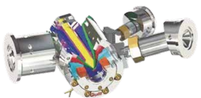
医用三层（二层）避光输液管生产线
Three Layers (Two Layers) of Medical Light-proof Infusion Tube Extrusion Line

该系列设备针对避光管的使用特性建设为主机共挤结构，三层或两层共挤专用模具，真空定型冷却水槽，伺服牵引切断连体机，皮带输送机等组成。客户可选配在线侧径测量仪。具有高效充分塑化、模具流量的精确控制，可以使得管路粘合良好，不分层。减少避光层偏移；更换专用模具可以用于OD20的双层共挤平口滴门，（内层厚度约为：0.2～0.25mm，外层厚度约为：0.65～0.7mm），模具结构为免调试，内外层分布均匀，模具流道无死角，拆模快捷方便，提高生产效益。

适用管径范围：OD1.5～OD20mm

适用材料：医用级PVC料、PVC避光料、TPU料等



主要技术参数 Main technical parameter

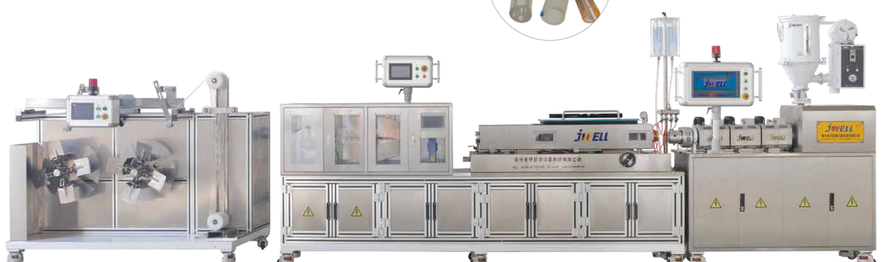
设备型号 Equipment model	螺杆直径和长径比 Screw diameter and L/D	耗电量KW/hr Power consumption KW/hr	产能kg/hr Capacity Kg/hr	占地尺寸(长宽高，单位MM) Machine size(L/W/H,in MM)
JWS45+30	45*28D 25*25D	9	15～45	L9500*W2500*H1780
JWS50+30	50*28D 30*28D	10	20～55	L13000*W2500*H1780
JWS55+30	55*28D 30*28D	12	20～65	L13500*W2500*H1780

备注：以上规格参数如有变更，恕不另行通知。Note:The specifications are subject to change without prior notice.

This series of equipment adopts two machines co extrusion structure based on characteristics of light- proof tube, which consists of three layers or two layers of coextrusion dedicated die, vacuum forming cooling tank, servo haul off and cutting machine and belt conveyor. Customer can choose online track outside diameter gauge. High efficient plastification and precise control of die and flow enable lightproof tube to bond well.This equipment with replacement of special mold can suitable for OD20 double-layer coextrusion flat mouth dripping bucket(inner layer thickness is 0.2mm～0.25mm, the outer layer thickness is 0. 65mm～0.7 mm). Avoid adjustment mold structure, inner and outer layer uniform distribution, mold flowing channel with no dead Angle, quick and convenient dismantle, improve production efficiency.

Applicable tube diameter: OD1.5～0D20mm.

Applicable materials: PVC compounds, PVC light- -proof compounds and TPU compounds for medical application.



呼吸类导管、氧气插管、输液管单螺杆挤出生产线
Single Screw Extrusion Line Endotrscheal Tube and Infusion Tube

该系列设备由单螺杆挤出主机、挤出模具、真空成型冷却水槽、小皮带牵引、伺服切断机组成，客户可根据需求选配输送机，设备和产品接触面铺设不锈钢面SUS316或可根据客户需求定制。

设备采用材料：医用级聚氯乙烯(PVC)：医用级聚氨酯(TPU)；等其他材料。

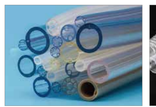
适用管类名称：鼻痒管、气管插管、输液管和高弹性输液管、双腔、多腔、单排管等。

设备适用管径和公差范围：

外径：1.5mm~20mm

外径尺寸公差：±0.01mm, ±0.02mm, ±0.05mm

壁厚：0.1mm~3.0mm



This series of equipment consists of single screw extrusion main machine, extrusion die, vacuum forming cooling tank, belt haul-off unit and servo cutter. Equipment and product contact surface can be made of stain-less steel(SUS316)or custom designed to match customer's requirements.

