

GSmach
国 塑 装 备

塑料双螺杆挤出机 Plastic Twin Screw Extruder Machine

GSmach 是一家专业的双螺杆挤出机制造商。

我们为您的混料项目提供交钥匙解决方案。这包括材料处理、配料、挤出、造粒和其他方面。通过我们的专业知识，您可以找到满足您混料系统需求的合适解决方案。

GSmach is a professional twin screw extruder machine manufacturer.

We supply turn-key solutions to your compounding projects. This includes material handling, dosing, extrusion, pelletizing and other aspects. Through our expertise you will find suitable solutions to your compounding system needs.



型号 Model

设备型号 Types	齿轮箱型号 Gearbox series	螺杆直径 Dia(mm)	螺杆长径比 L/D	螺杆转速 N(r/min)	主电机功率 P(kw)	产量 Q(kg/h)
GS20	B	21.7	32-60	600	4	5-15
GS35	B	35.6	32-60	600	18.5	10-40
GS50	B	50.5	32-60	600	55	120-200
GS65	B	62.4	32-60	600	90	255-400
GS75	B	71	32-60	600	132	450-750
GS95	B	93	32-60	600	250	950-1600



您需要什么样的双螺杆挤出机？

GS mach 是一家专业生产双螺杆挤出机造粒生产线和备件的制造商，拥有高品质的机器和极具竞争力的价格。

以下是我们的一些热销生产线，供您参考

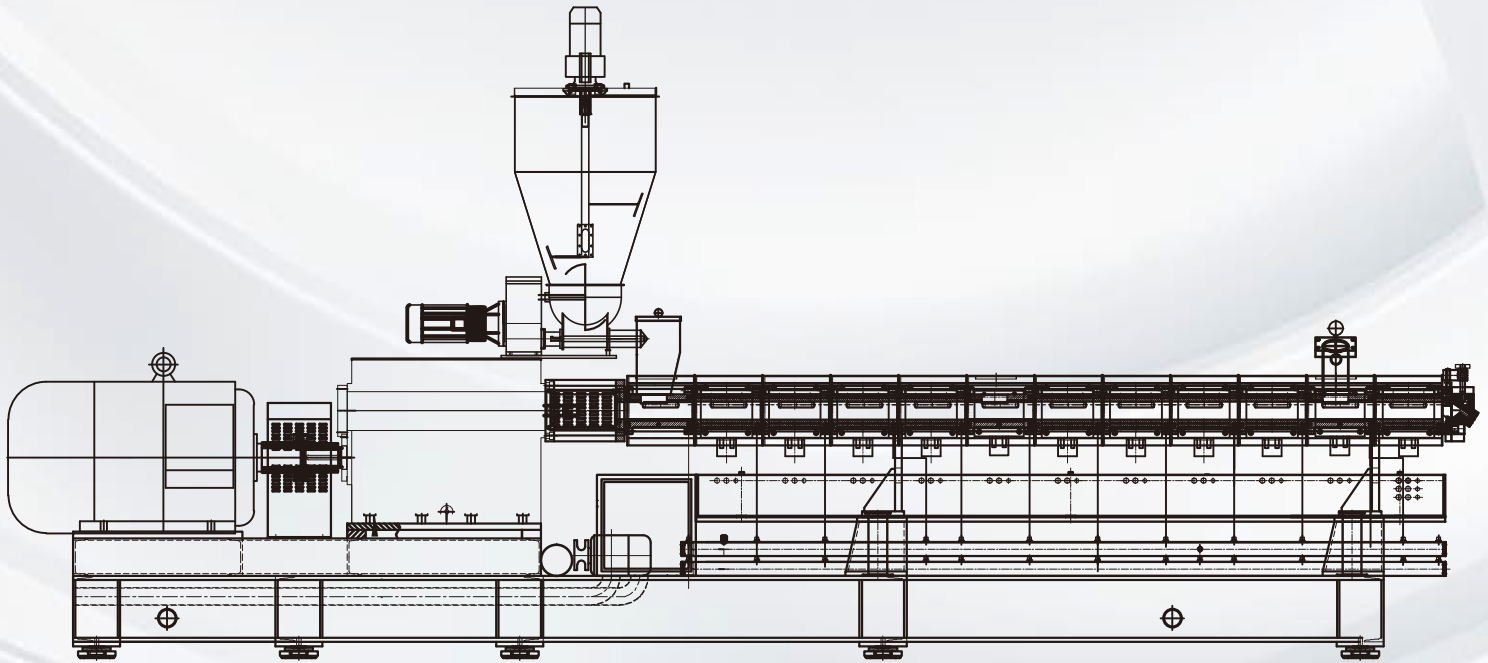
1. 聚乳酸 PBAT+ 玉米淀粉可降解颗粒生产线
2. PET 瓶片回收造粒生产线
3. EVA 热熔胶造粒生产线
4. PP/PE/EVA 等 +CaCO3/Talc/TiO2 填充料造粒生产线；
5. PE/PP/ABS/AS/PA/EVA/PET 等色母/白母/黑母造粒生产线；
6. HDPE/LDPE/LLDPE/MDPE/EVA/PVC/PP 等电缆复合生产线；
7. TPU/TPE/TPR/TPV 热塑性弹性体造粒生产线
8. 玻璃/碳纤维增强 PA/PP/PBT/ABS/AS/PC/POM/PPS/PET 等
9. 各种双螺杆元件、螺杆机筒、侧进料器、加热器等。

What Kinds Of Twin Screw Extruder Machine Do You Need ?

GS mach which is a manufacturing vendor, specializing in the twin screw extruder pelletizing line and spare parts, with high quality machine and competitive price.

Here are some of our hot sale production lines for your kind reference

1. PLA PBAT+ corn starch biodegradable pellets making line
2. PET bottle flakes recycling and pelletizing line
3. EVA hot melt adhesive pelletizing line
4. PP/PE/EVA etc.+CaCO3/Talc/TiO2 filler pelletizing line;
5. PE/PP/ABS/AS/PA/EVA/PET etc. color/white/black masterbatch pelletizing line
6. HDPE/LDPE/LLDPE/MDPE/EVA/PVC/PP etc. cable compounding line
7. TPU/TPE/TPR/TPV thermoplastic elastomer pelletizing line
8. Glass/carbon fiber reinforced PA/PP/PBT/ABS/AS/PC/POM/PPS/PET etc.
9. Various twin screw elements, screw barrels, side feeders, heaters, etc.



水下切造粒系统 Underwater Pelletizing System

水下造粒系统适用于大多数聚合物。特别是对于热塑性聚氨酯（TPU）和热塑性硫化弹性体（TPV）或类似弹性体，其优势更为明显。

GSmach 可以提供配备水下造粒系统的全套化合物生产线，如 TPU/TPV 生产线。

Underwater pelletizing system is good for most of polymers. Especially for TPU and TPV or similar elastomer, its advantage plays well.

GSmach can provide complete compounds production lines with underwater pelletizing system, such as TPU/TPV production line.



水下拉条切造粒系统 UnderWater Strand Pelletizing System

该系统适用于需要频繁更换过滤器的塑料回收。

在水流的作用下，绳索会自动进入切料机，即使在更换过滤器时绳索断裂也是如此。因此，在生产过程中几乎不会产生废料。

该系统由刨花模具、水浴、刨花造粒机、离心脱水机和振动分级机组成。

This system is suitable for plastics recycling where filters need to be changed frequently.

The rope enters the pelletizer automatically under the action of the water flow, even when the rope breaks during filter changes. As a result, there is virtually no waste in the production process.

The system consists of a strand mould, water bath, strand pelletizer, centrifugal dewaterer and vibratory classifier.



