需上述未列出型号，请与智田联系。







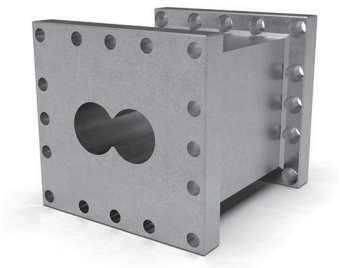
筒体材料 Screw Barrel Materials

筒体材料 Screw Barrel Materials

無 无衬套式筒体 Barrel without liner

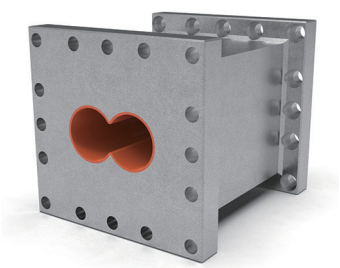
整体筒体 Monolithic Barrel

哈C合金	Hastelloy-C Alloy
氮化钢	38CrMoAla
不锈钢	304/316/316L Stainless Steel



直接复合筒体 In-Situ Alloy Composite Barrel

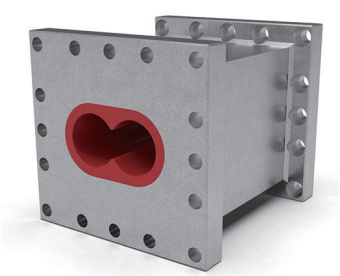
ZT615	Ni-Based
ZT715	Ni-Based+Tungsten carbide
ZT735	Ni-Based+Tungsten carbide



有 有衬套式筒体 Barrel with liner

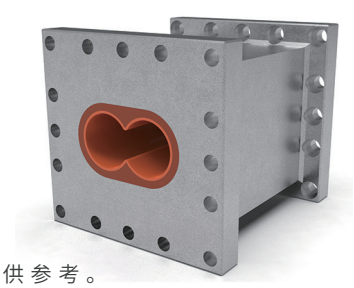
整体套筒体 Complete Liner Barrel

氮化钢套	38CrMoAla Liner
不锈钢套	440C Stainless Steel Liner
模具钢套	Cr12MoV Liner
SKD11/SKD61套	SKD11/SKD61 Liner
DC53套	DC53 Liner
工具钢套	W6Mo5Cr4V2 Liner
ZTCr26套	ZTCr26 Liner
SAM26/WR13套	SAM26/WR13 Liner
CPM10V/WR5套	CPM10V/WR5 Liner
ZT610套	Ni-Based +Cu Liner
ZT615套	Ni-Based Liner
ZT625套	Ni-Based+Tungsten carbide Liner
ZT818套	Co-Based+Tungsten carbide Liner



复合套筒体 Composite Liner Barrel

ZT615A套	S45C+Ni-Based Liner
ZT620套含碳化铌	S45C+Ni-Based +NbC Liner



耐磨性能 Abrasion
耐腐性能 Corrosion

材料性能数据仅供参考。
Data provided for reference purposes.

激光熔覆 Laser Cladding

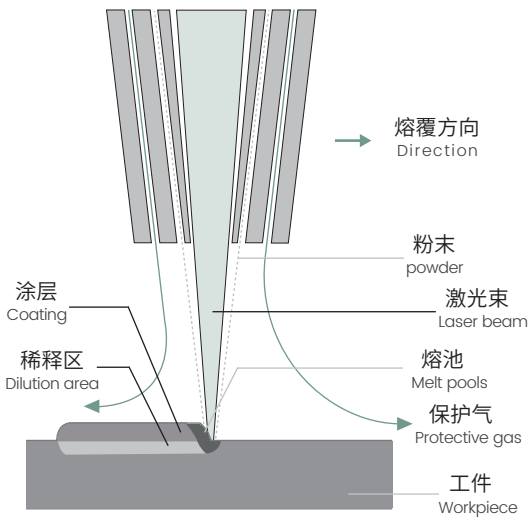
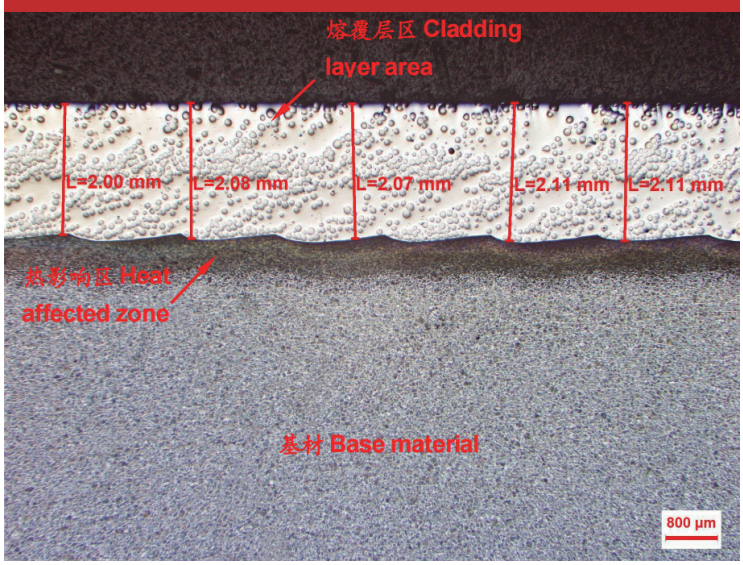


图 1 激光熔覆技术原理图

Fig.1 Laser Cladding Diagram

在筒体内壁激光熔覆2mm的镍基碳化钨，如 ZT715 和 ZT735 等

2mm Ni-WC coating (e.g., ZT715/ZT735) laser-cladded on barrel inner wall.



