



**HWYAA**  
plastic machinery



# PLASTIC EXTRUDER FOR WATER-SAVING PIPE

## 节水灌溉塑机

Water-saving irrigation helps create a greener tomorrow

Laiwu Huaya Polymer Sci. & Tech. Co., Ltd.  
莱芜华亚超高分子材料科技有限公司



[www.huayaequipment.com](http://www.huayaequipment.com)

# 公司简介

## Company Profile

Since 2010 始于2010

莱芜华亚超高分子材料科技有限公司位于山东省济南市莱芜区高新技术开发区，临近京沪高速公路莱芜东出口，交通十分便利。公司占地面积超过18,000平方米，拥有一支年轻而专业的研发服务团队，其中包括一位博士学位持有者、三位硕士学位持有者和资深工程师。高等学历人才占公司全体员工的四成。

自十多年前成立以来，华亚一直在以国内市场为基础培育国际市场。我们主要从事节水滴灌和回收造粒生产线的制造，我们的产品出口到中东、南美、非洲和东南亚等多个国家和地区，并受到客户的普遍赞赏。为了在产品竞争力方面走在竞争对手的前列，我们致力于在国外建立仓库，本着“市场导向、客户为中心”的使命，我们始终追求完美和卓越，以提供最高质量的产品为目标。为此，每个华亚成员都将以企业和勇气腾飞。

Laiwu Huaya Polymer Sci.& Tech, Co., Ltd. is located in the Laiwu High-Tech Development Zone in Jinan, Shandong Province. The proximity of our new factory to the Laiwu East Expressway exit of the Beijing-Shanghai Expressway facilitates transportation. The Company covers an area of more than 18,000 square meters, and has a young and professional R&D service team, including one doctor degree holder, three master degree holders and senior engineers. Higher educated talents account for forty percent of the company's whole staff.

Since its founding more than a decade ago, Huaya has been cultivating the international market based on the domestic market. We are primarily involved in the manufacturing of water-saving drip irrigation pipe production line and recycling granulation production line. Our products are exported to a variety of countries and regions, including the Middle East, South America, Africa, and Southeast Asia, and have received universal client appreciation. To race ahead of rivals in product competitiveness, we are devoted to establishing warehouses abroad. With the mission of "market-oriented and client-centered", we consistently pursue perfection and excellence to provide products of the highest quality. For that purpose, every Huaya member will surge ahead with enterprise and fortitude.



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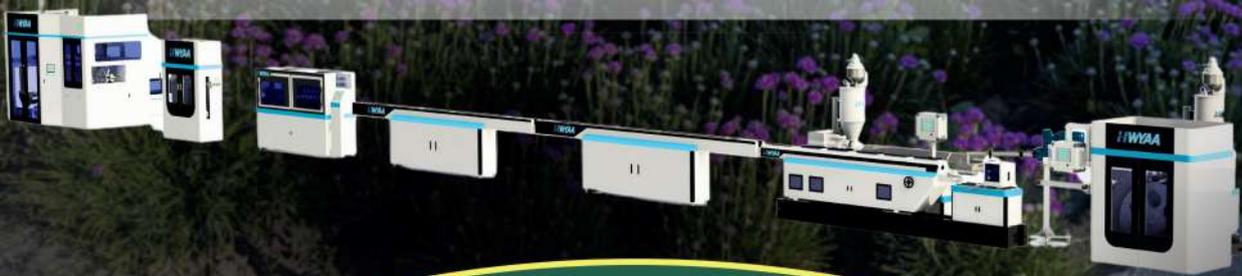
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## Continuous Strip Dripper Drip Irrigation T-TAPE Production Line

### 内镶连续贴条滴灌管生产线



## 技术简介

### TECHNICAL INTRODUCTION

We are proud to introduce this high - speed automatic inlaid continuous strip drip irrigation tape production line ( T tape making machine ) , which is the result of four generations of technological innovation. This line can continuously produce from the dripper to packaging at a speed of 300 meters per minute, achieving efficient and integrated production. The line operates stably with accurate punching, ensuring product quality. It is easy to install and maintain, saving manpower and resources.

我们很自豪地推出这款高速自动镶嵌式连续条带滴灌带生产线（T型带制造机），它是四代技术创新的成果。这条生产线能够以每分钟300米的速度从滴头到包装连续生产，实现高效集成化生产。该生产线运行稳定，冲孔精准，确保产品质量。它易于安装和维护，节省人力和资源。

The inlaid continuous strip drip irrigation tape is composed of a PE hose and an inlaid continuous strip dripper. One side of the inlaid continuous strip has comb - shaped and other protrusions with special shapes corresponding to its functions.

The protruding part of the continuous strip is thermally fused and compounded with the hose through a special process to form flow channels and pipelines.

The incompletely compounded and communicating parts of the flow channels and pipelines form the water inlet section, the parts where the flow channels communicate with the outside form the water outlet, and the part between the water inlet section and the water outlet is the comb - shaped turbulent flow channel.

The flow channel spacing of each section can be adjusted in length by adjusting the strip dripper pressing mechanism.

内镶式连续条带滴灌带由PE软管和镶嵌式连续条带滴头组成。镶嵌式连续条带的一侧具有梳状及其他与其功能相对应的特殊形状的凸起。连续条带的凸起部分通过特殊工艺与软管热融复合，形成流道和管路。流道和管路的不完全复合且相通的部分构成进水段，流道与外界相通的部分构成出水段，进水段和出水段之间的部分为梳状紊流流道。通过调整条带滴头压制机构可以调整各段流道间距的长度。

# MACHINE CHARACTERISTICS

## 设备特点

### EASY OPERATIO 操作简单



Installation instructions      Easy to understand      Customizable language

安装指示  
**1**

方便理解

定制语言  
**2**

### Quick to start 快速开始 ✓

No need to find drip head suppliers or purchase dripper injection molding machines. Save procurement time and the complexity of communicating with multiple suppliers.

