



COIL WINDING MACHINE CATELOGE

Wire winding and foil winding technology solutions



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About Us

Founded in 2005 by Fan Yuxue, BEST™(full name: Jinan Best Intelligent Tech. Co., Ltd.) is committed to providing professional wire winding and foil winding technology solutions for global power transformer manufacturers. It is a transformer-specific equipment manufacturing enterprise integrating R&D, design, manufacturing and global sales.

We are not only manufacturers of transformer winding and foil winding equipment, but also industry solution experts in power transformer coil winding processes.

The founding team of BEST™ comes from SUNSHINE™, a busbar machine manufacturer renowned for its advanced mechanical manufacturing, and MAC™, a CNC busbar machine manufacturer with software application as its core technology. Leveraging their unique advantages in mechanical manufacturing and software technology, the BEST team is dedicated to the innovation and iteration of CNC transformer winding machines, fully automatic foil winding machines, and

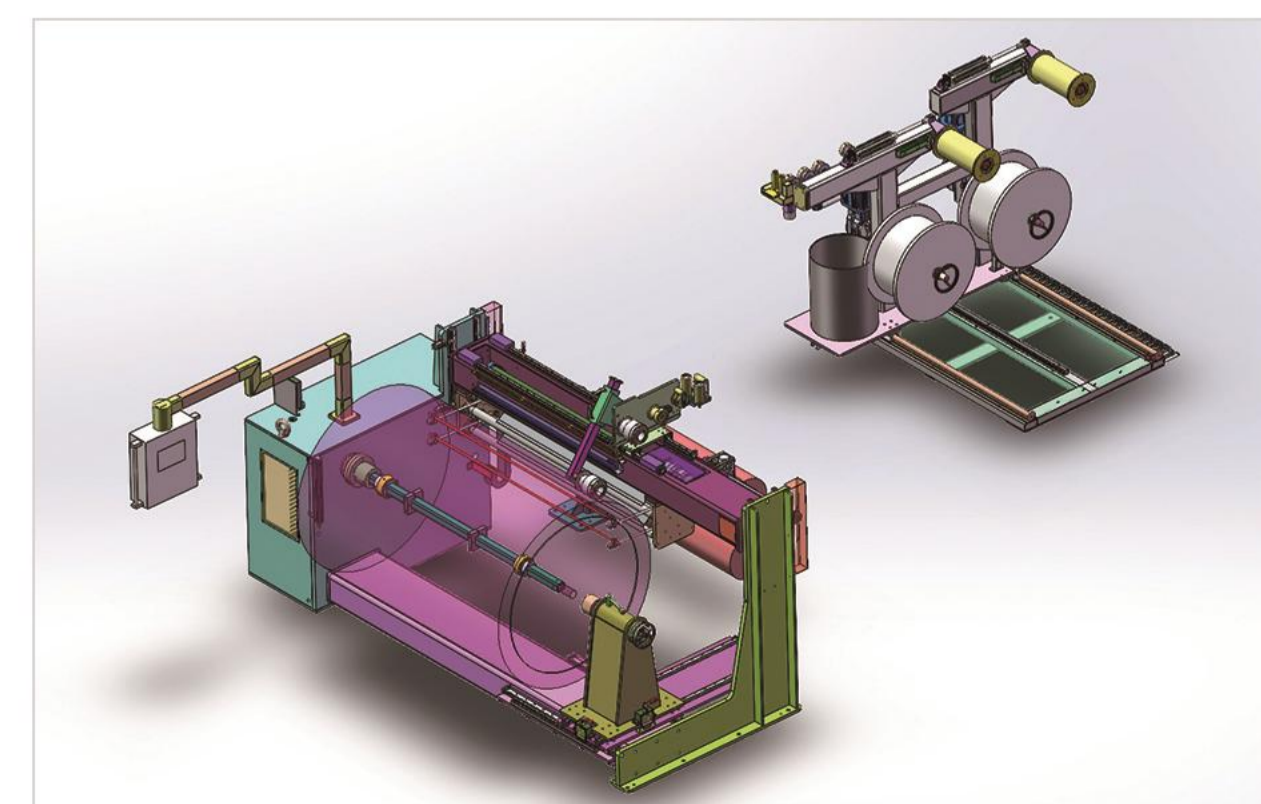
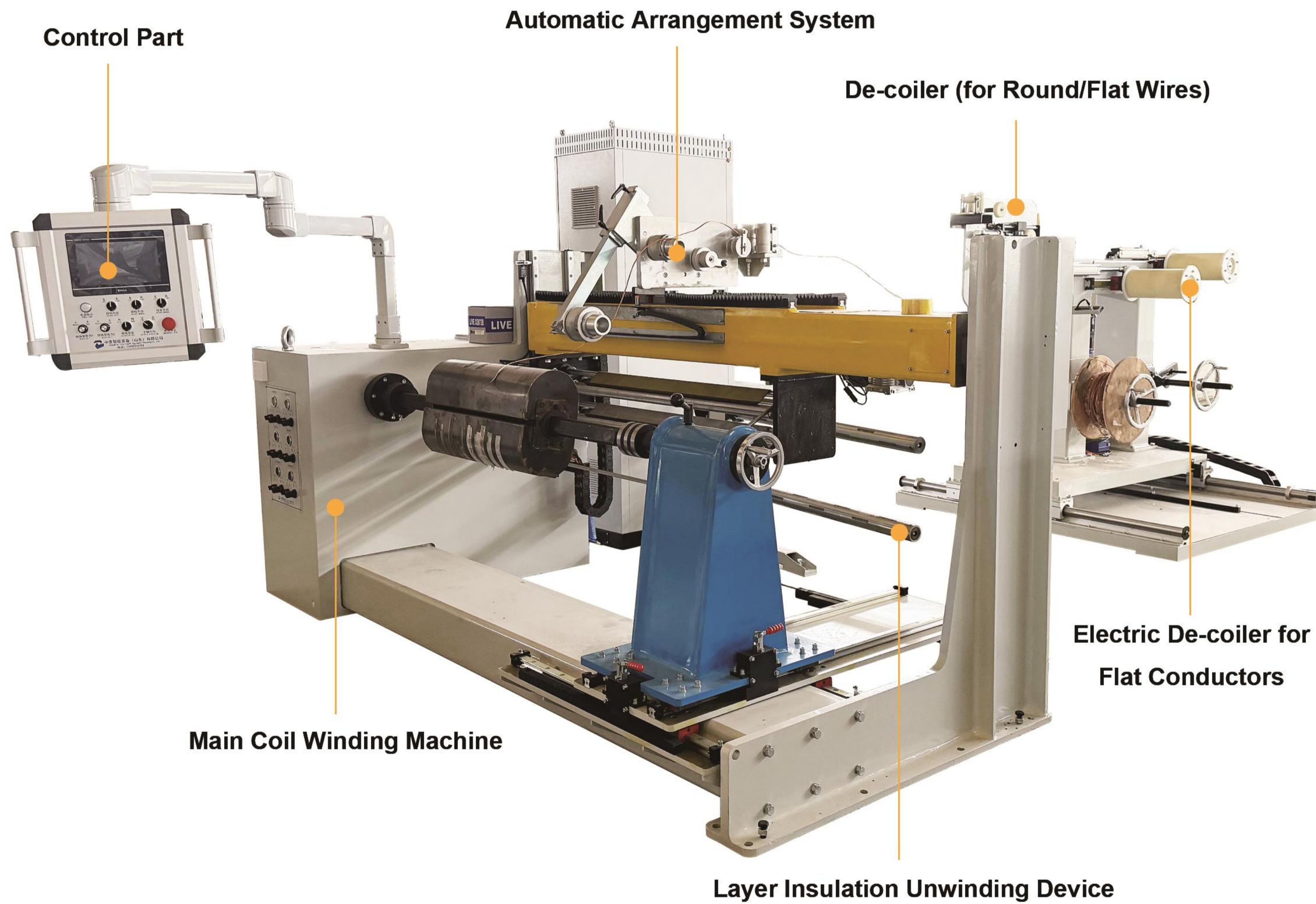
Our transformer coil winding technology team works closely with over 60 transformer manufacturers worldwide to develop coil winding equipment for medium-voltage / distribution transformers and high-voltage transformers. Leveraging nearly 20 years of experience in low-voltage winding machinery and high-voltage winding equipment R&D, we not only provide standard transformer winding machines, but also offer modular expansion of standardized equipment based on customers' specific transformer manufacturing processes, meeting the non-standard customization needs of more transformer manufacturers.



