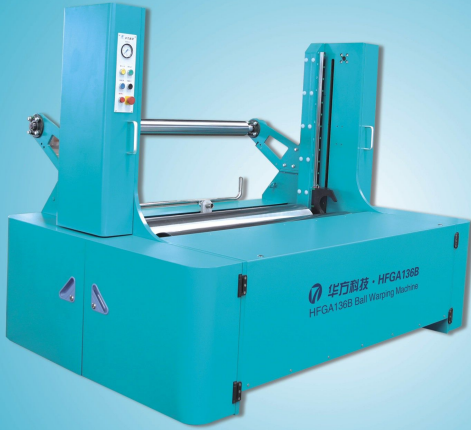




## HFGA136B 型集束球经机

HFGA136B Ball Warping Machine



### 适用范围 Scope of Application

将筒子架的纱线集束后，卷绕在球经轴上，供国外各种型号的束状染色机使用。  
This machine is applied for transferring individual yarn ends into a ropelike bundle and winding on beam, it's suitable for working with various types of rope dying machines.

## HFGA136B 型集束球经机 HFGA136B Ball Warping Machine

### 主要技术特征

- 采用世界知名品牌可编程控制器，对上下轴、加压的程序动作及开停车、调速进行安全可靠的自动控制。
- 采用世界知名品牌触摸屏，适时监控机械运行情况、故障分析，断头及断头率显示等，操作方便、直观。
- 采用世界知名品牌的变频器，调速范围大，确保恒线速卷绕。
- 采用独特的加压方式，加压压力线性可调。
- 经纱速度、长度均采用世界知名品牌编码器测量，计量精确、可靠性好。
- 左右墙板采用优质钢板，结构性好、刚性强、机器运转更平稳。
- 采用独特的上下轴方式，上下球经轴更加方便、快捷。
- 喂纱口往复轴承采用自润滑工程塑料直轴轴承，减少了直轴轴承的维护保养。
- 传动装置均采用同步带传动，降低了设备运行时产生的噪声。
- 人性化穿纱控制，达到设定长度后，自动降为爬行速度（可调），实现不停车穿纱，减少张力波动。
- 喂纱采用伺服电机传动，可任意设定行程、往复速度，实现高精度定位和重复定位，可对球经轴进行收边，减少退绕时产生隐性断头。（选配）
- 分枝箱前增加了吸风装置，有效的减少了飞花进入球经轴。（选配）
- 分枝箱采用上下摆动装置，防止定点磨损。（选配）
- 纱架采用循环吹风装置。（选配）

### Main Features

- With big brand PLC control, loading/doffing, pressing, machine start/stop and speed adjusting can be realized automatically and reliably.
- Big brand touch screen for convenient operation of mechanical running situation monitoring, trouble shooting analysis, broken and broken rate indicating.
- Big brand inverter for wide speed adjusting scope to ensure constant liner winding speed.
- Special press form, pressure given can be adjusted linearly.
- Big brand encoder for speed and length counting, precise and reliable.
- Wallboard are made of high quality steel plate, nice in structure, high in rigidity ensure steady machine running.
- Special loading/doffing design, more convenient and quick reaction.
- Reciprocating bearing of yarn feeder use self lubricating engineering plastic linear bearing for easy maintenance.
- With synchronous belt drive, machine running in low noise.
- Friendly leasing control, when desired setting length is reached, speed reduces to creep speed automatically so that no need to stop machine for treading leasing band. Creep speed can be adjusted.
- Yarn feeding use servo motor driving, travel distance and reciprocating speed can be set as well for high precision positioning and repositioning so that to make nice edge of warp ball and reduce invisible yarn breakage during unreeling (for option).
- Blowing device designed in front of leasing need to prevent fluff entering warp ball (for option).
- Swing device in vertical direction available for leasing need to avoid fixed point wearing (for option).
- Calculating blowing device available for creel (for option).