One line realizes simultaneous production of PE outer pipe, inlaid strip dripper and color line. One purchase. Start production as soon as it arrives at the factory.

无需寻找滴头供应商或购买滴头注塑机。节省采购时间以及与多个供应商沟通的复杂性。一条生产线实现 PE 外管、镶嵌式条带滴头和色线的同步生产。只需一次采购，设备一到工厂即可开始生产。

### Quick installation 快速安装 ✓

The T tape drip irrigation production line adopts a quick-connect joint design. In the assembly and debugging stages, this design makes equipment installation simple and efficient. Operators can quickly complete the installation of equipment without complex tools and professional skills, greatly reducing the time and labor costs consumed in the equipment installation process.

贴条滴灌带生产线采用快速连接接头设计。在装配和调试阶段，这种设计使设备安装简单高效。操作人员无需复杂的工具和专业技能即可快速完成设备安装，大大降低了设备安装过程中消耗的时间和人工成本。

**3**

### Quick to master 快速上手 ✓

The equipment is extremely easy to operate with integrated automatic control. After one day of training, the manufacturing process of drip irrigation tapes can be started. Its operation interface is friendly and intuitive, and even beginners can handle it easily.

该设备集成自动控制，操作极其容易。经过一天的培训，就可以开始滴灌带的制造流程。它的操作界面友好直观，即使是初学者也能轻松操作。

## 技术迭代表 Technological Iterations

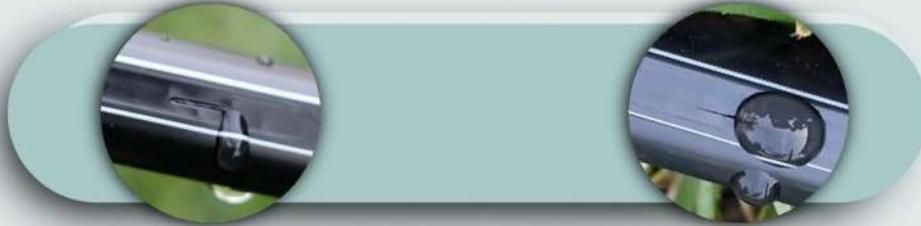
	Generation 1	Generation 2	Generation 3
<b>Strip dripper Molding Method</b>	Steel strip	Large-wheel pattern molding	Small-wheel pattern molding
<b>Material</b>	Stainless steel	Special steel for molds	Special steel for HWYAA
<b>Advantages &amp; Disadvantages</b>	Easy to break, short service life; large flow difference	High cost for changing flow specification patterns; large flow difference	Low cost for changing flow specification patterns; stable flow
<b>Molding Wheel Size (Diameter)</b>	500mm	1000mm	63mm
<b>Production Speed</b>	50-100m/min	80-200m/min	80-300m/min
<b>Minimum Spacing of Water Outlets</b>		150MM	50MM
<b>Extrusion Strip Nozzle</b>		Fixed	Three-dimensional adjustable
<b>Composite Pressure</b>		Pressure not adjustable	Pipe and strip composite pressure adjustable (to ensure bonding effect)
<b>Punching Method</b>		Knife	Laser and knife
<b>Winding Method</b>		Ordinary double-station winding	World's first fully automatic winding, changing rolls, changing paper cores integrated packing machine
	一代	二代	三代
<b>成型方式</b>	钢带式	大轮成形法	小轮成形法
<b>材质</b>	不锈钢	模具专用钢	华亚专用钢
<b>优缺点</b>	易断，使用寿命短 流量差距大	流量规格花纹更换成本高 一轮花纹周期多，流量差距大	流量规格花纹更换成本低 一轮花纹周期少，流量稳定
<b>成型轮尺寸(直径)</b>	500mm	1000mm	63mm
<b>生产速度</b>	50-100米/分	80-200米/分	80-300米/分
<b>出水口最小间距</b>		150MM	50MM
<b>挤出条枪嘴</b>		固定	三维可调
<b>复合压力</b>		压力不可调	管、条复合压力可调 (保证贴合效果)
<b>打孔方式</b>		刀片划孔	激光打孔，刀片划孔 一机双打孔模式
<b>收卷方式</b>		普通双工位收卷	世界首创全自动收卷，切断、换卷、换纸芯、打包一体机



## 打孔模式 Punching mold

One-machine double-punching mode. Remote video monitoring and adjustment of punching spacing and production speed. Improves adaptability and flexibility. Meets diverse market demands.

一机双打孔模式。远程视频监控并调整打孔间距和生产速度。提高了适应性和灵活性。满足多样化的市场需求。



### Laser punching

Highly accurate. No deformation, burrs, damage or water leakage.

激光打孔：

精度高。无变形、无毛刺、无损伤、无漏水。

### Knife punching

Precise punching by servo motor. Low cost and easy maintenance. Avoids reverse siphoning and is anti-clogging.