Our Clients



CNC HV Transformer Winding Machine



Purpose

GZR type automatic coil winding machine is suitable for all kinds of coils winding in middle and small electric transformer, circuit transformer, reactor and other similar art. It is necessary equipment of amorphous alloy transformer coil.

Characteristics

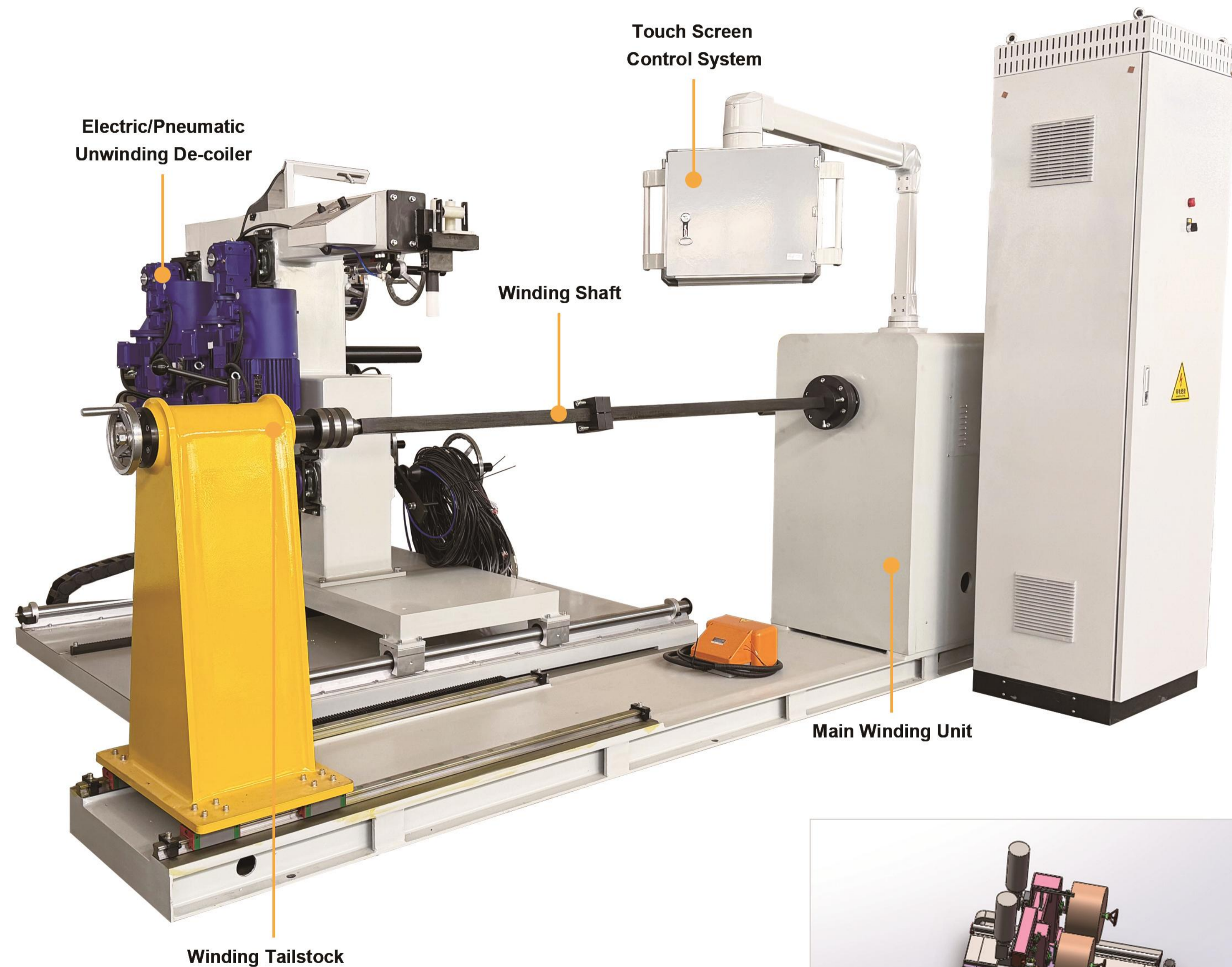
- ▶ This machine adopts hard gear mechanical transmission system, with high efficiency and low noise features.
- ▶ Motor with braking function, sensitive and reliable.
- ▶ Frequency adjusting range is large, speed is adjusted accurately and stable. Motor insulation grade is F.
- ▶ Adopting servo motor and PLC control system, high clear touch-screen operation to achieve displaying and machine interaction. Adopting imported ball screw transmission and line guide to assure cabling precision.
- ▶ Electrical adopts frequency adjusting, inverter to control braking, so starting and braking can be press, it can assure the best winding status.
- ▶ Desktop control box is located on top of machine box, easy to use, display definitely and clearly.
- ▶ With automatic cabling function.
- ▶ Setting special path to confirm synchronization between automatic cabling and winding.
- ▶ There is tension function in cabling device, tension is adjustable to meet with different wire specification, There is also pneumatic pressing device to meet with word requirement.
- ▶ Before winding ,we can set automatic cabling gauge according to different wire specification. IN the winding, we can make fine adjustment in manual for the error to assure coil tightly.

Technical Parameters

Parameters	Model	GZR-100	GZR-800	GZR-1000	GZR-1400
Main axis center height		850	850	850	850
Tip distance (mm)		250-200	250-900	250-1200	250-1600
Working torque (NM)		200	300	300	300
Main axis speed (r/min)		0-300	0-240	0-240	0-240
Speed adjusting method		Stepless Variable Speed Control	Stepless Variable Speed Control	Stepless Variable Speed Control	Stepless Variable Speed Control
Coil size (mm)		Outer Diameters≤500 Inner Diameter≥60 Axial Heights≤600	Outer Diameters≤600, Inner Diameter≥60 Axial Heights≤800	Outer Diameters≤800, Inner Diameter≥60 Axial Heights≤1000	Outer Diameters≤1000 Inner Diameter≥60 Axial Heights≤1400
Coil weight		≤100KG	≤300KG	≤700KG	≤800KG
Guide wire specification (mm)		Enamelled wire: Φ0.3—Φ3	Flat Wire: ≤3×12 Enamelled wire: Φ0.3—Φ4	Flat Wire: ≤3×12 Enamelled wire: Φ0.3—Φ4	Flat Wire: ≤4×12 Enamelled wire: Φ0.3—Φ4
Min.cabling distance (mm)		0.01	0.01	0.01	0.01
Main motor power (KW)		3	5	8	10