操作面板  
Control operation board

## HFGA136B 型集束球经机 HFGA136B Ball Warping Machine



分枝箱  
leasing reed



吸风装置  
Blowing device



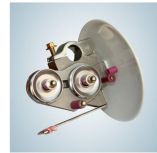
测长架  
Length counting frame



电控控制系统  
Electric control system



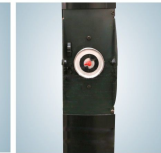
分枝箱摆动装置  
Swing device for leasing reed



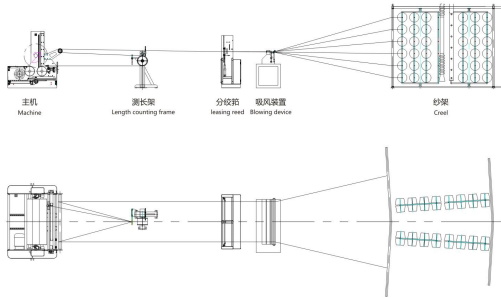
压片张力器  
2-pillar tensiometer



三柱磁悬张力器  
3-pillar magnetic suspension tensiometer



电磁式纱线张力器  
DiscTens



主要技术参数 Main Technic Parameters

成型宽度 Width	1000-1200mm	
卷绕成形直径 Ball dia.	≤1400mm	
经纱速度 Speed	10-350m/min	
加压压力 Pressing force	1500N-5500N	
加压方式 Pressing form	调压阀(手动控制) Regulating valve, manually control 比例阀(自动控制) Proportioning valve, automatically control	常规 Standard 选配 For option
喂纱传动方式 Feeding form	普通电机 Common motor 伺服电机(球经轴可收边) Servo motor(warp ball adge reducing)	常规 Standard 选配 For option
主电机功率 Power of main motor	5.5Kw	
主机重量 Machine weight	约(About) 1500kg	
外形尺寸 Overall dimension	2300mm(长L)×1550mm(宽W) ×1720mm(高H)	

客户使用现场  
Machine running in customer's mills



HFGA135D 型分纱整经机 HFGA135D Rebeaming Machine

HFGA135D 型分纱整经机  
HFGA135D Rebeaming Machine



适用范围 Scope of Application

本机与国内外各种型号的束状染色机配套，将染色后的束状纱拆改变成片状纱线后卷入经轴。  
This machine can be completed with various types of rope dyeing machine.  
It's applied for winding individual yam ends from a rope-like bundle and distributes them evenly over a section beam.

主要技术特征

- 采用世界知名品牌可编程控制器，对上下轴，开停车及调速进行安全可靠的自动控制。
- 采用世界知名品牌触摸屏，适时监控机械运行情况，故障分析等，操作方便直观。
- 采用世界知名品牌变频器，调速范围大，确保恒线速转绕。
- 独立起落式拔纱器装置，使分经更容易，提高整经效率。
- 具有倒车装置，可将转绕经轴上的纱线退绕出来，便于操作工寻找断头，不产生绞头，提高分经轴的质量。
- 伸缩架可左右摆动，实现纱线交叉转绕。
- 经纱速度，长度均采用世界知名品牌编码器测量，可靠性好。
- 左右墙板采用优质钢板，结构性好，刚性强，机器运转更平稳。
- 采用了独特的经轴支撑夹持机构，在突然断气，断气时能够保证经轴不会脱落，避免伤及工人。

Main Features

- With big brand PLC control, loading/doffing, machine start/stop and speed adjusting can be realized automatically and reliably.
- Big brand touch screen for convenient operation of mechanical running situation ministering, trouble shooting analysis, broken and broken rate indicating.
- Big brand inverter for wide speed adjusting scope to ensure constant liner winding speed.
- Independent collapsible yam guide device, more easy for leasing, increase productive.
- Yam reverse device available for unreeling yam winded on beam, convenient for operator's broken end searching, avoid leasing end and increase warp beam quality.
- Expansion reed swing left and right to get cross winding.
- Big brand encoder for speed and length counting, precise and reliable.
- Wallboards are made of high quality steel plate, nice in structure, high in rigidity to ensure steady machine running.
- Special beam holding and clamping device, warp beam will not drop in time of sudden power failure or gas failure, thus to protect worker free from injure.