刀片划孔：

由伺服电机精确打孔。成本低且易于维护。避免反向虹吸，具有防堵塞功能。

## 规格尺寸 Production application scope

轧条流量 Designed discharge of dripper	滴头间距 Drop spacing	管材直径 Inside diameter	壁厚 Wall Thickness	生产速度 Production speed	划口速度 Countersinking speed
0.8-3.0L/H	50-300mm	16mm	0.127-0.6mm	200-300m/min	≥3000P/min

## Fully automatic winding and packaging system

### 全自动收卷打包系统



Winder 收卷



Tape Cutting 切割



Packing Table 打包台



Change Roll 换卷



Plastic Sealing 封膜



Fall 落地

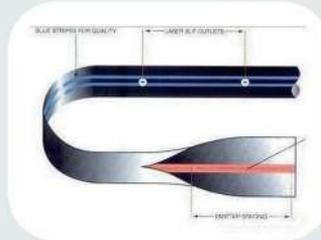
## 贴条滴灌带介绍

### Strip Drip Irrigation T-tape Introduction

The drip irrigation tape with embedded continuous strips is composed of PE soft tape and embedded continuous strips.

The continuous strips are bonded with the inner wall of the pipe to form the main water channel and drip irrigation channel. The non-adhesive parts form the drip irrigation inlet and outlet. The outlet adopts a gap design, and its structure is similar to that of a one-way valve. When the pipe has negative pressure, the water outlet automatically closes to prevent crop roots or insects from entering the flow channel and blocking the dripper.

There is a zigzag turbulent flow channel design between the two outlets, and all bonding points are integrally formed.



内嵌连续条带的滴灌带由 PE 软带和内嵌连续条带组成。

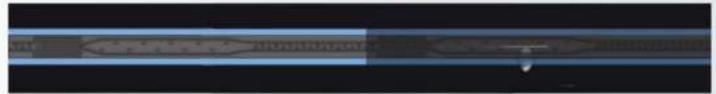
连续条带与管内壁粘合，形成主水道和滴灌通道。未粘合部分形成滴灌入口和出口。出口采用间隙设计，其结构类似于单向阀。当管道内有负压时，出水口自动关闭，以防止作物根系或昆虫进入流道并堵塞滴头。

两个出水口之间有锯齿形紊流通道设计，所有粘合点均为一体成型。



## 制品优势

### Advantages of products



#### Flow and Strength

Uniform flow, and the strip dripper enhances the tensile strength of the drip irrigation belt, resulting in better toughness and a flatter finished product winding.

**流量与强度：**水流均匀，条带式滴头增强了滴灌带的拉伸强度，使其韧性更好，成品卷绕更平整。

#### Anti - clogging

There are many filter holes at the entrance of the flow channel, and the water outlet gap design (similar to a one - way valve) prevents clogging by crop roots or insects, making its anti - clogging performance better than other forms of drip irrigation pipe belts.

**防堵塞：**流道入口处有许多过滤孔，出水口间隙设计（类似单向阀）可防止作物根系或昆虫堵塞，其防堵塞性能优于其他形式的滴灌管带。

#### Identifiability:

The unique double blue stripe mark makes it highly identifiable during installation.

**可识别性：**独特的双蓝色条纹标记，在安装过程中具有高度可识别性。

#### Stress Resistance

Formed by one - time extrusion and welding without seams or burrs, reducing the possibility of bursting under pressure. Pressure

**耐压性：**通过一次性挤出和焊接成型，无接缝和毛刺，降低了在压力下破裂的可能性。

#### Compensation:

With a variety of pipe diameter specifications and wall thicknesses, and having a certain compensation, it allows for a longer laying length compared to the same period last year.

**压力补偿：**有多种管径规格和壁厚，具有一定补偿性，与去年同期相比可铺设更长的长度。

## 内镶贴片式滴灌管生产线

### Inlaid Flat Dripper Drip Irrigation Pipe Production Line



#### Technical Introduction

Inlaid flat emitter drip irrigation tape is a common water-saving product in drip irrigation systems. Patches with curved small flow channels are inlaid in plastic pipes. Water flows through the openings to irrigate crops. It drips water slowly and evenly near crop roots through small drippers. In production, flat drippers are inlaid in black soft tape to form an integrated drip irrigation tape.

#### Characteristics

1. The spacing between emitter can be customized according to customer requirements, realizing precise irrigation, greatly improving the utilization rate of water and saving labor.
2. The production speed is fast, reaching 350 m/min.
3. There is no error in the spacing between the emitters.
4. The computer system centralized control to stay stable production process and easy operation.
5. Ordinary double-station or automatic winding&packing system, change the volume without stopping. Wiring spacing, winding tension and winding length can be adjusted according to needs.

#### 技术简介

内镶式贴片滴灌带是滴灌系统常用节水产品。在塑料管内每隔一定距离镶有带弯弯小流道的贴片，水由流道口流到土壤灌溉农作物。它通过极小的出流孔口滴头，把水均匀缓慢地滴在作物根部附近土壤。通常在生产中将扁平滴头镶嵌于黑色软带内壁，形成一体化滴灌带。

#### 特点

1. 滴头间距可根据用户要求定制，实现精准灌溉，大大提高水的利用率，节省劳动力。
2. 生产速度快，达到350m/min的生产速度。
3. 滴头间距无误差
4. 采用计算机系统集中控制，生产过程稳定，操作方便。
5. 普通双工位或全自动收卷打包系统，改变体积不停机，接线间距、绕组张力、绕组长度可根据需要调节。

## 产品适用范围 Product application scope

Flat drip irrigation tapes are suitable for flat and short-distance scenarios and seasonal crops. They are widely used in drip irrigation planting in industries such as crops (such as cotton), fruits, vegetables, trees, and flowers.