Applicable materials: PVC, TPU and other materials for medical application.

Applicable tubes: Nasal oxygen cannula, tracheal intubation, infusion tube, elastomeric infusion tube, double-cavity, multi-cavity and single row tube, etc.

Applicable tube diameter and margin of tolerance:

Outside diameter: 1.5~20mm

Dimensional tolerance of outside diameter: ±0.01, ±0.02, ±0.05mm

Wall thickness:0.1~3.0mm

主要技术参数 Main technical parameter

设备型号 Equipment model	螺杆直径和长径比 Screw diameter and L/D	耗电量KW/hr Power consumption KW/hr	产能kg/hr Capacity Kg/hr	占地尺寸(长宽高，单位MM) Machine size(L/W/H,in MM)
JWS25	25*25D	2	2～5	L7500*W2000*H1780
JWS45	45*28D	7	15～40	L9500*W2500*H1780
JWS55	55*28D（30D）	8	20～55	L10500*W2500*H1780
JWS 65	65*28D（30D）	11	40～90	L12600*W3000*H1780

备注：以上规格参数如有变更，恕不另行通知。Note:The specifications are subject to change without prior notice.

CE TÜV CERT ISO9001:2015

JWELL

Medical Precision
Catheter Extrusion

医用精密导管挤出

金纬机械
JWELL MACHINERY

精密中心静脉导管生产线
Center Vein Medical Pipe Extrusion Line

产品用途 Application

气管插管、中心静脉导管、麻醉管、输液管、导尿管、毛细管、多孔管等各类精密医用导管。
According to the special requirements of customer,HRJ develoing and designing the precision medical extrusion line which is a new type equipment.

主要特点 General features

- 挤出机采用德国西门子人机界面及西门子电脑控制操作系统，德国进口免维护电机与减速机直联方式驱动，能有效防止常规皮带传动的低效率、传动误差大、皮带与带轮的摩擦掉粉污染洁净车间等缺陷，使生产过程中无粉尘、无油渍、无噪音；
- 不锈钢定型水槽全部采用进口SUS304不锈钢折弯成型、全玻璃盖封闭式结构、医用级去离子水专用不锈钢离心泵，水环式低真空度的真空成型方式，确保了管材的圆度和精度；再配以风环式吹干装置，从而使生产过程中的冷却水能够循环使用而不溅湿地面；
- 双轴测径仪采用高速激光光源、日本TOSHIBA高精度CCD，计算机数字化图像处理技术、能够实现在线产品非接触测量、实施数字化显示、测量精度：±0.003MM；
- 牵引机皮带采用瑞士进口多辊带、日本三菱伺服电机及控制器、德国进口涡轮蜗杆减速机传动，确保牵引线速度高精度高稳定性的长期运行，且牵引过程中皮带不打滑，无噪音；
- 切断机采用低惯量铝合金旋转刀臂及特殊切断刀套，使切口平整无飞丝，日本三菱PLC编程控制，海泰克人机操作界面，可确保切断长度的精度，切断长度可任意设定，切断次数自动计数；
- 挤出主机和牵引机采用全闭环交流伺服控制系统，使牵引速度可时刻跟进主机速度的变化而变化，可确保整条生产线处于高精度高频率响应度的速度同步状态；能有效避免因外围环境因素影响主机速度变化时造成管径的波动，从而确保产品的最高精度达到±0.03的超高标准。