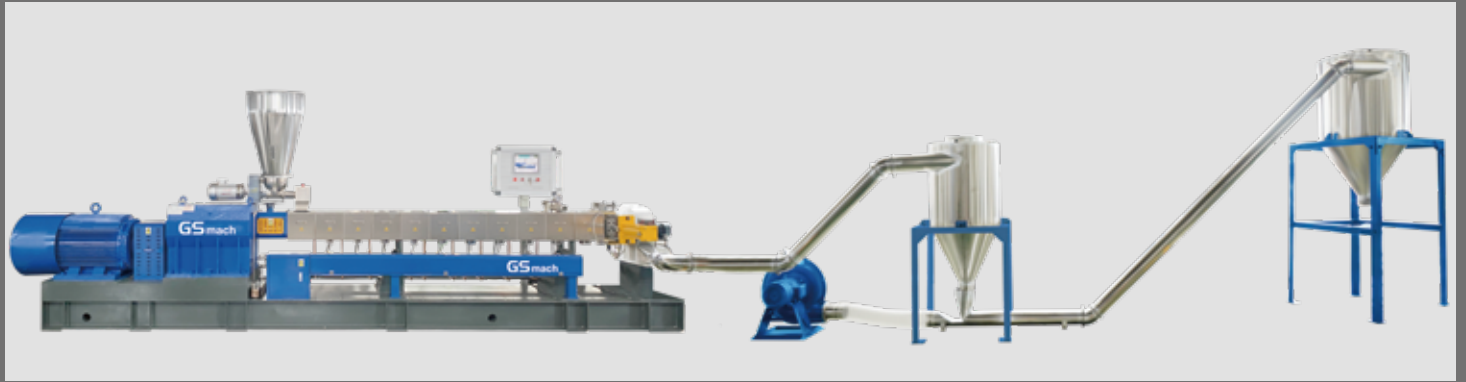
风冷模面热切造粒系统 Air Cooling Die Face Pelletizing System

该系统包括一个捏合机/班伯里双级造粒机。它适用于某些配方，如 PVC、LLDPE、高填充母料、生物降解母料、HFFR、WPC 等。根据原料的特性，可提供环形和离心式两种型号。这种系统的优点是可以防止原料遇水，而这对某些原料来说是必不可少的。

该系统包括模头、空气冷却造粒机、空气冷却输送机和振动分级机。

The system incorporates a kneader/banbury two stage granulator. It is suitable for certain formulations such as PVC, LLDPE, highly filled masterbatches, biodegradable masterbatches, HFFR, WPC, etc. Depending on the characteristics of the raw material, ring and centrifuge versions are available. The advantage of this system is that it prevents the material from encountering water, which is essential for certain materials.

The system includes die heads, air cooled granulators, air cooled conveyors and vibratory classifiers.



水环造粒系统 Water Ring Pelletizing System

它适用于某些配方，如 PE/PS/EVA/TPU 等。最终造粒的外观更漂亮，流动性更好。生产线长度比较线造粒短。

该系统包括水环造粒机、水循环系统、离心脱水和振动分级机。

It is suitable for certain recipes, such as PE/PS/EVA/TPU etc. The final pellet looks nicer and has good flowability. The length of production line is shorter than that of strand pelletizing.

This system includes water ring pelletizer, water circulating system, centrifugal dewater and vibrating classifier.



风冷输送带造粒系统 Air Cooled belt Pelletizing System

生物降解塑料是不可抗拒的趋势。

GSmach 是生物塑料全套挤出生产线的专家。我们可以为生物塑料的挤出和共混提供全套设备。

1. 聚乳酸树脂全套设备解决方案
2. 水溶性包装袋交钥匙解决方案

Biodegradable plastics are an irresistible trend.

GSmach is a specialist in complete extrusion lines for bioplastics. We can supply the entire range of equipment for the extrusion and compounding of bioplastics.

1. Complete plant solutions for PLA resins
2. Turnkey solutions for water-soluble packaging bags



水拉条切造粒系统 Water Cooling Strand Pelletizing System

它适用于大多数聚合物的复合生产，具有结构简单、易于操作和维护方便的特点。操作门槛也非常低。该系统由绞线模头、水批、气刀、绞线造粒机和振动分级机组成。

It is suitable for the compound production of most polymers and is characterised by its simple construction, easy operation and convenient maintenance. The operator's threshold is also very low.

The system consists of a strand die, water batch, air knife, strand pelletizer and vibratory classifier.



双阶造粒机 Two Stage Screw Extruder

某些聚合物要求在水无湿的条件下进行造粒，因此挤出系统应具有足够的冷却能力，以满足这一工艺的需要；有些材料被分为剪切敏感型或热敏感型。双级螺杆挤出系统就是为这类工艺设计的。初级双螺杆挤出机可在不产生过剪切力的情况下进行混合和分散，低速单螺杆挤出机可提供足够的冷却和压力积聚。

Certain polymers require pelletizing to be carried out under conditions without water and moisture, so that the extrusion system should have sufficient cooling capacity to cater for in this process; some materials are sorted into shear-sensitive or heat-sensitive categories. Two Stage Screw Extrusion System is designed for such processes. Primary twin screw extruder provides mixing and dispersion without over-shear, lower speed single screw extruder provides enough cooling and pressure accumulation.



型号 Model

设备型号 Types	螺杆转速 N(r/min)	电机功率 P(kw)	产量 Q(kg/h)
GS50-100	500-600/60-90	37-55/22-45	200-300
GS65-150	500-600/60-90	55-75/45-55	400-500
GS75-180	500-600/60-90	75-132/75-90	600-800
GS95-200	400-500/60-90	250-315/90-132	1000-1500



密炼单螺杆造粒机 Kneader (Banbury) Single Screw Compound Machine

中国首家塑料密炼机出口制造商

作为中国第一家出口双级混炼机的塑料机械制造商。在土耳其等地，它非常受欢迎，我们非常乐意为客户带来价值。机器定制和参数可与我们联系。

The first export manufacturer of plastic Kneader machines in China

As the first export manufacturer of plastic machinery in China about Two stage/Kneader machine. In places like Turkey, it's very popular, we are very happy to bring value to our customers. Machine customization and parameters can be contacted with us.



密炼机 + 单螺杆挤压机 = 密炼单螺杆挤出机

Kneader (Banbury) + Single screw extruder = Kneader (Banbury) Single Extruder Compound Machine.

加工工艺：密炼机--斗式输送机--锥形双螺杆强制喂料机--单螺杆挤出机混料--风冷热面切割系统/水环切割系统--料仓
Kneader banbury ---bucket conveyor ---Conical twin screw force feeder---single screw extruder compound---Air Cooling Hot Face Cutting System/water ring cutting system---Silo

简介

密炼机可将所有混合物料按批次混合在一起，就像将面粉按内批次反复揉搓一样。

所有物料经密炼机混合后，大块热软混合物料将从密炼机通过斗式输送机送入锥形双力喂料机，然后被推入单螺杆挤压机，物料再次均化并通过模头。

Introduction:

Kneader (banbury) can put all the compounding mixing them together by batch, like kneading flour again and again by inner batch.

After all the materials are mixed by kneader(Banbury), the large HOT and SOFT mixed materials will be fed from the kneader through Bucket conveyor to the cone double force feeder, and then pushed into the single-screw extruder, the materials are homogenized again and passed through the die.

最佳应用:

高填充母料: PE/PP+超过 85%Caco3

色母料化合物

EVA 泡沫母料

黑色母粒

石头纸色母

无纺布母粒

编织袋母料

Best Application:

High Filler Masterbatch:PE/PP+over 85%Caco3

Color Masterbatch Compound

EVA Foam Masterbatch

Black Masterbatch

Stone Paper Masterbatch

Non-woven Masterbatch

Woven Bag Masterbatch





优势:

密炼机采用自动温度和时间控制系统，精确、简单、易于操作，搅拌可达到最佳均匀分散效果。

搅拌罐可倾斜，搅拌轴防漏，采用干式机械轴封，便于清洗和换色。

加压密炼机不仅能确保混合特性和质量，还能防止环境污染。

内混料机的密炼机由高级合金钢制成，表面经耐磨钢处理。表面电镀硬铬，耐磨性极佳。上下挤出机的功能分离，操作员可以进行更灵活、更可预测的混合过程和温度控制。

锥形双螺杆强制喂料机为夹套焊接结构，可通过水冷却或油/热水/蒸汽加热来调节温度，以满足不同物料的工艺要求。喂料锥形双螺杆采用变直径、变扭矩收敛结构，提高了物料的挤出能力。同时，采用扁平喷嘴头，提高了挤出材料的密度，表面光滑。

单螺杆的直径相对较大，当物料通过单螺杆时，物料的压力可以得到最大限度的释放，物料通过机头的大换网装置均匀稳定地挤出，保证了物料质量的长期稳定。

Advantage:

The kneader (Banbury) adopts an automatic temperature and time control system, which is accurate, simple and easy to operate, and the mixing can achieve the best uniform dispersion effect.