贴片式滴灌管则适用于平面、短距离场景，季节性作物，广泛用于农作物(如棉花)、水果、蔬菜、树木、花卉等行业的滴灌种植。



## 规格尺寸 Production application scope

滴头间距 Drop spacing	管材直径 Inside diameter	壁厚 Wall Thickness	壁厚公差 Tolerance	最大生产速度 Max Production Speed
100-1500mm	12 16 20mm	0.15-0.8mm	± 0.05mm	120/250/350 m/min

## 技术参数 Technical parameters

生产速度	Production line speed (200/300mm spacing distance)	Ordinary speed:40-100 m/min,0.4-0.8 mm Medium speed:120-180 m/min,0.15-0.3 mm High speed: 300 m/min,0.15-0.3 mm
滴头最大筛选速度	Emitter maximum screening speed	2000 pcs/min
滴头镶入速度	Emitter inlaid speed	2000 pcs/min
滴头间距	Dripper spacing	100 mm, 200 mm, 300 mm, 400 mm, 500 mm, 1000 mm, 1500 mm
牵引速度	Hauling speed	300m/min
打孔速度	Punching speed	Mechanical punching,2000 pcs/min



## 使用注意事项 Precautions for Use

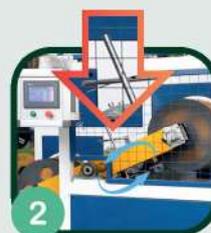
1. The pipes and drip heads of drip irrigation are prone to clogging, so a filter must be installed as it requires relatively high water quality.
2. Drip irrigation cannot regulate the micro climate in the field and is not suitable for irrigation during the freezing period. Also, it is not used for fertilization when irrigating vegetables.
3. The investment in drip irrigation is high, so the economic benefits of the crops should be taken into consideration.
4. When laying the drip irrigation tape, the plastic film should be pressed tightly so that it is as close as possible to the drip irrigation tape without any gap between the film and the drip heads, to prevent the drip irrigation tape from being burned by the focused sunlight.
5. Please pay attention to the front and back of the marking lines.

1. 滴灌的管道和滴头易堵，需装过滤器，对水质要求高。
2. 滴灌不能调田间小气候，冰冻期不宜灌溉，蔬菜灌溉时不用其施肥。
3. 滴灌投资高，要考虑作物经济效益。
4. 铺设滴灌带时，薄膜要压紧贴紧，与滴头无间隙，防阳光聚焦致滴灌带烧伤。
5. 请注意标识线的

## Fully automatic winding and packaging system 全自动收卷打包系统



1 Winder 收卷



2 Tape Cutting 切割



3 Packing Table 打包台



4 Change Roll 换卷



5 Plastic Sealing 封膜



6 Fall 落地

## 内镶圆柱式滴灌管生产线

### Inlaid Round Dripper Drip Irrigation Pipe Production Line



### Technical Introduction

Inlaid round dripper drip irrigation pipe is named for the cylindrical drip emitter embedded in the pipe. It is widely used in agriculture, ecological greening, landscaping and greenhouses because of its advantages of good dripping uniformity, relatively large paving length, good anti-clogging performance and simple and convenient installation.

### Characteristics

1. Wide application. Drip irrigation pipes are applicable to various situations such as field crops and fruit tree planting.
2. Energy-saving and yield-increasing. The water-saving effect of drip irrigation pipes can reach more than 85%, with an energy-saving rate of over 65% and a yield increase of more than 30%.
3. Low cost, suitable for the popularization and application in modern agriculture.
4. Long service life. They can be used for a long time and are available throughout the year.

### 技术简介

内镶式圆柱型滴灌管是因其在管内嵌入了圆柱型滴头而得名，由于它具有滴水均匀度好相对铺设长度大和抗堵塞性能好以及安装简单方便等优点，被广泛应用于农业、生态绿化、园林绿化以及温室大棚等领域。

### 特点

- 1、应用广泛。滴灌管适用于大田作物，果树种植等多种情况。
- 2、节能增产。滴灌管节水效果可达85%以上，节能65%以上，增产30%以上
- 3、造价低廉，适合现代化农业推广应用。
- 4、寿命长，使用时间长，常年可用



## 产品适用范围 Product application scope

The inlaid cylindrical drip irrigation pipe is suitable for long-distance and curved routes and can be used all year round. It is especially suitable for field crops and fruit tree planting, such as in orchards, vineyards and other places.

内镶圆柱式滴灌管适用于长距离、弯曲路线的情况下，可常年使用，特别是大田作物和果树种植，如在果园、葡萄园等场所



## 规格尺寸 Production application scope

滴头间距 Drop spacing	管材直径 Inside diameter	壁厚 Wall Thickness	壁厚公差 Tolerance	最大生产速度 Max Production Speed
100-1500mm	12 16 20mm	0.4-1.0mm	± 0.05mm	80 120 m/min