- The extruders adopt Siemens man-machine interface and Siemens computer-control operation system, maintenance-free motor (Germany) and decelerator direct driving, which can effectively avoid low efficiency and big transmission error of general belt transmission. Dust, grease dirt and noise produced during manufacturing process are also avoided.
- The cooling bath is made of imported SUS304 stainless steel with complete glass closed structure and stainless steel centrifugal pump for special medical-grade deionized water. Its water-annulus and low vacuum moulding ensures fine roundness and precision of pipes. Its air-annulus drying device allows the cooling water to be used circularly and not to splash the ground.
- Biaxial diameter gauge adopts high velocity laser light source, Japan TOSHIBA high-precision CCD, digital image manipulation, non-contacting measuring for online products and real-time digital display with measuring precision of ±0.003mm.
- The haul-off unit consists of belts made from Switzerland, servo motor and controller of Japan MITSUBISHI, turbing and worm decelerator from Germany. It can work with high precision and stability and no skidding or noise.
- The cutting unit is equipped with aluminum alloy rotatable Knife arm of low-inertia as well as special cutting Knife pouch which ensures smooth cuts. It is servo motor driving and PLC programming controlling of Japan MITSUBISHI, as well as Siemens man-machine interface ensure precision of cutting length. Cutting length can be set at will and cutting times can be counted automatically.
- The extruder and the haul-off adopt complete closed loop serve motor which enables hauling speed to change with the extruder speed, and consequently ensure speed synchronization on the whole line with high precision and frequency responsibility. It can also prevent pipe diameter from fluctuating when working speed is changed due to environmental factors, and thus ensures product precision up to ±0.03.

气管插管生产线
Trachea Cannula Medical Extrusion Line

本机组主要用于生产PVC、PP、PE等塑料软管，可广泛应用于医疗、化工、饮料等行业。它具有以下特点：
- 本机组设计先进，主机及标线机均采用变频调速，挤出速度稳定。
- 冷却水槽的水位、水温自动控制。
- 牵引机采用皮带及压辊组合方式，变频调速，牵引速度稳定。

The production line is mainly for PVC, PP, PE etc. Plastic tube to medical products, chemical and drink fields. It has the following features:
- Advanced design technology, inverter control for main machine and markline machine, stable extrusion speed.
- Automatic control the water level and temperature in cooling trough.
- Belt and press roll for haul off machine, inverter control and stable haul-off speed.

精密输液管生产线
Precise Perfusion Pipe Extrusion Line

高扭矩专用驱动系统，齿、轴为高强度合金钢，渗碳、磨齿处理。螺杆具有芯部温度调节装置及良好的料筒冷却，保证了对物料工艺温度的精确控制。

Drive system is special for high torque unit. Gear and shaft are made of high strength alloy steel, nitriding and polishing. Temperature adjusting system and good cooling of barrel ensure an accurate temperature.

主要技术参数 Main technical parameter

型 号 Type	螺杆直径 Screw Diameter	螺杆长径比 Screw L/D	主电机功率 Main Power	产量 Capacity
JWS-45	45mm	28:1	7.5kw	15-18kg
JWS-50	50mm	28:1	11kw	20-25kg
JWS-65	65mm	28:1	18.5kw	30-40kg

备注：以上规格参数如有变更，恕不另行通知。Note:The specifications are subject to change without prior notice.

血路（透析）管、输血管精密单螺杆挤出生产线
Precision Single Screw Extrusion Line Extracorporeal Blood Tube(Dialysis Tube) and Blood Transfusion Tube

该系列设备针对血透耗材需求量巨大，质量要求安全标准高，建设设备的配置由自动吸料机、高产能精密单螺杆挤出主机、专用挤出模具、加长真空成型冷却水槽、伺服牵引切断一体机和输送机组成，客户可选配在线精密外径测量仪；依据不同客户特殊应用需求，可针对性提供全方面的技术支持、操作培训、及时跟踪完善售后服务。
·速度：为满足泵管、主管、支管等不同管径不同的生产速度，牵引机的动力可采用日本三菱伺服电机配合进口高效减速机，做到改变速度的同时满足不同管径扭矩力度及伺服的稳定性。
·整机组设备操作简便，外观客户根据客户要求定制不锈钢面，满足十万级千净车间使用标准。

This series of equipment is designed for high demand of hemodialysis material, which consists of auto loader, high output precision single screw extrusion main machine, special extrusion die，lengthening vacuum forming cooling tank, servo haul-off and cutting machine and conveyor.Customer can choose online precision outside diameter gauge; We can provide comprehensive technical support, operation training, prompt follow-up and perfect after-sales service according to different user's specific application requirements.
·Speed: Haul-off unit power can adopt Japan MITSUBISHI servo motor with imported reducer to change speed and deliver different pulling force and drive stability.
·Complete unit is easy to operate, the appearance can be made of stainless steel according to customers requirements to meet the standards of 100-thousand-grade clean workshop.