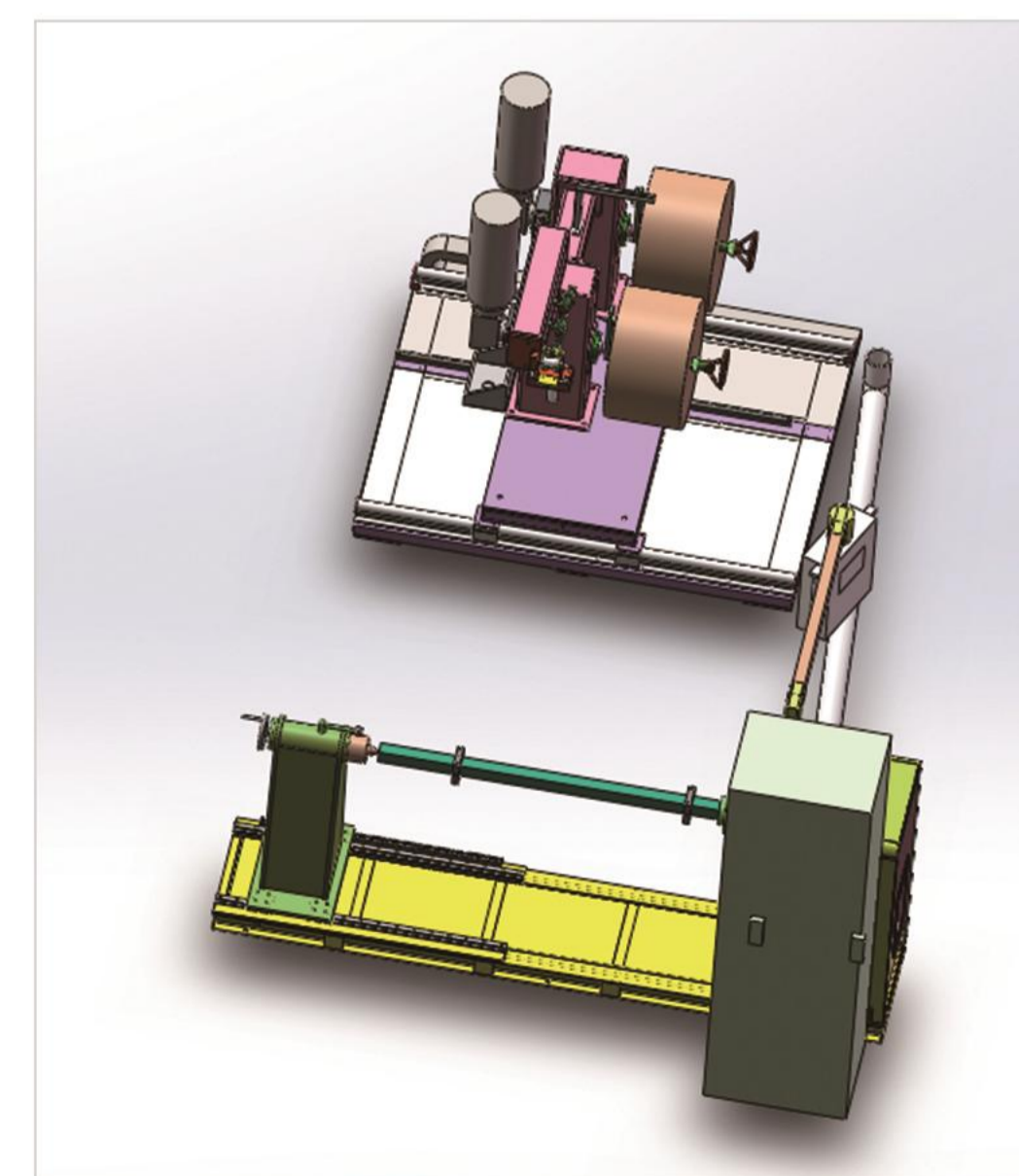


LV Transformer Coil Winding Machine



Summary

This series of horizontal winding machines incorporates advanced technology from countries such as Germany and Canada. Characterized by a unique appearance, novel design, and user-friendly operation, these machines feature intuitive data display capabilities and a high level of automation; consequently, they have gained widespread application within China's power transformer industry.



Characteristics

- ▶ Winding machine working reliable, easy operating, Suitable for status of smooth starting, frequent jogging, smooth braking and urgent stopping.
- ▶ The main axis winding and reverse winding can be achieved by foot switch and control box ,touch screen displays the number of coil winding with ability of counting number of winding and reverse winding, memory when power off.
- ▶ All components of machine is national standards and supplied from famous manufacture. Inverter, PLC and touch screen adopt imported high quality brand, other components are domestic famous manufacture.
- ▶ Winding machine pneumatic rotation smoothly, safe and reliable. Every operating handle and hand wheel operating flexible, no blocking struck situation.
- ▶ The whole appearance of winding machine is neat and beautiful.

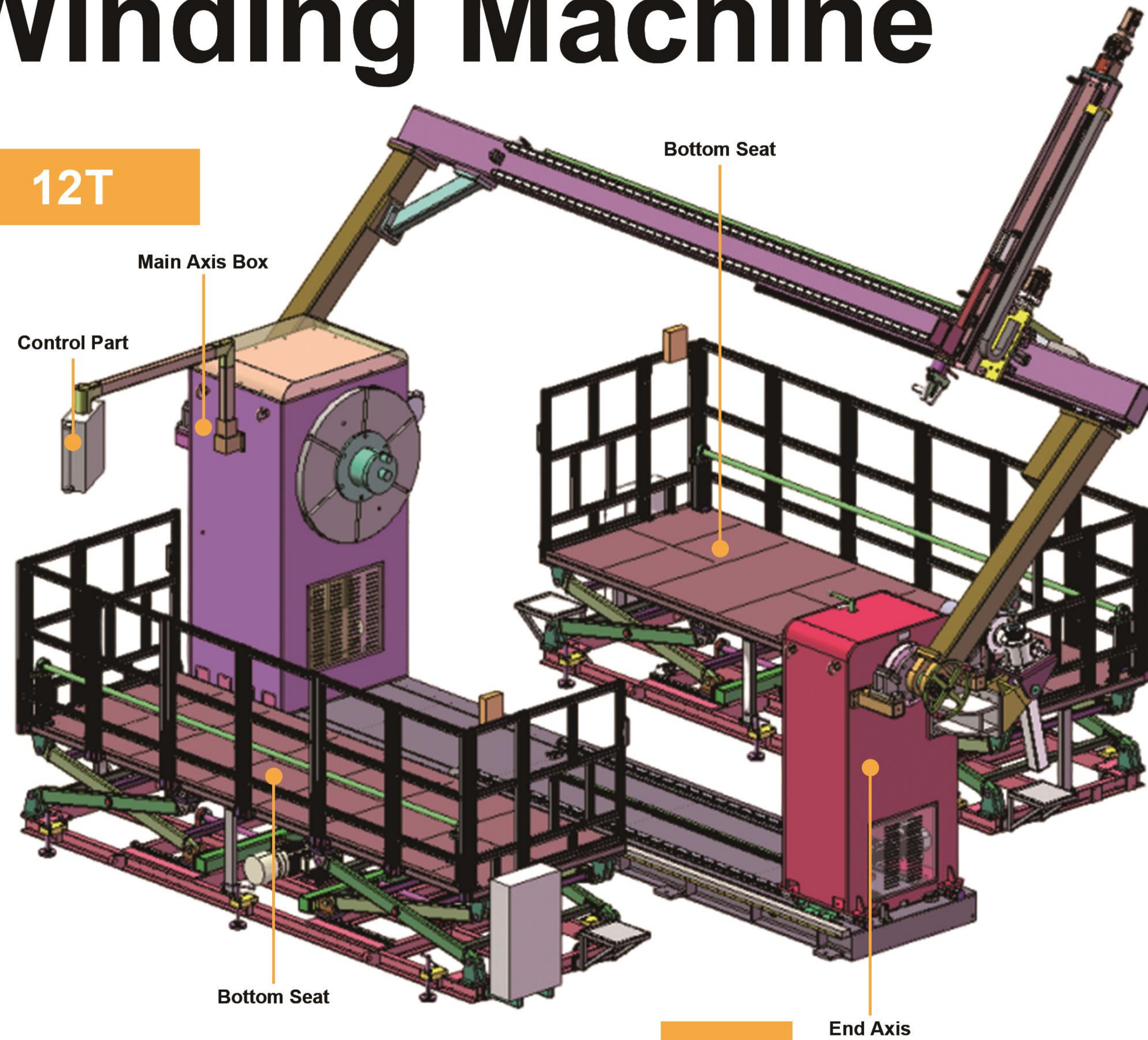
Technical Parameters

Parameters	Model	WR-05	WR-1	WR-2	WR-3
Max.Loading (Kg)		500	1000	2000	3000
Main axis speed (r/min)		0-200	0-150	0-100	0-60
Main axis center height		850	850	900	1100
Tip distance (mm)			1500	1600	2500
The telescopic shaft length		0-150	0-150	0-150	0-150
Working voltage (V)		380	380	380	380
Main motor power (kW)		3	4	5.5	7.5