真空直覆 Vacuum Direct Cladded

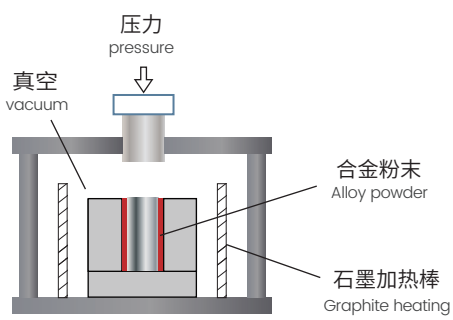
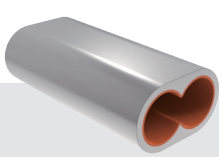


图 2 真空直覆套原理图

Fig.2 Vacuum Direct Cladded Diagram



在整体套内壁，直覆高性能合金，如：镍基合金 ZT615A 等

Directly clad high-performance alloy, such as nickel-based ZT615A , on the inner wall of the Barrel Liner.

冷等静压 Cold Isostatic Pressing

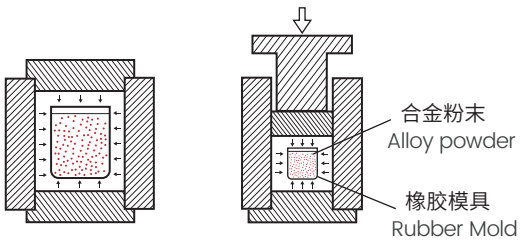


图 3 湿袋CIP技术
Fig.3 Wet Bag Process

为钴基碳化钨硬质合金提供了高均匀性、复杂成型的解决方案

Provides a solution with high uniformity and complex forming for cobalt-based tungsten carbide hard alloys.

冷等静压整体套工艺流程
CIP Process Steps for Barrel Liner



制粉 Powder Preparation
压机压制 Mechanical Pressing
冷等静压 CIP
烧结 Sintering
机加工 CNC Machining

真空热压 Vacuum Hot Pressed

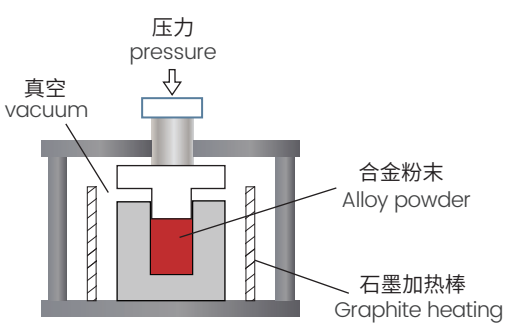
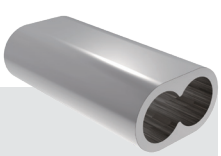


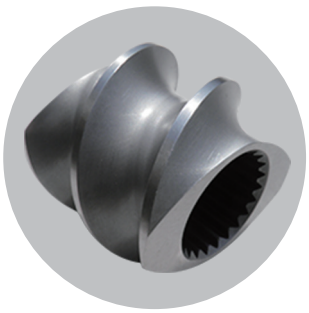
图 4 真空热压整体套原理图
Fig.4 Vacuum Hot Pressed Diagram



整个耐磨套都是高性能合金，如：ZT610、ZT615和ZT625等

The entire wear-resistant liner is made of high-performance alloys, such as **ZT610**, **ZT615**, and **ZT625**.

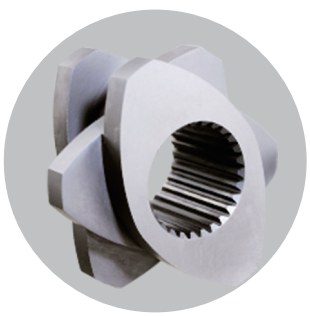
螺纹元件 SCREW SEGMENTS



输送元件 / Convey Element

将物料送进挤出机，导程的大小决定输送的快慢，在不同的功能区选用不同的输送元件，特殊设计的螺纹块还可以进一步提供喂料量。

For feeding and conveying the raw materials to the extruder.The pitch leads to delivery speed.Special design feeding screws can further increase capacity.



剪切元件 / Kneading Element

剪切分散物料，使物料部分或全部熔融后实现充分混合。

For heating the material to make some or all materials,mixing the materials fully.



特殊元件 / Special Element

物料的不同，选用特殊规格螺纹元件，实现各种需求，如三头&偏心元件，齿形盘，星形盘，转子，SK元件等

3KB Kneading block,SME Element,TME Element,ZME Element,Rotor Element,TKD Element,SK Element etc.

材料 MATERIAL

高速工具钢 W6Mo5Cr4V2	优质氮化钢 38CrMoAla	模具钢 Cr12MoV
不锈钢 WR30/WR45/304/316/316L/4Cr13/SUS440C/1.4112/9Cr18MoV		镍基合金 Ni60
PM-HIP粉末合金 SAM10/CPM10V/SAM39/X235/X245/X260/WR5/WR13/WR14		

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南京智田机电有限责任公司

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邮箱（Email）：zt@njzhitian.com

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