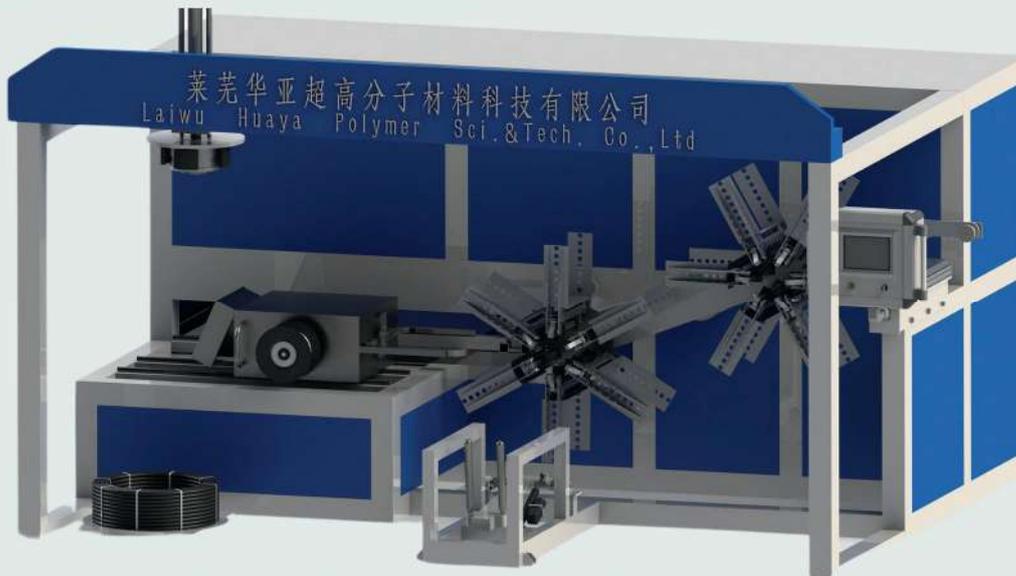
## 技术参数 Technical parameters

生产速度	Production line speed	Medium speed:40-50 m/min High speed: 50-100 m/min
滴头最大筛选速度	Emitter maximum screening speed	500pcs/min
滴头镶入速度	Emitter inlaid speed	500pcs/min
滴头间距	Dripper spacing	100 mm, 200 mm, 300 mm, 400 mm, 500 mm, 1000 mm, 1500 mm
牵引速度	Hauling speed	120m/min
打孔速度	Punching speed	300pcs/min

## 使用注意事项 Precautions for Use

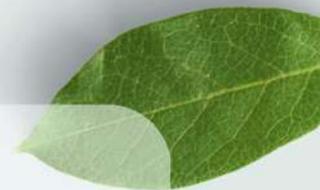
1. When laying the drip irrigation pipes, make sure to press the plastic mulch firmly so that it is as close to the ground as possible, and avoid leaving any space between them.
  2. The pipes and drip heads are prone to clogging, and they have relatively high requirements for water quality. Therefore, it is necessary to install filters.
  3. The water pressure inside the pipes affects the operation of the entire drip irrigation equipment for fruit trees. Therefore, the water transmission pressure should be calculated carefully before use, and a water pressure gauge should be installed for monitoring and regulation.
  4. Adjust the amount of irrigation water according to the condition of the fruit trees.
  5. This pipe cannot regulate the micro climate in the field and is not suitable for irrigation during the freezing period.
1. 铺设滴灌管时，需压紧压实地膜，使其紧密贴近，不留空隙。
  2. 管道和滴头易堵塞，对水质要求高，应安装过滤器。
  3. 管道水压影响果树滴灌设备运转，使用前要算好输水压力并装水压计量表监控调控。
  4. 依果树状况调整灌溉水量。
  5. 该滴灌管不能调节田间小气候，不宜在结冻期灌溉。

## 圆柱滴灌管/PE/PERT/小口径管材自动切断、收卷、打包机 Automatic Cutting Winding and Packaging Machine for round drip irrigation pipe/ PE/PERT/small diameter pipes



In order to adapt to high-speed winding and coil changing, improve and liberate productivity, the newly developed coiler of HWYAA Company can automatically roll up the core by the manipulator and automatically roll down to the packer for packaging.

为了适应高速生产中的收卷和换卷，提高和解放生产力，华亚公司新开发的全自动收卷打包机可利用机械手自动换卷，然后自动下卷至包装机进行包装。



# 水带微喷带生产线

## Micro-Spray Hose Production Line



### Technical Introduction

This equipment can divide into two kinds of machine types: mono layer and double layer. And the double layer machine has the features of stable property, high output, advanced technology and simple operation. So the production has the advantage of high tension strength and long service life, the configuration of the punching machine can produce micro-spray belt.

### 技术简介

本公司生产的微喷带设备,分为单层、双层两种机型,其中双层其挤成型微喷带设备具有性能稳定、产量高、工艺先进、操作简单等特点。所生产的制品具有拉力强度高、使用寿命长等优点,配置打孔机可生产微带。

### Characteristics

1. Molding way: down-blowing vacuum forming.
2. Equipment composition: extruder, die head, molding device, hauling device, printer, double station recoiling machine, and so on.
3. Punching machine: production speed 30-65 m/min, laser boring
4. The production line can produce micro belt products with a fold diameter of 30-80 mm and a thickness of 0.2-0.6 mm, or production of water belt products.

### 特点

1. 成型方式:下吹真空成型
2. 设备组成:挤出机、模头、成型装置、牵引装置、印字机、双工位卷取机等
3. 打孔机:生产率速度 30-65m/min,激光打孔。
4. 该生产线可生产折径 30-80mm,厚度 0.2-0.6mm 的微喷带制品,也可生产输水带制品。

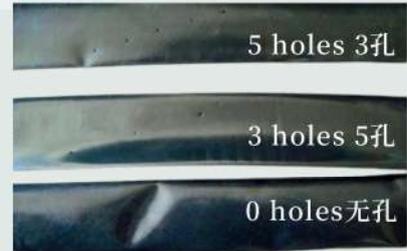
### 相关参数 Related parameters

生产速度	Production line speed	50-60m/min
产品折径	Folding diameter	1 inch 1.5 inch 2 inch 3 inch 4 inch 5 inch 6 inch

## 产品适用范围 Product application scope

Micro - spray belt is widely used in field crops, greenhouse vegetables, flower nurseries and so on.