主要技术参数 Main technical parameter

设备型号 Equipment model	螺杆直径和长径比 Screw diameter and L/D	耗电量KW/hr Power consumption KW/hr	产能kg/hr Capacity Kg/hr	占地尺寸(长宽高，单位mm) Machine size(L/W/H,in mm)
JWS-45	45*28D	7	15~40	L9500*W2500*H1780
JWS-65	65*28D(30D)	10~12	40~90	L12600*W3000*H1780
JWS-75	75*28D(30D)	15~18	50~100	L14000*W3000*H1780
JWS-90	90*28D(30D)	19~22	60~120	L15000*W3000*H1780

备注：以上规格参数如有变更，恕不另行通知。Note:The specifications are subject to change without prior notice.

医用级PVC造粒生产线
Medical Grade PVC Pelletizing Machine

金纬机械生产的系列平双螺杆挤出机与相应造粒辅机组成的成套设备，主要适用于医用级PVC造粒。生产的塑料颗粒均匀、密实、美观，辅机采用模面切粒，风送集料，振动分离冷却，具有自动化程度高，生产效率佳等特点。

The medical grade PVC pelletizing machine from JWELL features, uniform granules, dense and beautiful. The auxiliary machine adopts die face granulation, air-driven collection and vibration separation and cooling. Machines has high degree of automation and good production efficiency.

主要技术参数 Main technical parameters

机型 Model	SJP93	SJP120	SJP135
螺杆规格 Size of screw	93/22	120/26	135/31
电机功率 Power	55KW	110KW	160KW
产能产量 Output	300-400kg/h	500-600kg/h	800-1200kg/h
产品规格 Granule size	Ø 3-5mm	Ø 3-5mm	Ø 3-5mm

备注：以上规格参数如有变更，恕不另行通知。Note:The specifications are subject to change without prior notice.

医用级TPU造粒生产线
Medical Grade TPU Compounding Line

TPU是一种安全、稳定、优质的PVC替代材料，目前已得到全世界众多静脉输液器制造商的认可。卓越得抗扭结性，弹性，柔韧性。抗内压强度远远大于PVC，透明度优于PVC/EVA和TPO，高耐化学性，可使用伽马射线和ETO杀菌，药物吸附性低，易于粘结。根据聚氨酯/TPU物料流变特性，我公司对筒体的加工精度及筒体的冷却效果方面进行大胆的尝试，同时对一些关键部件进行了升级再设计，基本解决了一些制约物料生产过程中的一些瓶颈性问题，反应的效率及产能得到大幅度的提升，客户反应良好，认同度高。

TPU is a safe, stable and high-quality PVC alternative material, which has been recognized by many intravenous infusion device manufacturers all over the world. Excellent kink resistance, elasticity and flexibility. The internal pressure resistance is much higher than that of PVC, the transparency is better than that of PVC / EVA and TPO, the chemical resistance is high, gamma ray and ETO can be used for sterilization, the drug adsorption is low and easy to bond. According to the rheological properties of polyurethane / TPU materials, our company made a bold attempt on the processing accuracy and cooling effect of the cylinder, and upgraded & redesigned key components, which basically solved some bottleneck problems restricting the production process of materials, greatly improved the reaction efficiency and capacity. We had win good market response and high recognition.

主要技术参数 Main technical parameters

机型 Model	CJWH75	CJWH95
长径比 L/D	44-56	44-56
转速 Speed	300-500rpm	300-500rpm
参考产量 Capacity for reference	500-700kg/h	1000-1500kg/h

备注：以上规格参数如有变更，恕不另行通知。Note:The specifications are subject to change without prior notice.

地址：江苏省常州市溧阳中关村开发区上上路118号Add: No.118,shangshang Road,Liyang,Changzhou city,China
Whatsapp/Wechat/Mobile: +86-178 2010 6288
E-mail：salgg@jwell.cn

版本号Edition No.：2022.06