Heavy Duty Transformer Winding Machine

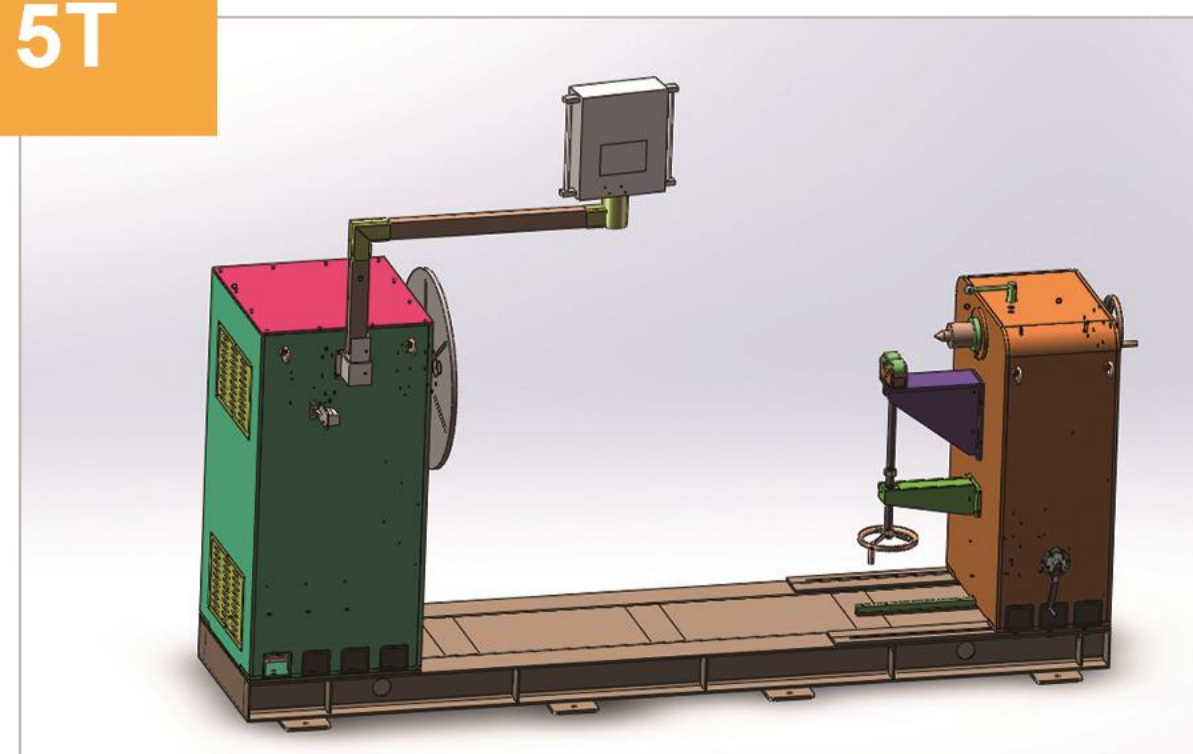
12T



Summary

This series of horizontal winding machine has a unique appearance, strong power, stability and reliability, easy operation, and intuitive data display, which is well received by the majority of users. Since it was put into operation, it has been widely used in the domestic power transformer industry. This series of winding machines are widely used in large-scale oil-immersed type and transformer production.

5T



Characteristics

- ▶ Winding machine working reliable, easy operating, Suitable for status of smooth starting, frequent jogging, smooth braking and urgent stopping.
- ▶ The main axis winding and reverse winding can be achieved by foot switch and control box ,touch screen displays the number of coil winding with ability of counting number of winding and reverse winding, memory when power off.
- ▶ All components of machine is national standards and supplied from famous manufacture. Inverter, PLC and touch screen adopt imported high quality brand, other components are domestic famous manufacture.
- ▶ Winding machine pneumatic rotation smoothly, safe and reliable. Every operating handle and hand wheel operating flexible, no blocking struck situation.
- ▶ The whole appearance of winding machine is neat and beautiful.

Technical Parameters

Parameters	Model	WR-5	WR-10	WR-15	WR-20	WR-30
Max.Loading(kg)		5000	10000	15000	20000	30000
Main axis speed(r/min)		0-30	0-15	0-10	0-10	-10
Main axis center height		1100	1400	1600	1800	2200
Tip distance(mm)		1000-2500	1500-3500	1500-3800	2500-4000	2500-4500
Working voltage(V)		380	380	380	380	
Main motor power(kW)		11	15	18	22	37

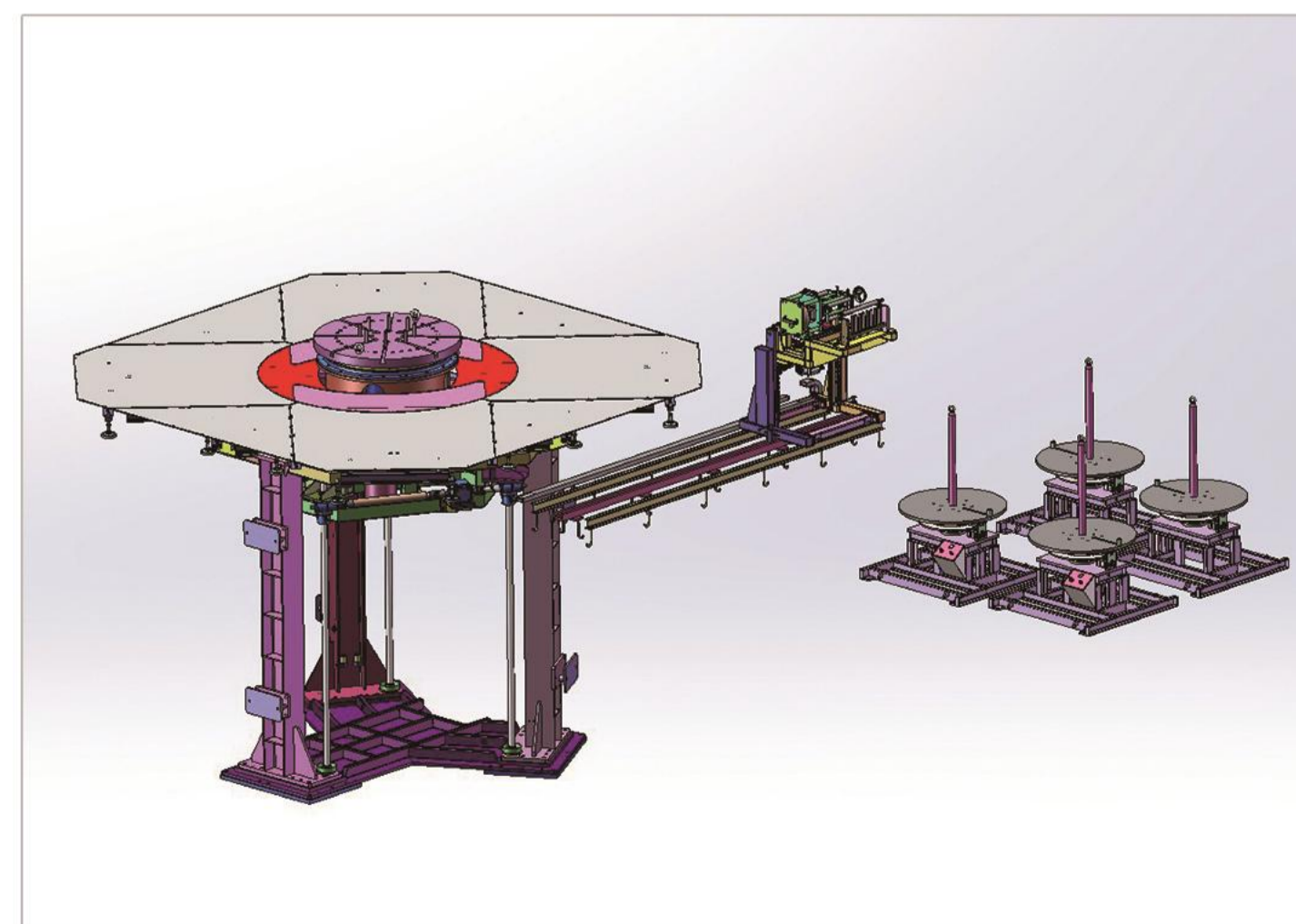


Vertical Transformer Winding Machine



Summary

The vertical winding machine is specifically designed for large power transformers, offering both pit-type and floor-type installation structures. Utilizing a vertical winding method, the equipment is particularly suitable for precision manufacturing of large coils such as those for ultra-high voltage (UHV) transformers and reactors