微喷带广泛应用于大田作物、温室蔬菜、花卉苗圃等。



## Precautions for Use

1. The nozzle should face up. It is wrong to lay the nozzle face down. The nozzle facing down will not only cause deep leakage of irrigation water, but also cause soil and water loss, and in serious cases, plant rotted roots.
2. After laying, the interface between the micro-jet belt and the water pump should be fixed tightly.
3. After the water pump starts to supply water, the gate valve should be adjusted to an appropriate width from small to large according to the width between several micro-jet belts to ensure even irrigation.
- 4 Do not adjust the gate valve to the maximum immediately after the water pump supplies water. otherwise it is easy to cause damage to the micro-jet belt.

## 使用注意事项

1. 微喷带的喷孔要朝上，喷口朝下铺设是错误的，喷口朝下不仅会造成灌溉水的深层渗漏，还会出现水土流失，严重时还会植物烂根的现象。
2. 设完成后，要将微喷带与水泵接口处固定紧。
3. 在水泵开始供水后，要根据数条微喷带之间的宽度调节闸阀，从小到大，调节到合适的宽度保证灌溉的均匀。
4. 切忌水泵供水后马上将闸阀调到最大，否则容易造成微喷带的破损，

## 客户案例 Customer Cases

Customer from Thailand got acquainted with HWYAA at the Chinaplas exhibition in 2023. On September 6th, 2023, they had their first cooperation on the down-blowing micro-jet belt equipment project, which earned the trust of the customer. By the end of 2024, they had cooperated a total of four times.

来自泰国的客户与HWYAA相识于23年的Chinaplas展会，在23年9月6日第一次合作了下吹微喷带设备项目，取得了客户的信任，截止24年底，共合作四次。



# PE编织热合水带微喷带生产线

## PE Woven Heat-sealed Rain Hose Production Line



### Technical Introduction

Micro-spraying tape (also known as multi-hole pipe or rain spray irrigation pipe) is a micro-sprinkler irrigation product that adopts mechanical or laser to directly punch holes on the tape body for irrigation. Generally, the spraying tapes with 3, 5 or more water outlet holes in each group are directly laid on the ground, and the water flow shooting into the air can form a micro-sprinkler irrigation effect similar to a drizzle.

### 技术简介

微喷带（又称多孔管、微喷灌管）是一种微喷灌产品，它是在带体上通过机械或激光直接打孔来实现灌溉功能。通常情况下，是将每组有3个、5个或更多出水孔的喷水带直接铺于地面，水流从这些出水孔直射至空中，进而形成类似细雨的微喷灌效果。

### Characteristics

1. Water-saving: Micro-irrigation is a partial irrigation method, which reduces deep seepage and surface evaporation.
  2. Energy-saving: The micro-irrigation system operates at low pressure, reducing the energy consumption of pumping stations.
  3. Uniform irrigation: Micro-irrigation is precise. It can control the outflow rate of each emitter, and the uniformity of irrigation can reach 80% - 90%.
- Strong adaptability to soil and terrain: It is applicable to both clayey and sandy soils, as well as flat lands, hillsides and hilly areas (with water conveyed through pressure pipelines).

### 特点

1. 省水: 由于微灌是局部灌溉，减少了深层渗漏和地面蒸发。
2. 节能: 微观系统采用低压运行，可降低泵的能耗。
3. 灌水均匀: 微灌是精确灌溉，全系统能做到有效地控制每个灌水器的出流量，灌水均匀度可达80%~90%。
4. 对土壤和地形的适应性强: 既适用于黏性土壤也适用于沙性土壤，由于是压力管道输水，所以既适用于平地也适用于山坡丘陵地区。

## 相关参数 Related parameters

生产速度	Production line speed	30m/min
产品折径	Folding diameter	1 inch 1.2 inch 1.5 inch 2 inch 2.5 inch 3 inch 4 inch 5 inch 6 inch 7 inch 8 inch

## 产品适用范围 Product application scope

PE braided heat-sealed water hoses and micro-spray hoses are applicable to agricultural use, construction sites, orchards, parks and home yards. They offer even spraying, are explosion-proof, sun-proof and durable.

PE编织热合水带微喷带适用于农用、工地、果园、公园、家庭庭院，喷洒均匀，防爆防晒耐用



Micro spray



Water transmission main hose



## 预制孔柔性软管生产线

### Pre-punching Outlet Hole Flexible Pipe Production Line



#### Technical Introduction

The pre-punching hole pipe production line is the latest equipment developed by Huaya Company for the water-saving irrigation sector. The products produced by this equipment are pre-punching hole composite hoses, primarily used for transporting irrigation water in main pipelines for agriculture, landscaping, and other applications. These products are made using PE composite woven fabric, with pre-installed connectors, and then heat-sealed. The advantages of this product include good pressure resistance, large pipe diameter, and ease and speed of connecting branch pipes during irrigation.