The mixing tank is tiltable, and the mixing shaft is leak-proof and adopts a dry mechanical shaft seal to make it easy to clean and change colors.

The pressurized kneader(Banbury) can not only ensure the mixing characteristics and quality, but also prevent environmental pollution.

The kneader(Banbury) of the internal mixer is made of high-grade alloy steel, and the surface is treated with wear-resistant steel. The surface is electroplated with hard chromium and has excellent wear resistance. The functions of the upper and lower extruders are separated, and the operator can perform a more flexible and predictable mixing process and temperature control.

The diameter of the single screw is relatively large, when the material passes through the single screw, the pressure of the material can be released to the maximum, and the material is uniformly and stably extruded through the large screen changer in the head to ensure the long-term stable quality of the material.

型号 Model

设备型号 Types	密炼机 Kneader	电机功率 P(kw)	产量 Q(kg/h)
GS100	35L	55	100-200
GS120	55L	75	200-300
GS120	75L	110	400-600
GS150	110L	160	600-800
GS180	150L	220	800-1200



密炼双阶造粒机 Kneader (Banbury) Two Stage Extruder Compound Machine

中国首家塑料密炼机出口制造商

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密炼机 + 双螺杆挤压机 + 单螺杆挤压机 = 密炼双阶挤出机

Kneader (Banbury) + Single screw extruder = Kneader (Banbury) Single Extruder Compound Machine.

加工工艺：密炼机----高速混合机----螺旋上料 Kneader (Banbury) --- High Speed Mixer---Spiral Loader---Twin
机----双螺杆挤出机混料----单螺杆挤出机混料 Screw Extruder Compound---Single Screw Extruder Com-
----风冷热面切割系统/水环切割系统----料仓 compound---Air Cooling Hot Face Cutting System---Silo

优势：

通常情况下，上层双螺杆复合挤出机的高速运转能达到更好的混合效果和更高的产量。下级单螺杆挤出机是一种直径较大的挤出机，能够低速运转。低速单螺杆可避免过度剪切发热，较大直径单螺杆内部的冷却系统可避免过热，热交换能力强。

上挤压机和下挤压机的功能分离，操作员可以进行更灵活、更可预测的混合过程和温度控制。

产能远远高于单双螺杆挤出机。

日常维护成本非常低。

Advantage:

Usually the high-speed operation of the upper-stage twin-screw compound extruder has achieved better mixing effect and higher output. The lower-stage single-screw extruder is an extruder with a larger diameter and capable of running at a low speed. The low-speed single screw can avoid over-shearing heat, and the cooling system inside the larger diameter single screw can avoid overheating and strong heat exchange capacity.

The functions of the upper and lower extruders are separated, and the operator can perform a more flexible and predictable mixing process and temperature control.

The capacity will be much higher than only twin screw extruder.

Daily maintenance costs are very low.





最佳应用：
 PVC 电缆复合材料
 化学交联电缆化合物
 木塑化合物
 高填充母料化合物
 TPE/TPR 鞋底材料
 填充母料化合物

Best Application:
 PVC Cable Compound Material
 Chemical Cross-linking Cable Compound
 Wood Plastic Compound
 High Filler Masterbatch Compound
 TPE/TPR Shoe Sole Material
 Filler Masterbatch Compound



型号 Model

设备型号 Types	单双螺杆挤出机 Single / Twin Screw Extruder	电机功率 P(kw)	产量 Q(kg/h)
r (Banbury) + Single screw extruder = Kneader (Banbury) Single Extruder Compound Machine.			
GS50/100	GS50 Twin Screw Extruder	37~55	300~400KG/H
	GS100 Single Screw Extruder	22~44	
GS65/150	GS65 Twin Screw Extruder	55~75	400~600KG/H
	GS150 Single Screw Extruder	45~55	
GS75/180	GS75 Twin Screw Extruder	75~132	600~800KG/H
	GS180 Single Screw Extruder	75~90	
GS95/200	GS95 Twin Screw Extruder	250~315	1000~1500KG/H
	GS200 Single Screw Extruder	90~132	



塑料挤出 (可生物降解 /PVA)、吹膜和包装袋制造交钥匙项目。 (Biodegradable/PVA) Plastic Extrusion, Blown Film, Bag Making Turnkey Project

吹膜印刷袋制造工艺

- (1) 混合定量机: (普通混合机、带干燥系统的定量机、混合式定量机、捏合机)。
 - (2) 吹膜机: (高、低压吹膜机, 新、旧料吹膜机; 常规杆径比 $\Phi 45\sim 55\text{mm}$ 的小型吹膜机; 长杆径比 $\Phi 50\sim 80\text{mm}$ 的中型吹膜机; 长杆径比 $\Phi 70\sim 120\text{mm}$ 的大型吹膜机; 特殊用途吹膜机)。
 - (3) 调速电机: (电磁调速型、变频调速型)。
 - (4) 控制、监控、配电系统: (根据主机而定)。
 - (5) 模头: (普通模头、旋转模头、特殊模头)。
 - (6) 绕线环: (常规、合金、特殊)
 - (7) 空气压缩机: (小型、中型、大型)
 - (8) 主机架: (常规、升降、特殊)
 - (9) 卷绕机构: (常规卷绕; 矩切卷绕--单卷或双卷; 特殊)
 - (10) 电子冲击机: (小型、中型、大功率)
 - (11) 专业凹版彩色印刷机组: (500~600型, 单色、多色组合; 远红外烘干系统; 单、双面印刷; 360度收版定位系统)
 - (12) 专业高速制袋机: (450~650型, 特殊规格型号; 常规光控、电脑扫描、色标跟踪; 主变频电机、直流调速电机; 高速单、双层热封冷切或热封热切、电脑点断连续卷式制袋机、三边封专用制袋机)
 - (13) 冲孔机: (3T~12T机械、电动多用)
- 上图: (1)~(9)可用于生产农膜、包装膜等产品的新旧颗粒状原料; (1)~(13)可用于生产普通袋、彩印袋等产品的新旧颗粒状原料;
(12)~(13)可直接用半成品吹塑薄膜卷加工塑料袋。

Blown film printing bag making process

- (1) Mixing and batching machine: (ordinary mixer, batching machine with drying system, mixing and kneading type batching machine)
 - (2) Blown film machine mainframe: (high and low pressure blown film machine, new and old material blown film machine; small blown film machine $\Phi 45\sim 55\text{mm}$ conventional rod diameter ratio; medium-sized $\Phi 50\sim 80\text{mm}$ long rod diameter ratio; large $\Phi 70\sim 120\text{mm}$ long rod diameter ratio; special purpose blown film machine).
 - (3) Speed-regulating motor: (electromagnetic speed-regulating type, frequency conversion speed-regulating type)
 - (4) Control, monitoring, power distribution system: (customised according to the host)
 - (5) Die head: (normal size die head, rotary die head, special die head)
 - (6) wind ring: (conventional, alloy, special)
 - (7) Air compressor: (small, medium, large)
 - (8) The main frame: (conventional, lifting type, special)
 - (9) Winding mechanism: (conventional winding; moment slice winding - single or double winding; special)
 - (10) Electronic impact machine: (small power, medium and high power)
 - (11) Professional gravure colour printing unit: (500~600 types, single-colour, multi-colour combination; far-infrared drying system; single- and double-sided printing; 360-degree version of the rewinding and positioning system)
 - (12) Professional high-speed bag-making machine: (450~650 type, special specification type; conventional light control, computer colour scale scanning and tracking; frequency conversion main motor, DC speed control motor; high-speed single and double-layer heat sealing and cold cutting or heat sealing and hot cutting, computer point break continuous roll bag-making machine, three-side sealing special bag-making machine)
 - (13) Punching machine: (3T ~ 12T mechanical, electric multiple)
- Above: (1)~(9) supporting the new particles or old particles of raw materials can be used to produce agricultural film, packaging film and other products; (1)~(13) supporting the new particles or old particles of raw materials can be used to produce ordinary bags, colour-printed bags finished products;
(12)~(13) matching can be used directly with blown semi-finished plastic film rolls processing plastic bags.