Characteristics

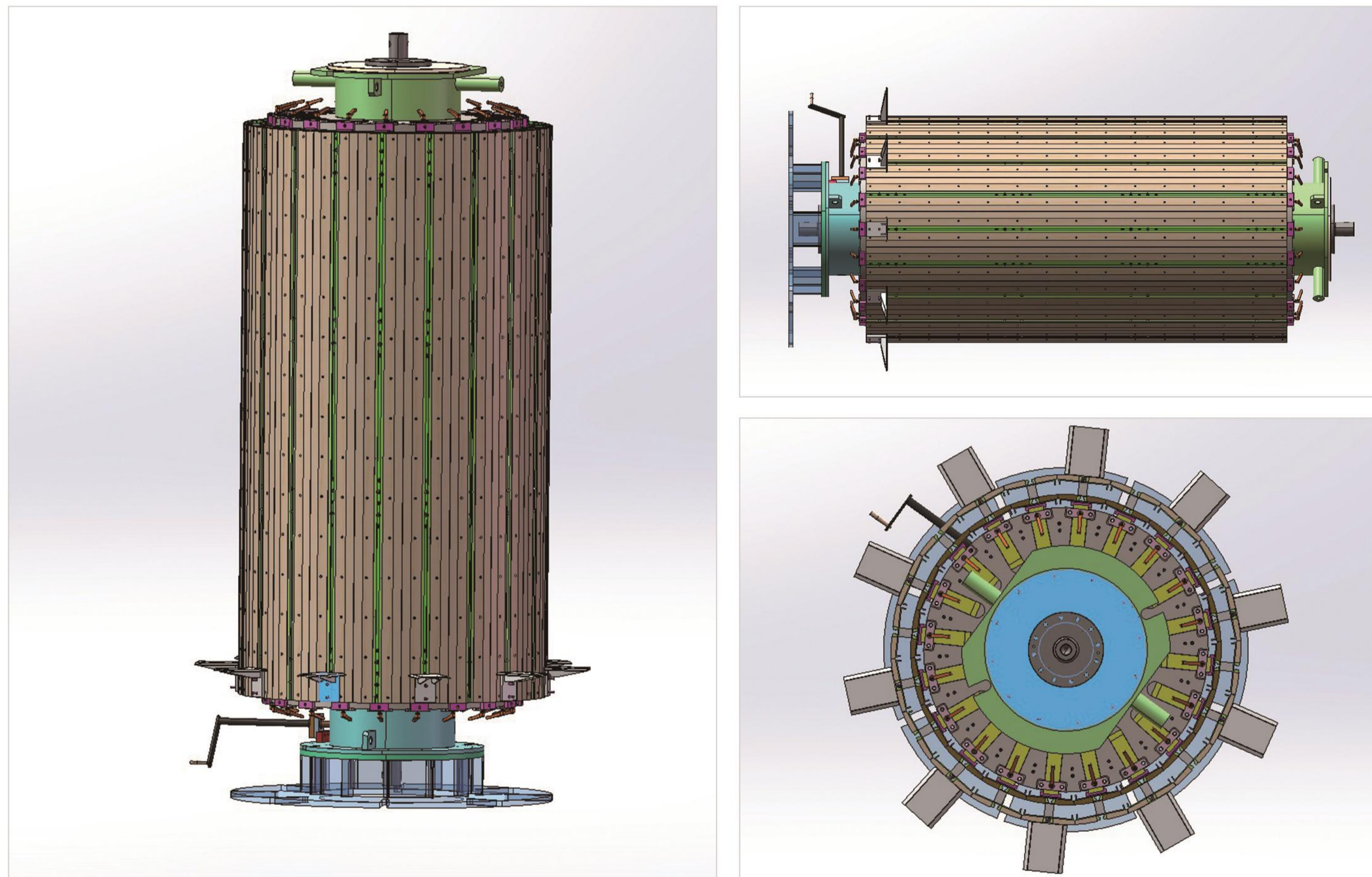
- ▶ Technologically advanced: The equipment design incorporates a range of cutting-edge technologies, including laser ranging systems and protective devices for detecting thread wear.
- ▶ Energy-efficient: The equipment features low energy consumption, and its foundation pit requires minimal dimensions and shallow depth, facilitating ease of construction.
- ▶ Premium components: The equipment configuration utilizes standardized components, sourced from either renowned international suppliers or leading domestic brands.
- ▶ High-quality transmission system: Employing high-quality transmission components, the system ensures high-precision operation characterized by smooth, shock-free movement and low noise levels.
- ▶ The electrical control system features advanced functionality and robust hardware support; through software programming, it enables seamless switching between manual and automatic control modes.
- ▶ The auxiliary units are comprehensively configured and structurally sound, delivering excellent performance and operating under an interlocking control system integrated with the main unit.

Technical Parameters

Project	LRJ-D-10	LRJ-D-15	LRJ-D-25	LRJ-D-35
Flower Pot Stand Load Capacity (kg)	10000	15000	25000	35000
Flower head diameter (mm)	1500	2000	2000	3000
Faceplate Speed (r/min)	0-20	0-15	0-10	0-7
Maximum Turning Diameter(mm)	2000	3000	3000	3500
Maximum Torque(Nm)	20000	30000	32000	32000
Cover Plate Expansion Range(mm)	1000-2500	1200-3000	1200-3200	1200-3500
Cover Plate Extension/Retraction Speed(m/min)	0.5	0.5	0.5	0.5
The flowerpot is raised above the ground(mm)	350	350	350	350
Maximum Conductor Tension(N)	10000	12000	12000	12000
Coil Winding Start Height(mm)	500	500	500	500
Rotary Table Motor Power(kw)	15	22	25	37
Lifting Motor Power(kw)	7.5	7.5	11	15
Total Power(kw)	25	35kw	42kw	55kw



Variable Winding Mold



Expanding mandrel can be used for large, giant or main transformer coil winding.

Expanding mandrel is mainly composed of mouse cage, sliding sleeve assembly, supporting pole assembly, attached pole, transmission parts and T-type right angle limiter components.

According to the needs of each client, we can develop a flexible device structure.

Characteristics

- ▶ Suitable for winding inner hole within the prescribed scope of high, medium and low voltage coil.
- ▶ The material is suitable for winding roll opening and winding; For use with horizontal and vertical
- ▶ Die sliding parts, main shaft between the sliding sleeve and faceplate, the joint of poles and LvPai, poles and faceplate connection adopts oil-free lubrication bearing lubrication.
- ▶ Silk mother uses the bimetallic centrifugal casting, different from other manufacturers usually adopt coppernut, can effectively avoid the stress cracking phenomenon.
- ▶ Speed reducer can be used to handle or electric wrench operation.

