



*碳丝收丝机装配现场(Carbon fiber winder assembly site)

► 碳丝收丝机装备

CARBON FIBER WINDER

碳纤维自动换卷卷绕收丝机，可有效的将碳纤维顺利在空卷上进行卷绕。采用全新的勾拉切断形式，在空卷卷绕的同时拉紧空卷和满卷之间的碳纤维，从而能够使切丝机构自动切丝。采用全新的辅助推出下丝机构，后期可配套使用机械手下丝上纸管，实现全自动操作，提高效率，降低50%用工人数；全新的气胀机构，丝卷取放轻松；配合自动下丝功能，满足高品质碳纤维的生产要求。

The automatic carbon fiber winder can effectively wind the carbon fiber on the empty coil and start winding. With its brand new method of hook-pull and cutting, the carbon fiber between the empty roll and the full roll is tightened while the empty roll is wound, so as to achieve the automatically cutting of the shredding mechanism. With the auxiliary filament loading mechanism that is new, the manipulator can be adopted to load the filament on the paper tube in the future, so as to realize the automatic operation, to improve efficiency, and to reduce the the number of workers by 50%. The newly equipped pneumatic mechanism makes yarn tube loading and unloading an easy task. With the filament loading function, the aim of producing high quality carbon fiber can be fulfilled.



■ 产品参数 / PRODUCT PARAMETERS

型号 / Model	最大收卷12kg碳丝收卷机 Maximum winding 12kg carbon fiber winder	最大收卷20kg碳丝收卷机 Maximum winding 20kg carbon fiber winder
纱管尺寸 / Yarn tube size	内径(ID)Φ76.2±0.5mm; 外径(OD)Φ84±1mm; 管长(Pipe length)280mm	内径(ID)Φ76.2±0.5mm; 外径(OD)Φ84±1mm; 管长(Pipe length)280mm
碳丝丝锭尺寸 / Carbon wire spindle size	最大外径 (MOD) Φ240mm; 幅宽约 (Width approx) 245~250mm	最大外径 (MOD) Φ330mm; 幅宽约 (Width approx) 245~250mm
碳丝丝锭重量 / Carbon wire spindle weight	最大 (Maximum) 12kg	最大 (Maximum) 20kg
收丝速度 / Winding speed	最大 (Maximum) 20m/min	最大 (Maximum) 20m/min
卷绕比控制方式 / Winding ratio control method	电子卷绕比 (Electronic Winding Ratio)	电子卷绕比 (Electronic Winding Ratio)
收丝K数 / Range	12K~50K	12K~50K
纱管胀紧方式 / Yarn tube expansion method	气动胀紧 (Pneumatic expansion)	气动胀紧 (Pneumatic expansion)
下丝方式 / Means of unloading	气动推出辅助下丝 (Pneumatic pusher device)	气动推出辅助下丝 (Pneumatic pusher device)
机台方向 / Machine direction	左右手分开 (Separate left and right hands)	左右手分开 (Separate left and right hands)
电气防护等级 / Electrical protection level	IP54	IP54

■ 产品优势 / PRODUCT ADVANTAGES

01

参数精确
PRECISE PARAMETERS

收丝参数精确设置，确保收卷后产品端面成型美观，无毛丝。
Thanks to the precise winding parameters, the the end face of the final product is in good shape with no broken filaments.

02

速度精准
ACCURATE SPEED

精确提取前道出丝速度，收卷张力控制合理，整轴收卷紧实、饱满。
The winding speed accurately extracts the speed of the previous thread, the winding tension is controlled reasonably, and the winding of the whole shaft is tightly and full.

03

人机交互强
STRONG HCI

收丝机组充分考虑人机交互性，做到操作便利，引丝方式合理。
Having taken human-computer interaction into consideration, the winding unit is convenient in operation, and accurate in leading the carbon fiber precursor.

04

卷径自读准确
COIL DIAMETER IS ACCURATELY READ

收丝卷径自读准确，主轴旋转速度跟随准确合理。
After the coil diameter is accurately read by the winder, the rotation speed of the main shaft adjusts precisely.

05

精准卷绕比
PRECISE WINDING RATIO

收丝张力及卷绕比等工艺参数需根据不同K数丝束单独依据经验设置准确值。
Process parameters, such as winding tension and winding ratio, can be set in an accurate number based on experience in accordance with the K difference on the carbon fiber precursor.

06

防护等级高
HIGH PROTECTION LEVEL

机组防护等级充分考虑碳纤维导电特殊性，确保设备本身密封到位。
The protection level of the winding unit fully considers the conductivity of carbon fiber, so as to ensure the equipment is not only well-sealed, but also has the ability of heat exchange.