组织结构图 Flow Chart



100% biodegradable

Under industrial compost conditions, It can be completely degraded in about 180 days



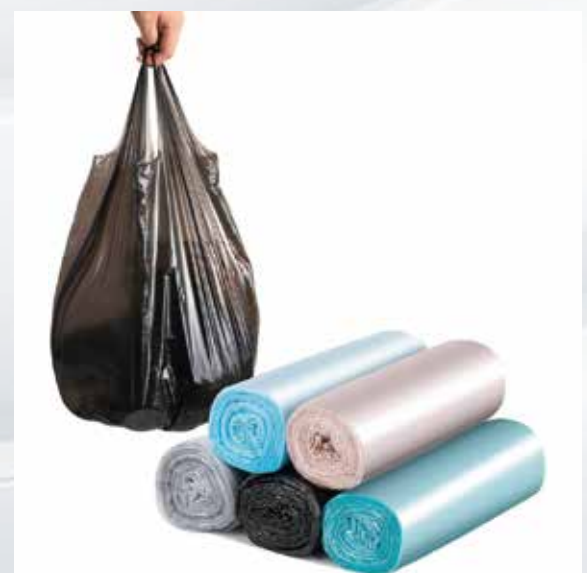
Our Manufacturing Operation



用途 Usage

吹膜机是将塑料颗粒加热融化后吹制成卷膜，后续用途可切割成袋状，如垃圾袋、马甲袋、购物袋、塑料袋、方便袋、信使袋、奶茶袋、保鲜袋、尿布袋等！

Blown film machine is the plastic particles heated and melted and then blown into film rolled up, the use of the later can be cut into bags, such as rubbish bags, vest bags, shopping bags, plastic bags, bags, convenience bags, courier bags, milk tea bags, preservation of freshness, bags, diaper bags and so on!



失重秤系列造粒设备 Loss-in-Weight Scale Series Pelletising Equipment

失重秤造粒机自动供料系统满足化工，改性塑料等行业的连续，恒流量给配料的自动化生产要求，与加料机运用动态控制技术进行全自动操作，大幅度提高配料的准确性。

在生产过程中，主料、再生料、添加剂经过失重计量喂料器精确配料，均匀、连续地将物料喂送到下一道工序，并且能够承受较大的仓压。再由气力输送系统送到搅拌料斗，通过与挤出机产能同步的失重计量喂料器精确供料给挤出机。本机构造简单，调整方便，性能优越。

综上所述，失重秤喂料机的高精度计量、动态调节、灵活性、过程监控和自动化控制等优点使其成为工业生产中广泛使用的喂料设备。

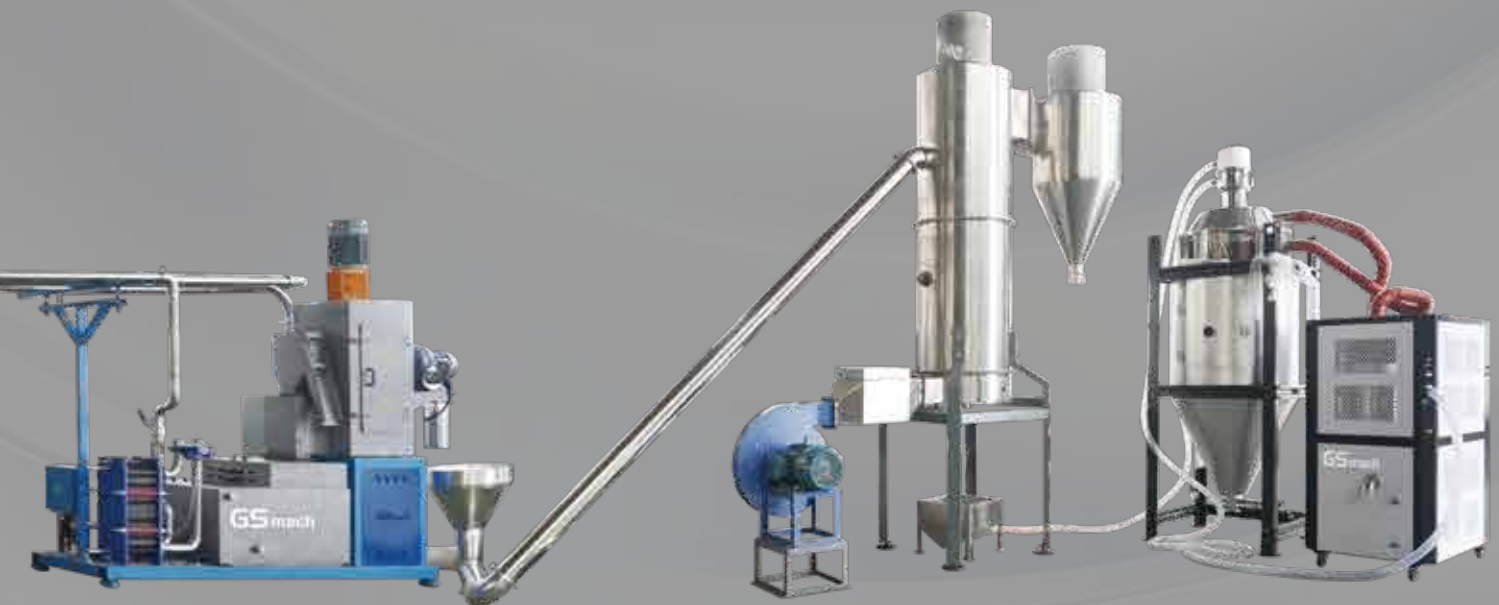
Loss-in-weight weighing granulator automatic feeding system to meet the chemical industry, modified plastics and other industries, continuous, constant flow to the dosing of automated production requirements, and dosing machine using dynamic control technology for fully automatic operation, greatly improving the accuracy of the dosing.

In the production process, the main material, recycled material, additives through the loss-in-weight metering feeder accurate dosage, uniform, continuous feeding materials to the next process, and can withstand large warehouse pressure. Then it is sent to the mixing hopper by the pneumatic conveying system, and accurately supplied to the extruder through the loss-in-weight metering feeder synchronised with the extruder's capacity. This machine is simple in construction, easy to adjust and has superior performance. In summary, the advantages of loss-in-weight feeders such as high-precision metering, dynamic adjustment, flexibility, process monitoring and automation control make them widely used feeding equipment in industrial production.





失重秤 95 双螺杆水下切造粒设备
Loss-in-weight scale 95 twin screw underwater cutting granulation equipment



3D 打印拉丝机 3D Printer Filament Extruder Machine



GS-mach 提供 3D 打印机灯丝挤出机。主要生产 3D 打印机长丝，支持各种原材料，排线整齐，卷装整齐。采用先进的 PLC 技术，生产方便，操作简单。我们在美国等国家都有客户，受到一致好评。我们在挤出机行业拥有超过 14 年的丰富经验。我们是 3D 打印长丝生产线的专业制造商。

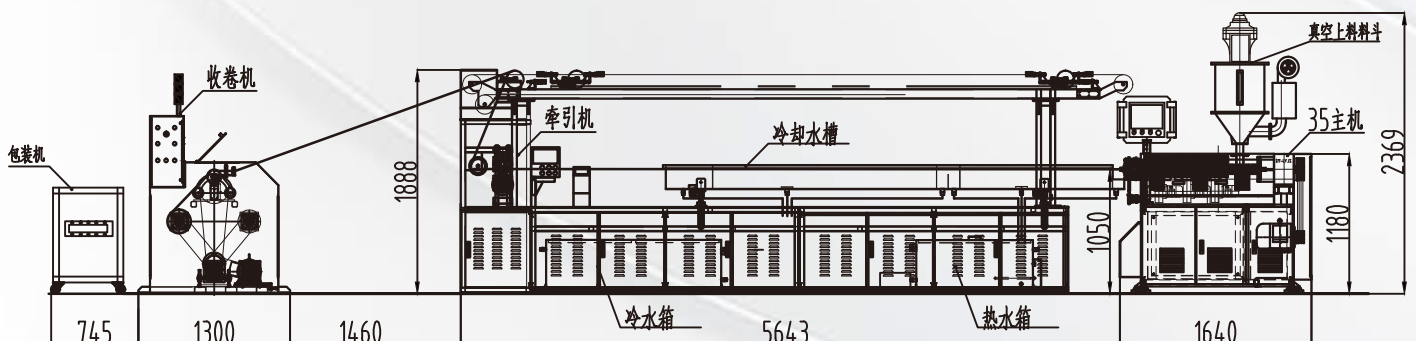
GS-mach provides 3D printer filament extruder. The main production of 3D printer filament production, support all kinds of raw materials, line neatly and roll up neatly. With advanced PLC technology, production is convenient, simple operation. We in the United States and other countries, there are customers, by the unanimous praise. Our company has more than 14 years of rich experience in the extruder industry. We are professional in 3D printing filament production line.