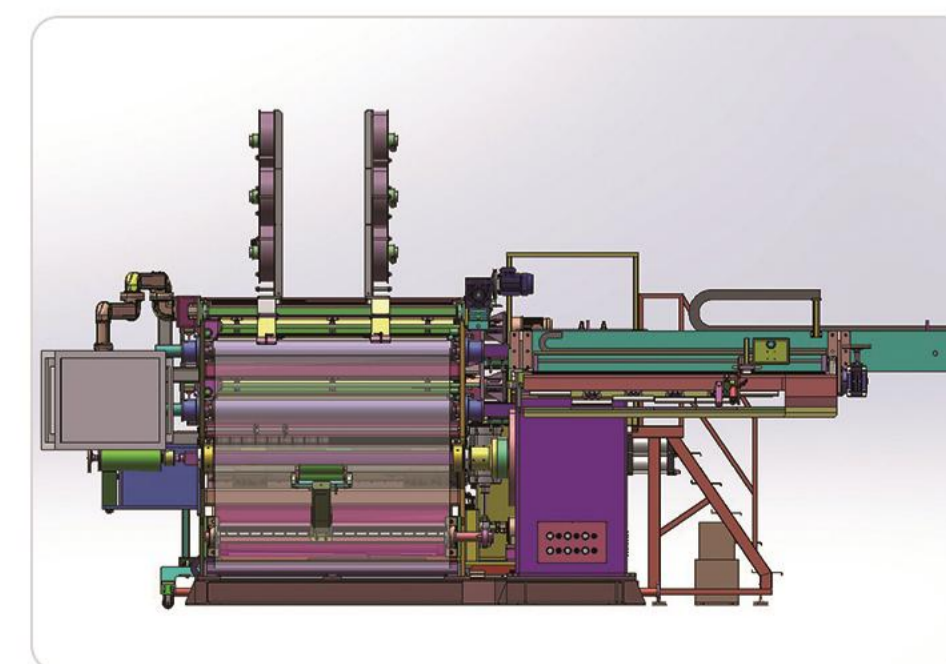
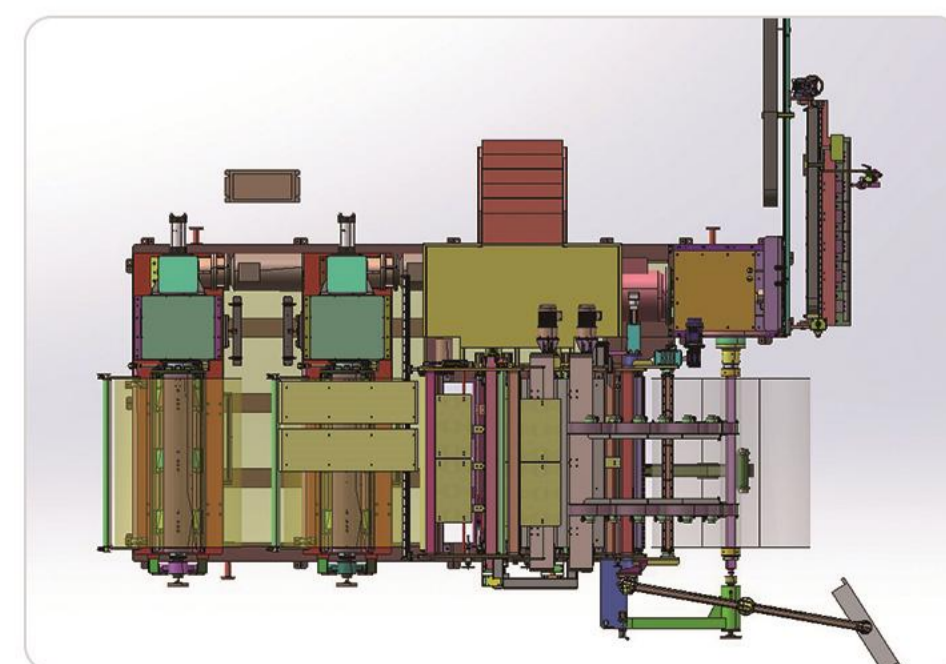
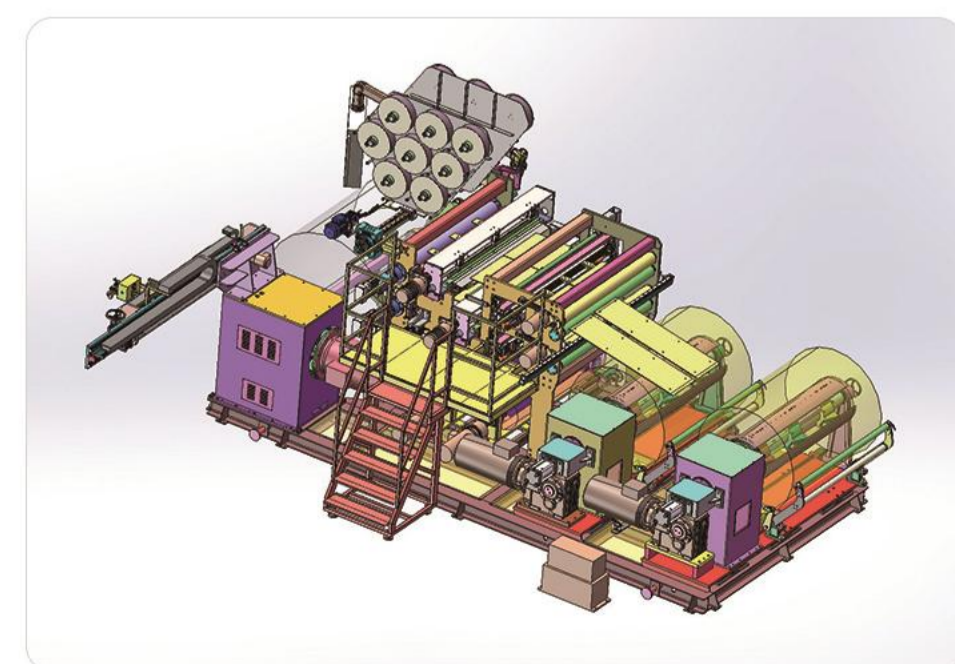
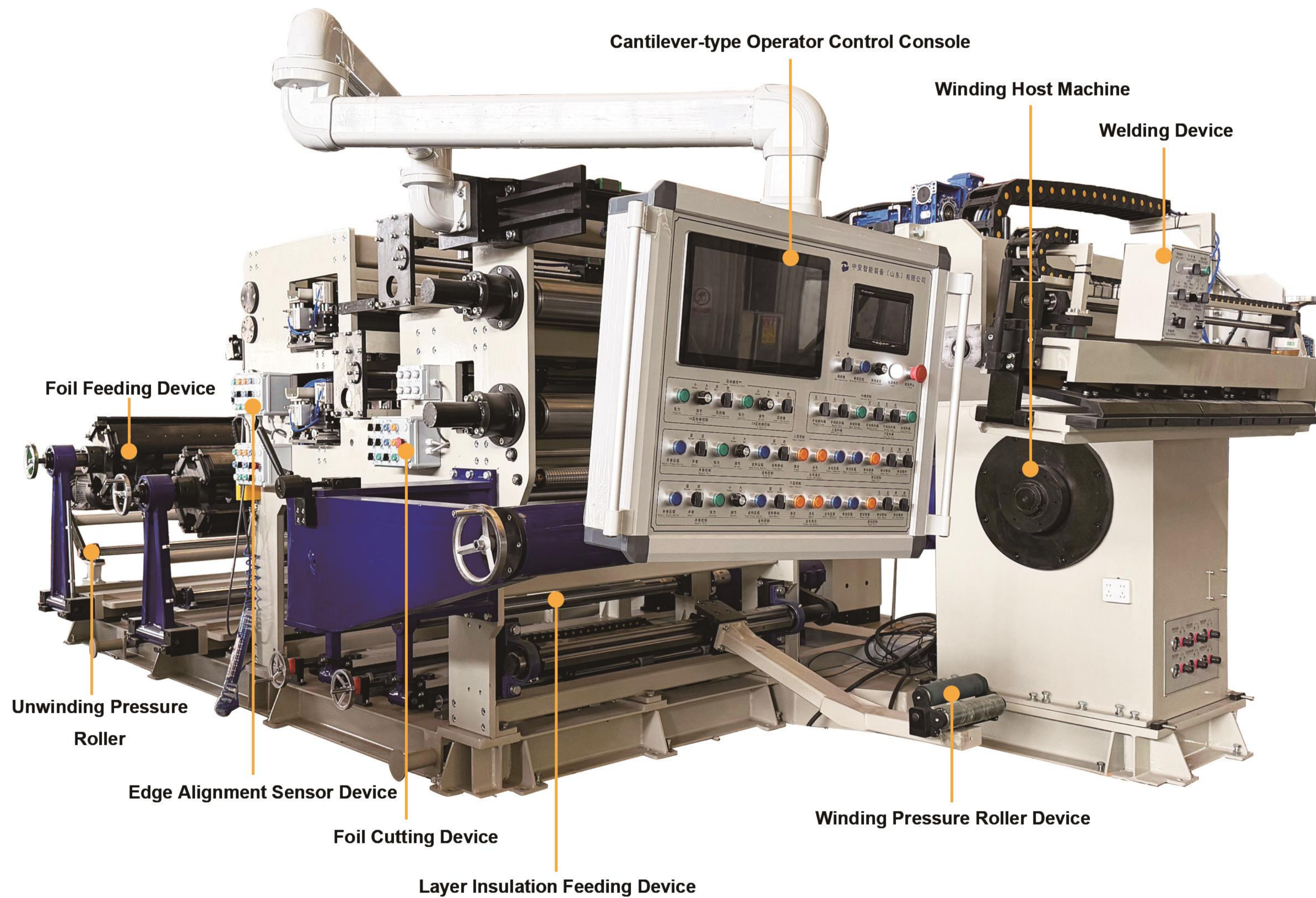
Technical Parameters