#### 技术简介

预制孔复合编织水带生产线是华亚公司针对节水灌溉这一板块，最新研发的新设备。此设备生产的制品为预制孔复合水带，主要应用于农业、园林绿化等主管道的输送灌溉。该制品是采用PE复合编织布，预装连接口后，热合焊接而成。该制品优点是承压好，管径大，灌溉时连接支管方便快捷。

#### 相关参数 Related parameters

生产速度	Production line speed	15m/min
产品口径	Diameter	2.5 inch 3 inch 3.5 inch 4 inch 4.5 inch 63 mm 75 mm 90 mm 100 mm 110 mm
出水孔间距	Outlet hole spacing	40--80 cm ;81-120 cm;121-200 cm;

## Characteristics

- 1.No need for manual drilling, reserved hole spacing for free combination.
- 2.Tough and durable, can be recycled for many years.
- 3.Strong pressure resistance and large towing area of farmland.
- 4.Nut assembly, connect in one second.
- 5.Flat hose, easy to roll up and store, soft and light, easy to install, lay and recycle.
- 6.Good sealing, no burrs or leaks.

## 特点

- 1.无需人工打孔、预留孔距自由组合。
- 2.坚韧耐用、可以多年循环使用。
- 3.耐压能力强、拖带农田面积大。
- 4.螺母组件，一秒连接。
- 5.扁平软管，便于收卷储存，柔软轻便，便于安装铺设和回收。
- 6.密封性好，不呲不漏。

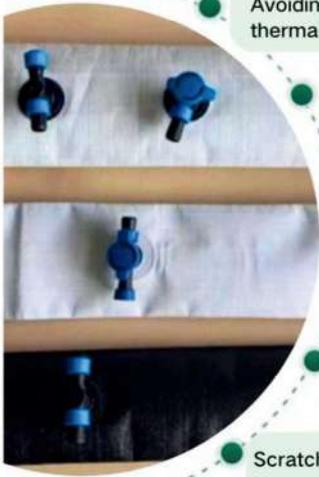
**Heat-resistan**

The special outer white and inner black appearance design is beneficial to prevent the water inside the pipe from absorbing heat and rising in temperature in extremely hot regions.

Protect crops from being burned.




outer white                  inner black



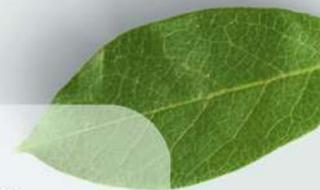
- Small expansion ratio. Avoiding brittle cracking due to thermal expansion and contraction.
- High cost performance. Eliminating the intermediate links
- Convenient for laying. Saving time and effort.
- Meticulous workmanship. Long service life.
- Thickened and explosion-proof. Long service life.
- Scratch-resistant and anti-abrasion. Not easy to wear.

## 产品适用范围 Product application scope

The main prefabricated-hole water hoses, with the features of no need for manual drilling and high pressure resistance, can excellently serve as the main water pipelines for large-scale farmland irrigation. They can be used under both high and low pressure conditions and are suitable for being the main pipelines of drip irrigation and sprinkler irrigation. Moreover, they are also applicable to the irrigation of orchards, vegetable plantations, flower planting bases, as well as the irrigation of urban parks and green belts.

预制孔主水带免打孔、耐高压，可出色充当大型农田灌溉主水管道，高低压环境均适用，适用于滴灌和喷灌主管道，也可用于果园、蔬菜种植园、花卉种植基地灌溉以及城市公园、绿化带灌溉。





## 迷宫式滴管带挤出生产线 Labyrinth Type Drip Irrigation Tape Production Line

### Technical Introduction

In order to produce this production line, our company makes full market research and assimilates the advanced technology from domestic and overseas. This production line is specialized in producing the single labyrinth drip irrigation tape which is used in farm-oriented irrigation. And this production line is the most advanced labyrinth type drip irrigation tape machine in our company at present.



### 技术简介

该生产线是我公司经充分市场调研,消化国内外先进技术,精心研制而成。它专门生产农用新型塑料机械灌溉用单翼迷宫式滴灌带,是目前国内最先进的单翼迷宫式滴灌带生产线



### 单层迷宫式滴管带挤出生产线

#### Single layer Labyrinth Type Drip Irrigation Tape Production Line

挤出机 Extruder	主电机 Motor	成型轮 Shaping wheel	冷却方式 Cooling method	牵引 Traction	收卷 Recoiling	生产速度 Max. speed
SJ-65/30	22KW	Ø480	风冷、水冷 Water or air	对辊式 roll - to - roll	双工位 Double station	100m/min

### 复合迷宫式滴管带挤出生产线

#### Single layer Labyrinth Type Drip Irrigation Tape Production Line

This production line uses two extruders to co-extrude and composites in the mold. it can enhance the adhesive strength and loading capacity of the production, so the tape can avoid booster and cracking.

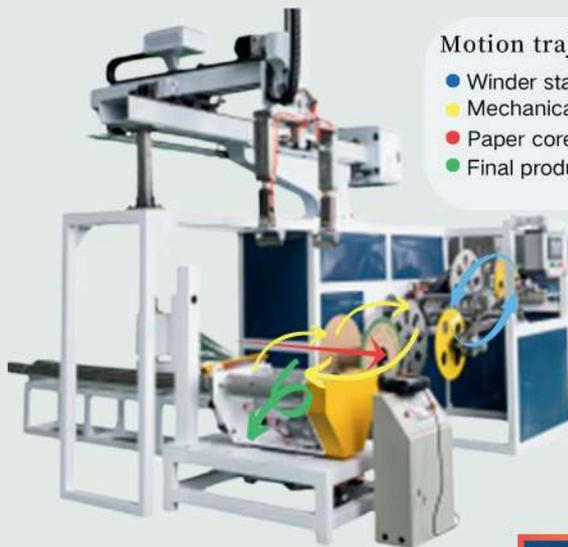
两台挤出机共挤模内复合,提高滴灌带粘合强度及承压能力,避免爆管及开裂现象发生。

挤出机 Extruder	主电机 Motor	成型轮 Shaping wheel	冷却方式 Cooling method	牵引 Traction	收卷 Recoiling	生产速度 Max. speed
SJ-55/30 SJ-40/30	15KW 4KW	Ø382	风冷、水冷 Water or air	对辊式 roll - to - roll	双工位 Double station	100m/min

## 全自动收卷打包系统 Fully - automatic Winding and Packing System

HWYAA's fully automatic winding, cutting, reel changing, core changing, film wrapping and unloading system, designed for high speed drip irrigation tape production lines, can match high speed production.