型号 Model

设备型号 Types	误差 Tol (mm)	螺杆直径 Dia(mm)	螺杆长径比 L/D	主电机功率 P(kw)	产量 Q(kg/h)	材料 Material
GSD20	+0.05	1.75-3	28~32	0.4	1-2	PLA ABS PS PA PETG PEEK BVOH
GSD35	+0.03	1.75-3	28~32	4	8-15	PLA ABS PS PA PETG PEEK BVOH
GSD45	+0.03	1.75-3	28~32	7.5	15-30	PLA ABS PS PA PETG PEEK BVOH
GSD65	+0.03	1.75-3	28~32	15	30-50	PLA ABS PS PA PETG PEEK BVOH

3D 打印拉丝机流程图解 Production Flow of 3D Printing Filament

混色机 → 真空上料机 → 烘干料斗 → 挤出机 → 模具 → 热水槽 → 冷水槽 → 测径仪 → 牵引机 → 收卷机
 Mixer → Vacuum Loader → Hopper dryer → Extruder → Mould → Hot Water Tank (Forming) → Cooling Water Tank (Cooling) → Traction Machine → Winding Machine (Automatically winding)/Reel in neatly



机器优势

- 1.与使用相同型号的其他供应商相比，产能大。
- 2.完美的公差： +/-0.03毫米，甚至+/-0.02毫米。
- 3.可生产 1.5mm~3.0mm 不同直径的长丝。
- 4.操作简便： PLC 全自动控制系统。
- 5.生产不同的原材料： ABS PLA PA HIPS PET PEEK
- 6.维护成本低。

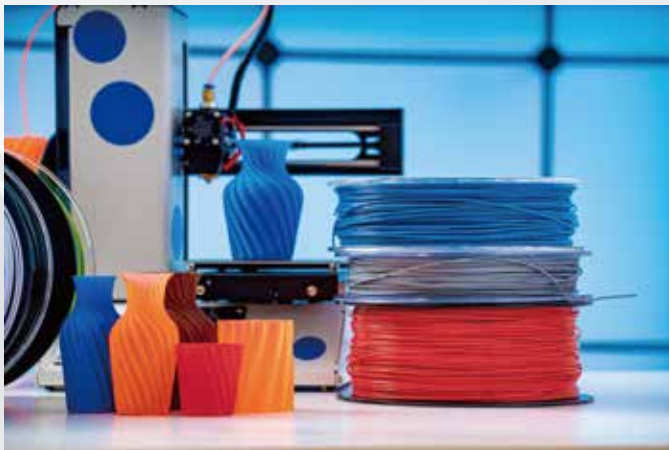
Machine advantages

- (1) Larger capacity compared with other suppliers with the same model
- (2) Perfect tolerance: +/-0.03mm, even+/-0.02mm.
- (3) Produce the different diameter of filament from 1.5mm~3.0mm.
- (4) Easy operation: PLC full-automatically control system.
- (5) Produce different raw material:ABS PLA PA HIPS PET
- (6) Low maintain.

特点 Features

3D打印领域的塑料丝一般是通过熔融挤出方法制造的。塑料颗粒或颗粒材料被加热熔化，并通过挤出机的螺杆将熔化的塑料挤出成细丝。这种细丝通常以卷轴盘或卷筒形式供应给3D打印机使用。

Plastic filaments in 3D printing are generally manufactured by melt extrusion methods. Plastic pellets or granular material are heated to melt and the melted plastic is extruded into filaments by means of a screw in an extruder. This filament is typically supplied to 3D printers for use in spooled discs or reels.



双螺杆塑料片材生产线 Twin Screw Sheet Production Line



双螺杆片材机具有低能耗，高效率，优良的分散性等特点。

适用于 PET 片材时可以达到免结晶，免干燥的特点，同时我们采用 PET 专用合金钢薄壁辑组，使冷却效能大幅提高从而增大产量，提高制品韧性，透明度。另外我司独立编程的操作系统保证了设备的人性化，易操作型。

双杆片材机因其具有双螺杆与生俱来的优势，适用于多种物料如 :PP PE PS PET PLA PVA 及多种复合材料。

The twin-screw sheet machine has the characteristics of low energy consumption, high efficiency, excellent dispersibility and so on.

When applied to PET flakes, it can achieve the characteristics of famous crystallisation and free drying. At the same time, we adopt the PET special alloy steel thin-wall series group, which can greatly improve the cooling efficiency and thus increase the output, improve the toughness and transparency of the products. In addition, our independently programmed operating system ensures that the equipment is friendly using and easy to operate.

Because of the inherent advantages of twin-screws, the twin-screw sheet machine is suitable for a wide range of materials such as: PP PE PS PET PLA PVA and a variety of composite materials.

型号 Model

型号 Model	GS 50/65/75/95
适用原料 Materials	PLA/PP/PE/PET/PS...
制品宽度 Width	400-2000mm
制品厚度 thickness	0.15-2.5mm
挤出机规格 Extruder specification	Φ50.5, Φ62.4, Φ71, Φ93
挤出产量 Capacity	50-900Kg

优势 Advantages

1. 智能化的先进控制系统，网络传输速度迅速，使信息的传送误差大大减少，使设备的速度、压力、物料输送更加稳定。
2. 收卷部分采用伺服控制，更加准确，和整机具有速度同步功能，让收卷更方便简单，也更具有安全性。
3. 全套采用国际一线品牌西门子变频伺服控制，以太网传导技术控制，实现高效率、高精度、高稳定、高安全性。在设备故障时快速定位错误并能够进行远程维护，可通过 HMI 实现通道级诊断和错误分析，大大减少调试与生产停机时间。高数字化的系统使调试更简单，维护更便捷。
4. 完备的售后服务体系，从设备安装调试到高质量产品的生产制造，并提供终身技术支持，让客户无后顾之忧。

1. Intelligent advanced control system, rapid network transmission speed, so that the transmission error of information is greatly reduced, so that the speed, pressure, material conveying equipment more stable.
2. The winding part of the servo control, more accurate, and the whole machine has a speed synchronization function, so that the winding is more convenient and simple, but also more secure.
3. A full set of international first-class brand Siemens frequency conversion servo control, Ethernet conduction technology control, to achieve high efficiency, high precision, high stability, high security. In case of equipment failure, we can quickly locate errors and perform remote maintenance, and we can realize channel-level diagnosis and error analysis through HMI, which greatly reduces debugging and production downtime. The high digital system makes debugging easier and maintenance more convenient.
4. Complete after-sales service system, from equipment installation and commissioning to the manufacture of high-quality products, and provide life-long technical support, so that customers have no worries.

单螺杆塑料片材生产线 Single Screw Sheet Production Line

PP、PE 单层及多层共挤片材生产线，目前国内技术稳定、工艺成熟、设备稳定的片材生产线之一，与国内同类设备相比，综合效能高 30% 以上。

PP, PE single-layer and multi-layer co-extruded sheet production line, one of the sheet production lines with stable technology, mature technology and stable equipment in China at present, and the comprehensive efficiency is more than 30% higher compared with the similar equipment in China.