Specification Range	Reinforcement Layer Diameter Transition Range	Effective Length	Number of Support Strips	Overall Length	Remark
Ø210-Ø270		1000	8	1700	Dual-Use: Upright and Horizontal
Ø260-Ø350	Ø330-Ø420	1200	8	1900	Dual-Use: Upright and Horizontal
Ø300-Ø410	Ø390-Ø500	1400	8	2100	Dual-Use: Upright and Horizontal
Ø400-Ø530	Ø510-Ø620	1600	12	2200	Dual-Use: Upright and Horizontal
Ø500-Ø660	Ø640-Ø800	2100	12	2700	Dual-Use: Upright and Horizontal
Ø600-Ø760	Ø740-Ø900	2300	12	2900	Dual-Use: Upright and Horizontal
Ø800-Ø1020	Ø1000-Ø1220	2900	18	3500	Dual-Use: Upright and Horizontal
Ø1125-Ø1325	Ø1305-Ø1505	3200	18	3800	Dual-Use: Upright and Horizontal
Ø1460-Ø1660	Ø1640-Ø1840	3200	24	3800	Dual-Use: Upright and Horizontal
Ø1780-Ø2020	Ø2000-Ø2240	3200	24	3800	Dual-Use: Upright and Horizontal
Ø2100-Ø2340	Ø2320-Ø2560	3200	24	3800	Dual-Use: Upright and Horizontal
Ø2420-Ø2660	Ø2640-Ø2880	3200	24	3800	Dual-Use: Upright and Horizontal

Can be custom-made based on parameters provided by the user.