上倒车装置

将纱线卷入纱桶，以防止纱线污染。上倒车上的离合器则可保证在纱线张力过大时不受到损伤。

纱团检测装置

该装置使用光电形式，防止纱线打团经过导纱罗拉，以确保纱线不被拉断或者设备不被外力损坏，从而提高整经的效率，质量及安全。

张力架

通过变频器，使纱线张力与设置的张力保持一致。安装在下面的夹纱装置则可减少停车与倒车时由惯性产生的松纱现象。

缓冲装置

该装置通过角度传感器反馈的信号，自动调节摆臂的位置，以保证实际张力与设置的张力保持一致，提高编织产品的质量。

Upper reversing device

This device is for leading the yarn bundle into the vat to store and prevent it being polluted. The clutch ensures yarns not to be damaged in time of big tension.

Intertwined yarn detection device

To prevent intertwined yarns passing by guide roll, avoid yarn being pulled break or machine being damaged by external force, this machine is equipped with a photo-electric detecting device for guarantee and increase productivity, yarn quality and safety.

Tension frame

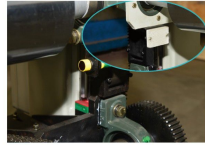
The inverter control ensure yarn tension is in correspondence with the desired setting tension. The yarn gripper in the lower place reduces and minimizes the yarn-loosening which is caused by the inertia in time of machine stop or reversing.

Buffer

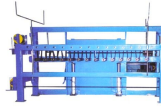
This device adjusts the position of swing arm according to the feedback signal of the angle sensor. This ensure the actual tension is in correspondence with the setting tension and improve the product quality.



上倒车装置 Upper reversing device



纱团检测装置 Intertwined yarn detection device



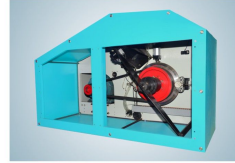
地面绕纱架 Turn-around stand



张力架 Tension frame



缓冲装置 Buffer

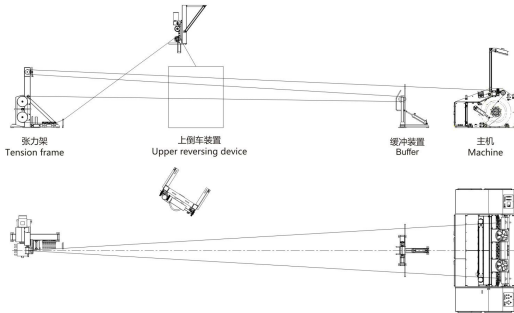


主传动系统 Driver System



电器控制系统 Electric Control System

精益求精 不断创新



主要技术参数 Main Technic Parameters

整经有效幅宽 Working width	1600 mm、1650mm、1800 mm、2000 mm	选配 For option
经轴片直径 Beaming dia.	φ800 mm、φ1000 mm	通用 For both
整经速度 Warping speed	0-350 m/min	
制动距离 Brake distance	≤1.5m(最高速度时 at max speed)	
卷绕密度 Winding density	0.55-0.65g/cm <sup>3</sup>	
伸缩箱 Expansion reed	W型，可左右摆动，与经轴机械联动，摆动范围0-20mm W-shaped, swing left and right, interlock working with warping beam, swing scope 0-20mm	
主电机功率 Main motor power	15kw变频器 15Kw inverter motor	
储纱架储纱量 Yarn store capacity	地面绕纱架(上下式):≤12m Turn around stand(up and down):≤12m 上绕纱架:全桶绕纱 Upper stand:Full barrel store	通用 For both 选配 For option
主机重量 Machine weight	约(about)3500kg	
外形尺寸 Overall dimension	1600mm 3837mm(长L)X1950mm(宽W)X2600mm(高H) 1800mm 4037mm(长L)X1950mm(宽W)X2600mm(高H) 2000mm 4237mm(长L)X1950mm(宽W)X2600mm(高H)	

客户使用现场

Machine running in customer's mills



精益求精 不断创新