型号 Model

设备型号 Equipment model	制品宽度 Product width (mm)	制品厚度 Product thickness (mm)	产量 Output (kg/h)
GSD120/65-1000	400-2000	0.1-3mm	600
GSD120-1000	400-2000	0.1-3mm	550
GSD150-1500	400-2000	0.1-3mm	1000

组成部分及说明 Components And Descriptions

1. 原料干燥罐 一套 → 2. 真空上料机：一套 → 3. 真空负压系统 一套 → 4. 双流道过滤器：一套 → 5. 熔体计量泵：一套 → 6. 专用型模具 → 7. 涂硅油烘箱装置：一套 → 8. 边料剪切装置：一套 → 9. 牵引机：一套 → 10. 双工位收卷机：一套 → 11. SIEMENS 人机界面控制系统

1.Raw material drying tank : one set → 2.Vacuum loading machine : one set → 3.Vacuum negative pressure system : one set → 4.Double flow channel filter: one set → 5.Melt metering pump: one set → 6.Special type mold → 7.silicone oil coating oven device: a set → 8.Side material shearing device: one set → 9.Traction machine: one set → 10.Duplex winder: one set → 11.SIEMENS human-machine interface control system



吸塑机 Blister machine

吸塑机又叫热塑成型机，是将加热塑化的 PLA 等热塑性塑料卷材吸制成各种形状的高级包装装璜盒、框等产品的机器。利用真空泵产生的真空吸力，将加热软化后的 PET 等热可塑性塑料片材经过模具吸塑成各种形状的真空罩、吸塑托盘、泡壳等。其机器主要构造是由给料、拉料、上下电加热炉、下闸、多功能可调尺寸、下模盘、上模、上闸、刀闸、切片、放片及配以真空装置等构成。

Blister machine, also called thermoforming machine, is a machine that blisters heated and plasticized PLA and other thermoplastic coils into various shapes of advanced packaging and decoration boxes, frames and other products. The vacuum pump generates the vacuum suction, and then the heated and softened PLA and other thermoplastic sheets are sucked into various shapes of vacuum covers, blister trays and blisters through the mold.

The main structure of the machine is composed of material feeding, material pulling, upper and lower electric heating furnace, lower gate, multi-functional adjustable size, lower die plate, upper die, upper gate, knife gate, slicing, sheet release and with vacuum device.



型号 Model

型号 Model	GSX 61A/61B/61C
适用原料 Materials	PLA/PP/PE/PET/PS...
设备宽度 Width	400-2000mm
制品厚度 thickness	0.15-2.5mm
挤出机规格 Extruder specification	Φ50.5, Φ62.4, Φ71, Φ93
挤出产量 Capacity	Adjustable

特点 Features

1. 其主要特点在于采用了真空成型机构，运用塑料片材成型工艺技术，是集机、电、气一体化设计，采用微电脑及工控可编程器 PLC 控制，整个系统 HMI (人机界面)，自动化程度高。
 2. 专用于热成型和产品自动收卷的流水式生产线。加工高透明、高拉伸、浅拉伸、圆型、方型、不规则、上下双向拉伸、翻边等产品，生产各种生物降解盒、碟、托盘、碗、盖、工业包装类等包装制品。
1. Its main feature is the adoption of vacuum forming mechanism, the use of plastic sheet forming process technology, is a set of machine, electricity, gas integrated design, the use of microcomputer and industrial control programmable PLC control, the whole system HMI (human-machine interface), a high degree of automation.
 2. A flowing production line dedicated to thermoforming and automatic product winding. Processing high transparent, high stretch, shallow stretch, round, square, irregular, up and down bi-directional stretch, flanging and other products, producing various biodegradable boxes, plates, trays, bowls, lids, industrial packaging and other packaging products.

热成型工艺流程图解 Thermoforming process flow diagram

塑料片材 → 切割 → 片材固定 → 加热 → 成型 → 脱模 → 去料边 → 成品

Plastic sheet → cutting → sheet fixing → heating → forming → Demoulding → Dematerial edge → Finished product

案例 Case

编号 No.	名称 Name	参数 Specification & Model	编号 No.	名称 Name	参数 Specification & Model
1	形成方法 Forming method	正面和负面 Positive and negative	8	拉进系统 Pull-in system	台湾 "台达" 3KW 伺服马达 Taiwan "Delta" 3KW Servo motor
2	成型尺寸 Forming size	成型宽度: 50-2000 毫米 Forming length: 350mm-550mm; Forming width: 410mm-600mm	9	成型单元 Forming unit	上、下模: 由 "Delta" 伺服电机驱动 3KW 连杆结构 Upper、lower die: 3KW drive by "Delta" servo motor connecting rod structure
3	成型高度 Forming height	≤100 毫米 ≤100mm	10	裁切单元 Cutting unit	上、下模: 5.5KW, 由 "Delta" 伺服电机连杆结构 驱动。 Upper、lower die: 5.5KW drive by "Delta" servo motor connecting rod structure
4	材料和厚度 Material&thickness	生物降解片材 / 0.15 毫米 -2.0 毫米 PVC、PET、PS、PP And so on. 0.15mm-2.0mm	11	堆叠单元 Stacking unit	产品未完全切开, 用三角伺服电机配合吸盘将产品 自上而下堆放。 产品可以完全切割, 用机械手抓取和堆放 使用机械手 (两用) 在传送带上抓取和堆放。 The product is not completely cut, using delta servo motor with suction cup to stack the product top down. The product can be completely cut and used to grab and stack the conveyor belt with a manipulator (dual purpose).
5	送料系统 Feeding system	由电机自动送料, 最多可送 200 公斤一卷材料。可 选择增加硅胶注射系统 Automatic feeding by motor, up to 200KG a roll of material.Optional addition of silicone injection system	12	回收系统 Recycling system	德国 "JSCC" 可调节扭矩的充电马达 Germany "JSCC" Adjustable torque motor recharging
6	加热系统 Heating system	上、下加热炉采用 54 块 600W 的节能 600W 的加 热砖, 上、下层加热分为两部分。 The upper and lower heating furnace adopts 54 energy saving heating bricks of 600W, and the upper and lower heating is divided into two sections.	13	控制系统 Control system	台湾 "台达" 10.1 英寸触摸屏, PLC: 台湾 "台达" Taiwan "Delta" 10.1"inch touch screen, PLC: Taiwan "Delta"
7	温控系统 temperature control system	采用上海 "奥一" 温控模块, 逐一控制温度, 具有 快速加热和快速调节功能 Adopt Shanghai "AOYI" temperature control module to control the temperature one by one, can quickly heat and quickly adjust the function			

用途 Usage



吸塑机生产线被广泛应用于可降解的餐盘, 杯子和容器的生产。

Blister machine production line is widely used in the production of biodegradable plates, cups and containers.

PP PE EVA 塑料淋膜机 PP PE EVA Plastic Laminating Machine

机器主要部件: 挤压式主机, 单板单工位过滤器, 溶体静态混合器, 淋膜专用型模具, 螺杆上料装置, 料斗型干燥机, 淋膜复合成型系统, 模具上方抽油烟装置, X射线自动测厚仪, A双工位放卷系统, 纠偏装置, 胚布静电消除装置, LED照明观测装置, 边料风送装置, 牵引机, 双工位自动卷绕系统, SIEMENS人机界面控制系统

Machine Main parts: Extruder, Single board single station filter, Solution static mixer, Laminating Special Mould, Screw feeding device, Hopper dryer, Laminating composite molding system, Oil dust absorption device, X-Ray automatic thickness detection device, double station unwinding system, correction device, Fabric static elimination device, LED lighting observation device, Edge air conveying device, Tractor, Double station automatic winding system, SIEMENS human-machine interface control system



型号 Model

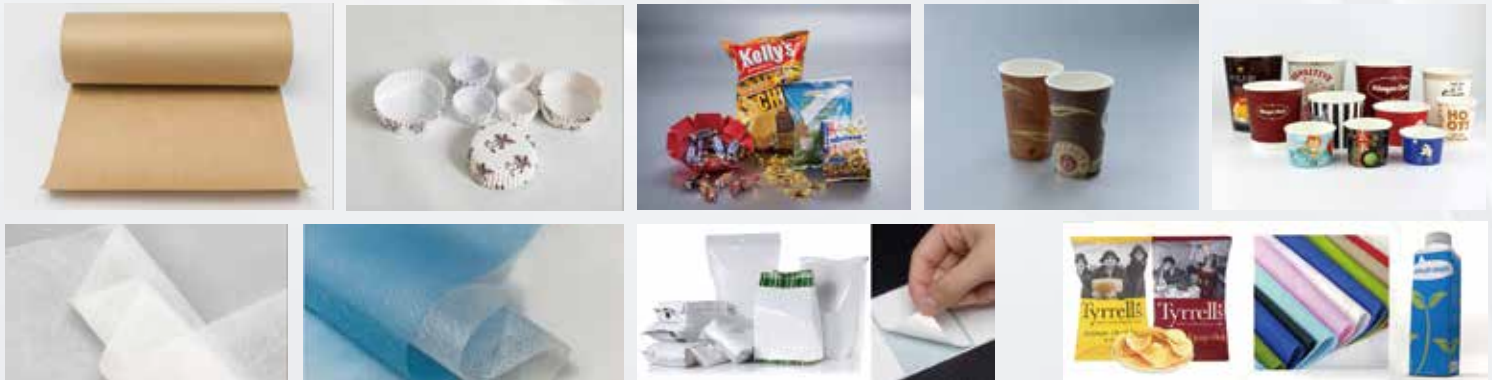
设备型号 Equipment model	制品宽度 Product width (mm)	制品厚度 Product thickness (mm)	最大线速度 Maximum line speed (m/min)
1000/1600/2000/2600	800/1300/1700/2300	0.02-0.1mm	60-150m



工艺原理: 将塑料熔融后通过高温熔融态挤出与纸张, 牛皮纸, 无纺布, 铝箔, 衬布系列进行高速淋膜复合从而达到理想的抗拉强度, 致密性, 阻隔性以及提高材料的防潮性。

Process Principle: Through high temperature extrusion, melts the plastic resin, laminating with othe base material like paper, kraft paper, non-woven fabric,a luminum foil and interlining series. Thereby achieving the desired requirement for final products features like tensile strength, compactness, barrier properties, and improving the moisture resistance of the material.