It winds fast and stably, cuts precisely, and changes reels and cores quickly. It can evenly wrap film to protect products, control tension precisely to ensure quality, reduce labor intensity and save manpower through automated operation. The system has good integration and is easy to maintain, which can improve production efficiency and product quality and reduce costs.



- | Motion trajectory | 运动轨迹   |
|-------------------|--------|
| ● Winder station  | ● 收卷换卷 |
| ● Mechanical arm  | ● 机械臂  |
| ● Paper core      | ● 纸芯   |
| ● Final product   | ● 最终产品 |

华亚专为高速滴灌带生产线设计的全自动收卷切割换卷换纸芯缠膜下卷系统，可匹配高速生产，收卷快速稳定，切割精准、换卷换纸芯迅速，能均匀缠膜保护产品，精确控制张力保障质量，自动化操作降低劳动强度、节省人力，系统集成性好且易于维护，可提高生产效率和产品质量，降低成本



**1**  
Winder  
收卷



**2**  
Cutting  
切割



**3**  
Packing Table  
打包台



**4**  
Change Core  
换芯



**5**  
Plastic Sealing  
缠膜



**6**  
Fall  
下卷

# 滴头成型模具及其注射机 Dripper Mold and Injection Molding Machine

256腔贴片滴头模具 256-cavity flat dripper mold



全热流道  
Full - hot Runner



半热流道  
Semi - hot Runner

64腔圆柱滴头模具 64-cavity round dripper mold



全热流道  
Full - hot Runner



半热流道  
Semi - hot Runner



冷流道  
Cold Runner

注塑机 Injection molding machine



**相关辅助设备 Related Auxiliary Equipment**



**管材激光打字机**  
**Pipe laser printer**



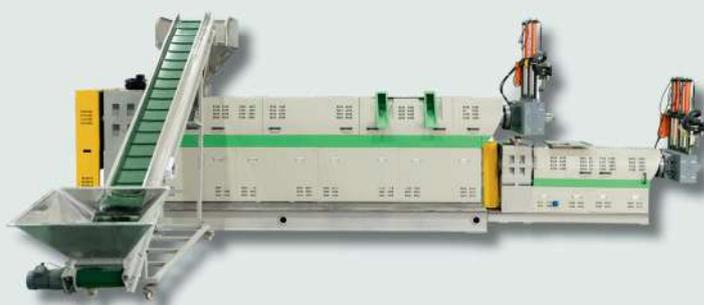
**冷水机**  
**Industrial chiller**



**混料机**  
**Mixer**



**空压机**  
**Air compressor**



**造粒机**  
**Granulator**



**破碎机**  
**Crusher**

## What can our machine produce

**“**  
**Agriculture**  
**Irrigation**  
**System**  
**”**

### Main water hose <<



Pre-punching outlet holes hose



PE water transmission main hose



PE woven heat-sealed water hose

### Drip irrigation pipe <<



Round dripper pipe



Flat dripper tape



Strip dripper tape  
T-TAPE

### Micro spray hose <<



PE micro-spray hose



PE woven heat-sealed rain hose



## Worldwide Touring Exhibition



## Communicate Sincerely



## Precision Manufacturing



# Certification & Patent



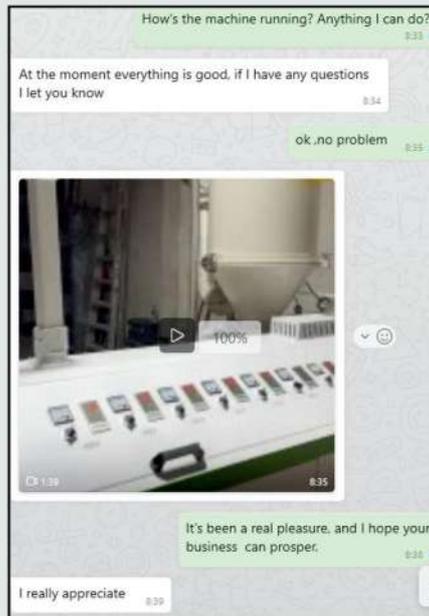
# Worry-free after-sales service



Exclusive service group



The machine is running well



Regular follow-up visits



Customers repurchase



IWYAA®

Laiwu Huaya Polymer Sci.&Tech. Co., Ltd.  
莱芜华亚超高分子材料科技有限公司

+86 0531-76168688

139 0634 7126 (国内商务) +86 153 0634 7126 (International business)

[www.huayaequipment.com](http://www.huayaequipment.com)

[steven@laiwuhuaya.com](mailto:steven@laiwuhuaya.com), [laura@laiwuhuaya.com](mailto:laura@laiwuhuaya.com) (International business)

NO. 79-10, Jinggangshan Road, Laiwu District, Jinan City, Shandong Province, China

山东省济南市莱芜高新区鹏泉街道井冈山路79-10号