产品用途：主要用于纸无纺布、纸张、PET薄膜、BOPP薄膜、铝箔、编织袋、软片、漫浆布、离型纸、合成材料等材料的单、双面淋膜及双层、三层材料的淋膜复合。广泛应用于食品、包装、广告、居家用品、护理、医卫及建筑材料等领域。
 Application: It is mainly used for single and double-sided lamination of paper non-woven fabrics, paper, PET film, BOPP film, aluminium foil, woven bag, soft sheet, diffuse pulp cloth, release paper, synthetic material and other materials, As Well As lamination lamination of double and triple-layer materials. It is widely used in the fields of food, packaging, advertisement, houseware, nursing care, medical and health care and construction materials production.



特点 Features

- 1) 双轴辊架，自动升降，操作简单。
- 2) 自动接纸装置可在不降低纸机线速的情况下，实现 150-300 米/分钟的交换速度。
- 3) 超声波式 EPC 系统，使频繁更换材料的操作更加简单。
- 4) 液压层压结构设计，可使涂层更薄、更牢固。
- 5) 切边装置使涂布纸成品卷均匀一致。
- 6) 特殊的切刀和复卷机设计使高速复卷轴交换成为可能。

- 1) Double shaft roll stand with automatic lifting and lowering, easy to operate.
- 2) Automatic splicing device can achieve 150-300 m/min exchange speed without reducing the line speed of the paper machine.
- 3) Ultrasonic EPC system makes frequent material changeover easier.
- 4) Hydraulic laminate structure designed for thinner and stronger coating.
- 5) Edge trimming device provides uniformity in the finished roll of coated paper.
- 6) Special cutter and rewinder design enables high speed rewind spool exchange.



流延膜生产线 (设备交钥匙工程) Casting film production line (equipment turnkey project)

流延膜机器 (也称为流延膜生产线) 是一种用于制造塑料薄膜的设备。它采用流延工艺, 通过将熔融的塑料料浆挤出、拉伸和冷却, 形成连续的薄膜卷材。可生产的材料为PVA/POE/EVA/PVB/ETFE/PVDF/TPU...

流延膜机器可以生产多种不同类型的薄膜产品, 包括:

1. 塑料包装膜: 用于制作食品包装袋、保鲜膜、药品包装薄膜等。
2. 工业膜: 用于建筑、农业、建材等领域的防水膜、地膜、隔离膜等。
3. 底片膜: 用于摄影、印刷等领域的照片底片、印刷底片等。
4. 医疗膜: 用于医疗器械、手术室、绷带等的医疗薄膜。
5. 塑料袋膜: 用于制作购物袋、垃圾袋、封口袋等。
6. 功能膜: 如太阳能电池膜、液晶显示屏膜、柔性电子产品膜等。

流延膜机器广泛应用于包装行业、农业、医疗、建筑、印刷、电子等领域, 为这些行业提供了塑料膜产品的生产解决方案。

A cast film machine (also known as a cast film production line) is a device used to manufacture plastic film. It uses a casting process to form a continuous film web by extruding, stretching and cooling a molten plastic stock. Available materials are PVA/POE/EVA/PVB/ETFE/PVDF/TPU...

A cast film machine can produce many different types of film products, including:

1. Plastic packaging film: used to make food packaging bags, cling film, pharmaceutical packaging film, etc.
2. Industrial film: used in construction, agriculture, building materials and other fields of waterproof film, ground film, isolation film and so on.
3. Negative film: used in photography, printing and other fields of photo negative, printing negative, etc.
4. Medical film: medical film used for medical devices, operating theatres, bandages, etc.
5. Plastic bag film: used for shopping bags, rubbish bags, sealing bags, etc.
6. Functional film: such as solar cell film, LCD film, flexible electronic product film, etc.

Cast film machines are widely used in packaging industry, agriculture, medical, construction, printing, electronics, etc. They provide production solutions for plastic film products in these industries.



型号 Model

设备型号 Equipment model	制品宽度 Product width (mm)	制品厚度 Product thickness (mm)	产量 Output (kg/h)
GS300-3000	200-3000	0.01-0.5mm	20-800

流延膜生产线采用的是流延工艺，其工艺原理如下：

- 1.原料处理：将塑料原料（聚合物颗粒或颗粒混合物）加入到料斗中，并通过输送系统将料斗中的原料送入熔体区中。
- 2.融化：在熔体区中，加热器将原料加热至熔点以上，使其融化成熔体。
- 3.挤出：熔体被挤出熔体区，通过挤出机构加压，并通过模具挤出口挤压出来。模具的开口尺寸决定了最终薄膜的宽度。
- 4.拉伸：挤出的熔体通过一组辊筒被拉伸，以减少其厚度并增加其长度。
- 5.冷却：拉伸后的薄膜经过冷却装置，使其迅速冷却并固化。
- 6.卷取：固化的薄膜通过带有卷取装置的卷材机构，被收集起来卷取成卷形，形成连续的薄膜卷材。

整个流延膜生产线通常由上述几个步骤组成，每个步骤都紧密联系，以实现高效的薄膜生产过程。同时，流延膜生产线的工艺参数（如挤出温度、拉伸比、冷却速度等）可以根据不同的薄膜产品和要求进行调整。



The cast film production line adopts the casting process, which is based on the following principles:

1. Raw material handling: Plastic raw material (polymer granules or granule mixture) is added to the hopper and the raw material in the hopper is fed into the melt zone through a conveying system.
2. Melting: In the melt zone, a heater heats the raw material above the melting point, causing it to melt into a melt.
3. Extrusion: The melt is extruded out of the melt zone, pressurised by the extrusion mechanism and squeezed out through the extrusion outlet of the die. The opening size of the die determines the width of the final film.
4. Stretching: The extruded melt is stretched through a set of rollers to reduce its thickness and increase its length.
5. Cooling: The stretched film passes through a cooling unit that allows it to cool and cure quickly.
6. Winding: The cured film is collected and wound into rolls to form a continuous film web by means of a winding mechanism with a winding device.



The entire cast film production line usually consists of the above steps, each of which is closely linked to achieve an efficient film production process. At the same time, the process parameters of the cast film line (e.g. extrusion temperature, stretch ratio, cooling rate, etc.) can be adjusted to suit different film products and requirements.



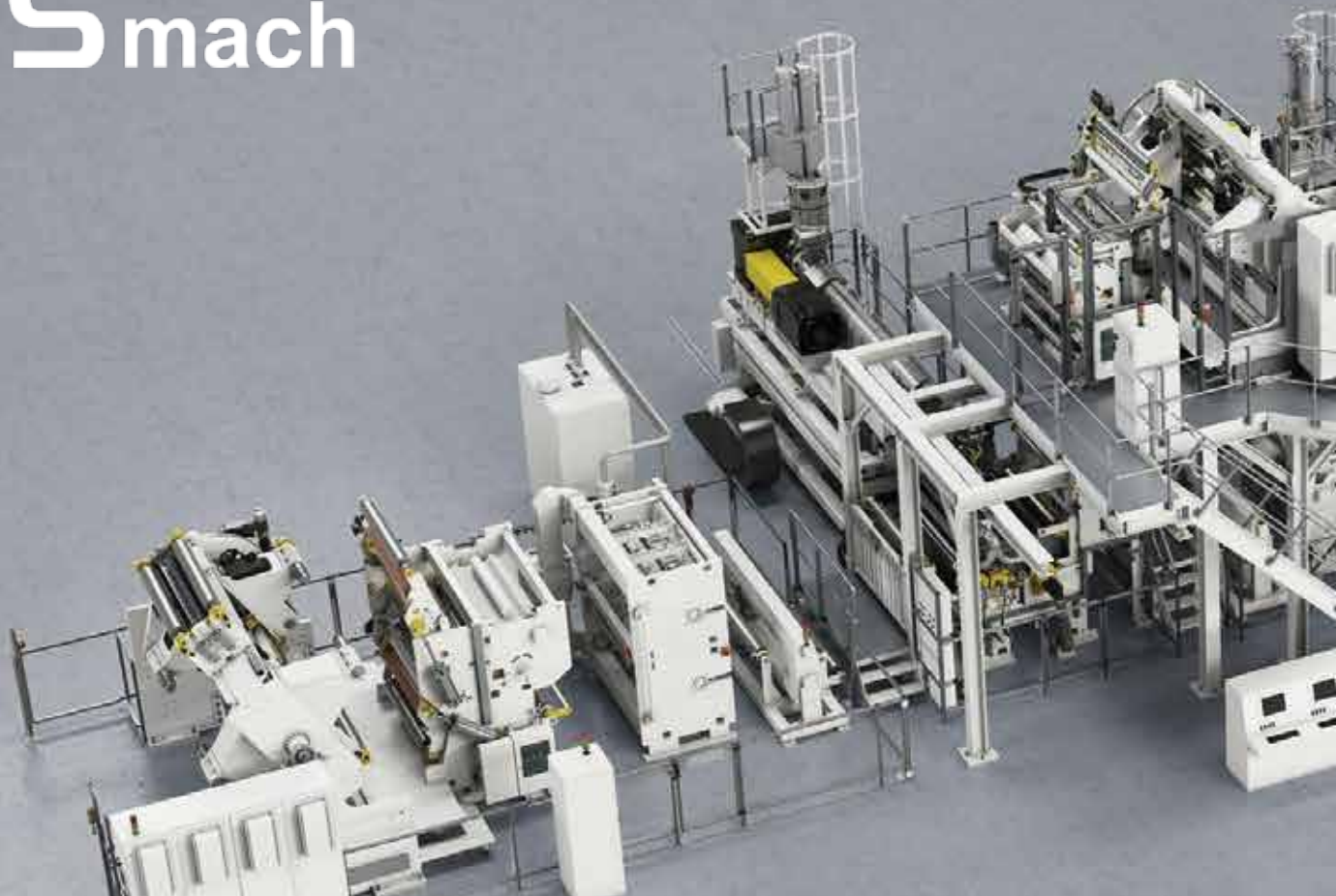
特点 Features

1. 生产效率高：流延膜机器采用连续生产方式，能够实现高效率的薄膜生产。
2. 生产线自动化程度高：采用自动化控制系统，实现整个生产过程的自动控制和监控。提高了生产线的稳定性和可靠性。
3. 适应性强：可以根据不同产品的需求进行工艺参数的调整，生产各种不同类型的薄膜产品，满足市场的多样化需求。
4. 产品品质稳定：具有较高的生产稳定性和一致性，可以生产出具有一致厚度、宽度和物理性能的薄膜产品。
5. 节能环保：采用高效节能的加热器和冷却系统，改善废气排放处理等，减少能源消耗和环境污染。

综上所述，流延膜机器具有高效率、高自动化、适应性强、产品品质稳定和节能环保等特点，使其成为塑料薄膜生产的重要设备，广泛应用于各个行业。

1. High production efficiency: the cast film machine adopts continuous production mode, which can achieve high efficiency film production.
 2. High automatic production line: adopting automatic control system to achieve automatic control and monitoring of the whole production process. It improves the stability and reliability of the production line.
 3. Strong adaptability: the process parameters can be adjusted according to the needs of different products to produce different types of film products to meet the diversified needs of the market.
 4. Stable product quality: with high production stability and consistency, it can produce film products with consistent thickness, width and physical properties.
 5. Energy-saving and environmental protection: adopting energy-efficient heater and cooling system, improving waste gas emission treatment, etc., reducing energy consumption and environmental pollution.
- To sum up, cast film machine has the characteristics of high efficiency, high automation, strong adaptability, stable product quality and energy saving and environmental protection, which makes it become an important equipment for plastic film production and be widely used in various industries.

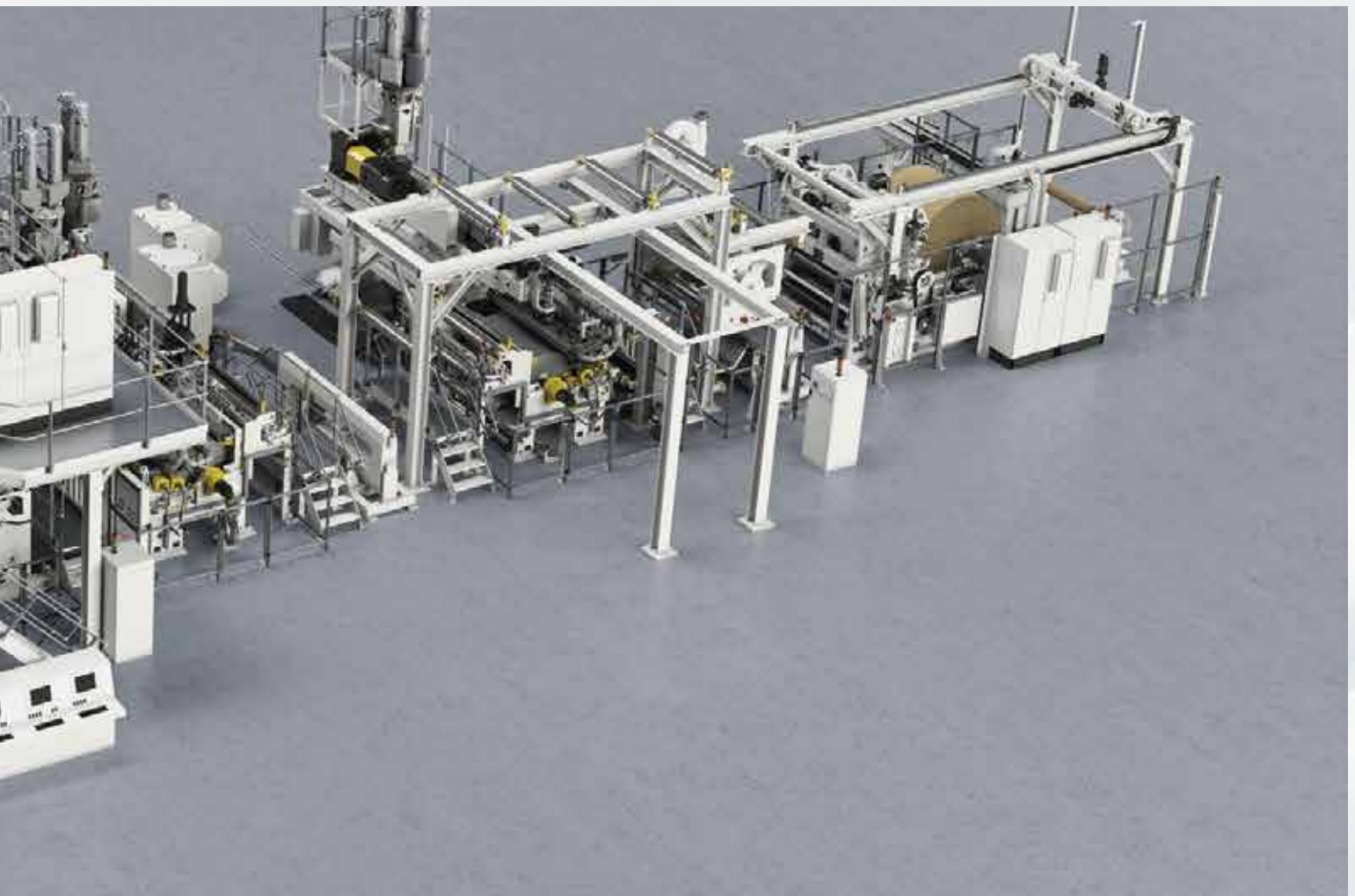
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