Multi Foil Winding Machine



Purpose

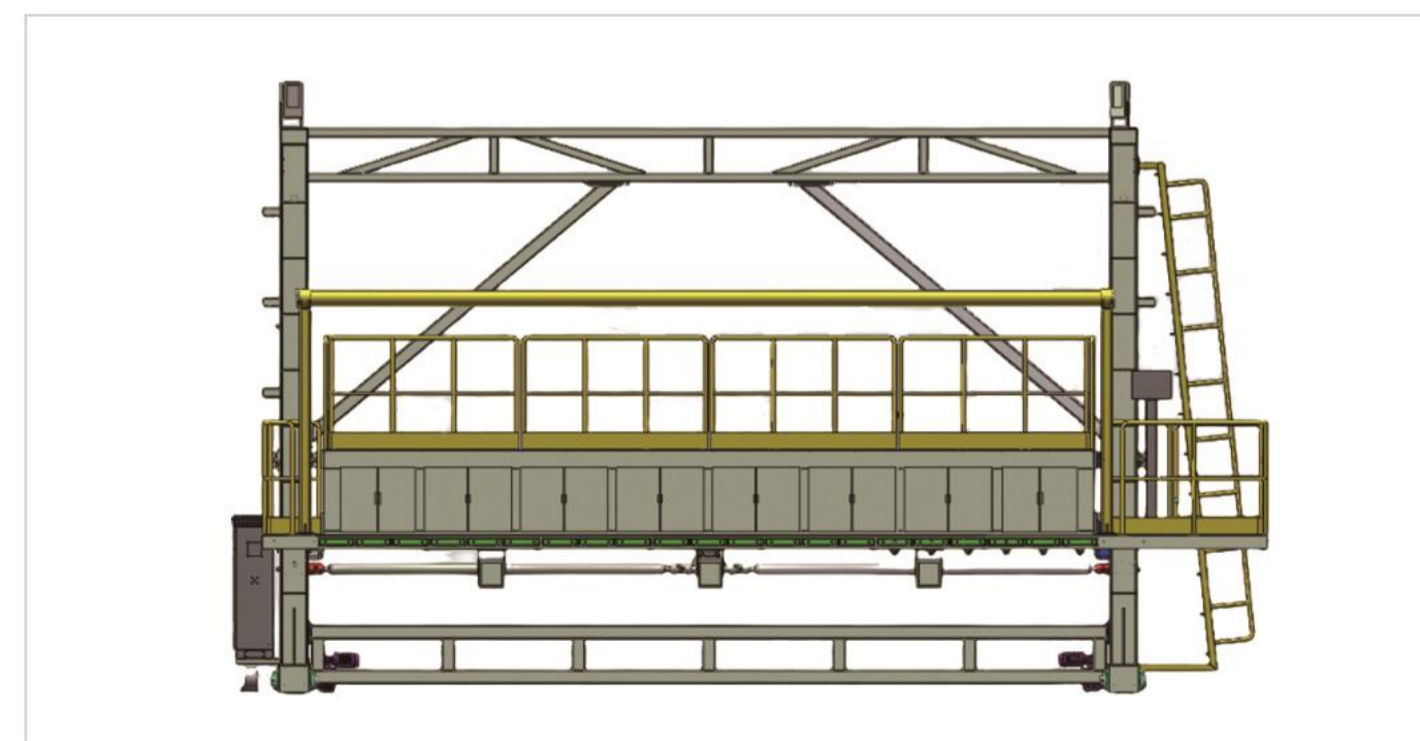
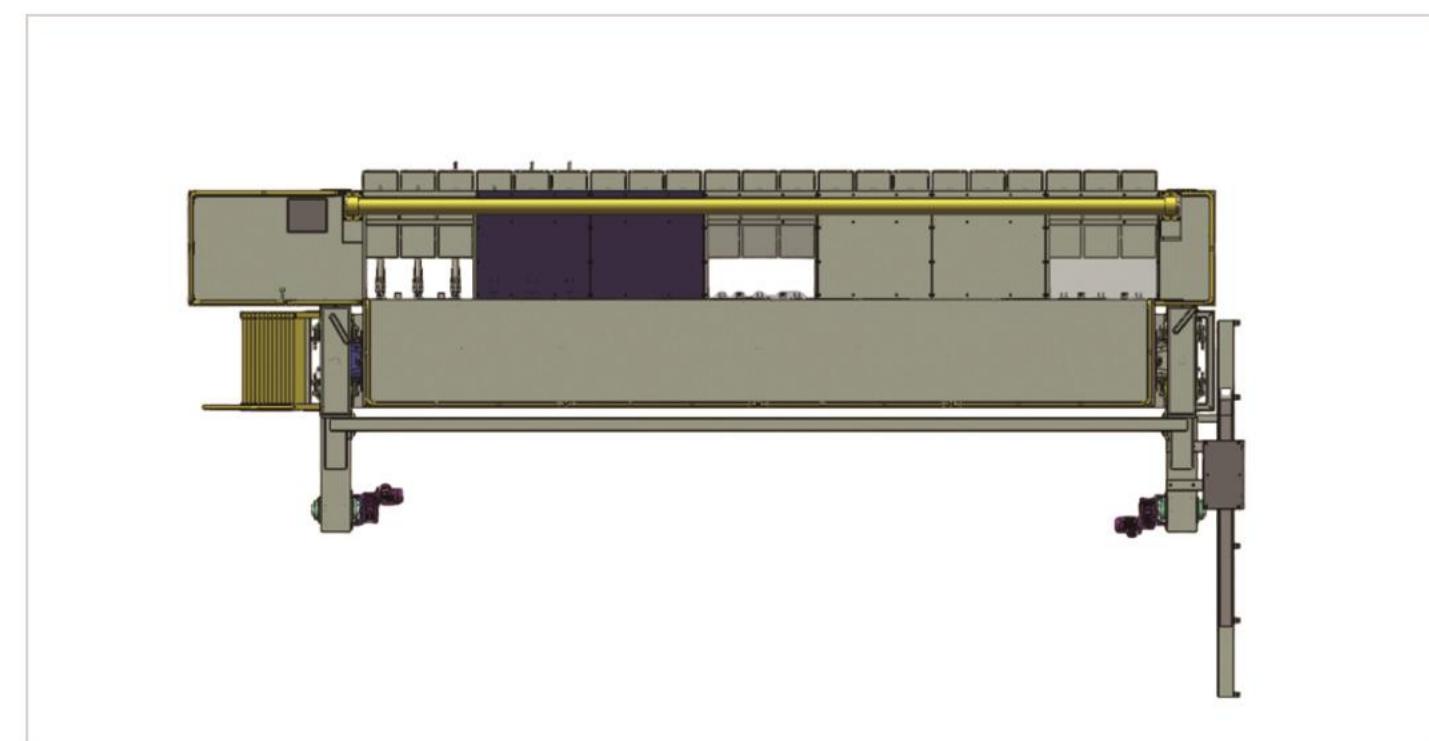
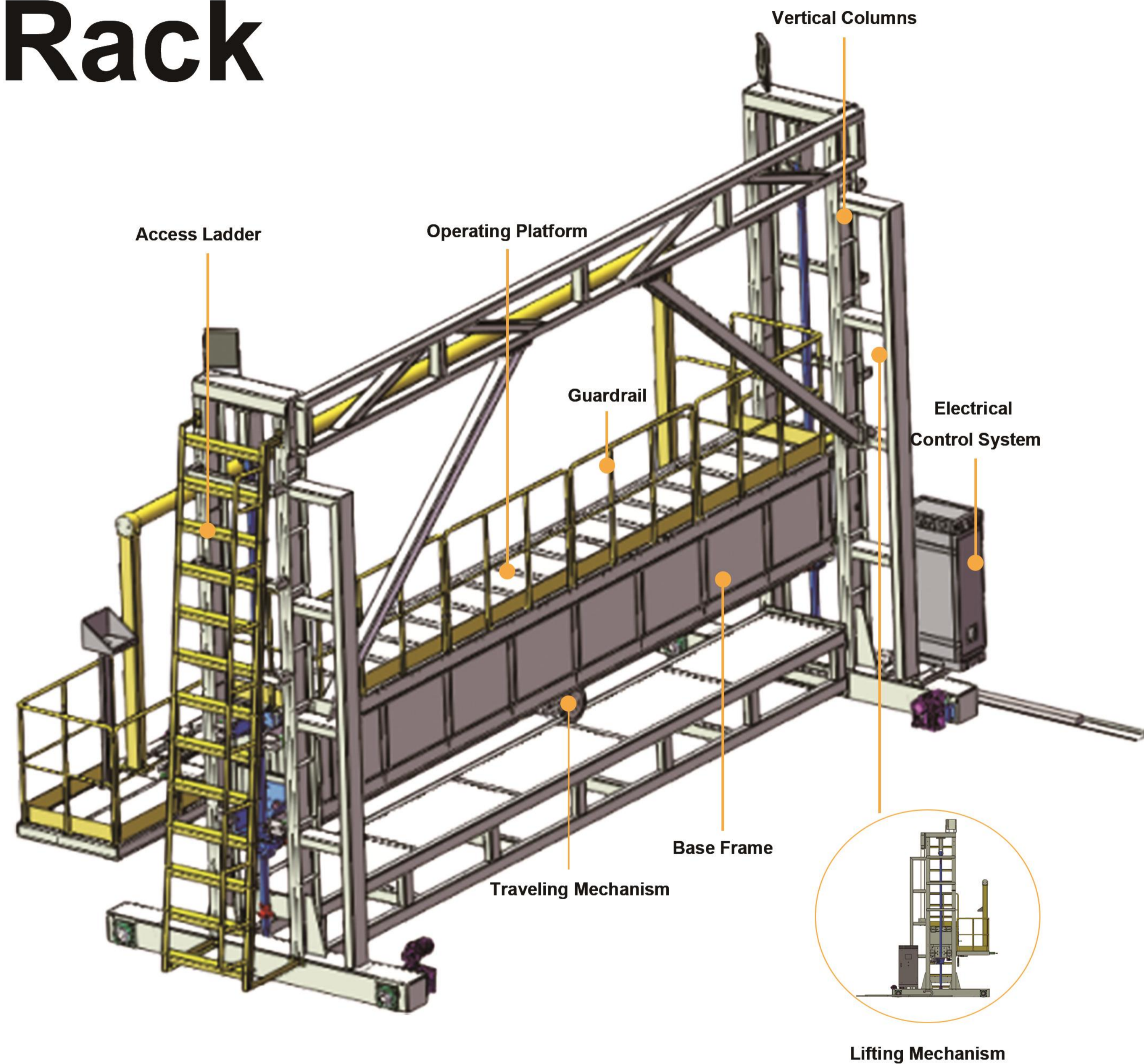
Foil winding machine is suitable for all kinds of coils winding in middle and small electric transformer, circuit transformer, reactor and other similar art. Especially used for rectangular foil coil winding of amorphous and open coil steel core transformer.

Technical Parameters

Model	BRJ-800	BRJ-1000	BRJ-1400-2	BRJ-1400-2
Foil width (mm)	≤800	≤1000	≤1400	≤1600
Foil thickness (mm)	0.5-2.5	0.5-2.5	0.5-3	0.5-3
Foil outer diameter (mm)	100-800	160-1000	200-1400	200-1600
Foil max tension (KN)	≤8	≤10	≤26	≤32
Welding method	Argonaut welding	Argonaut welding	Argonaut welding	Argonaut welding
Automatic correction accuracy (mm)	±0.3mm	±0.3mm	±0.3mm	±0.3mm
Insulation max tension	≤1	≤1	≤1	≤1
Installed Capacity (KW)	15	30	75	90



Assembly Rack



Summary

This equipment is designed for use in the production of medium-to-large transformers within transformer manufacturing facilities; specifically, during the core assembly stage, it serves as a platform for positioning yoke silicon steel laminations and provides a standing workspace for operators.

Technical Parameters

Number	Parameter Name	5T	10T	20T
1	Rated Load of Single-Sided Frame (kg)	5000	10000	20000
2	Operating Platform: Length × Width (mm)	5000×1000	8000×1200	12000×1500
3	Operating Platform Load Capacity (kg)	5000	10000	20000
4	Discharge Operation Platform Load Capacity (kg)	Static Load:5000 Dynamic Load:3000	Static Load:10000 Dynamic Load:8000	Static Load:20000 Dynamic Load:15000
5	Bottom Platform: Length × Width (mm)	5000×1100	8000×1300	12000×1800
6	Extension Length of Retractable Platform (mm)	0-650	0-650	0-650
7	Single telescopic platform load capacity (kg)	150	150	150
8	Telescopic Platform Width (mm)	200	200	200
9	Lifting Range (mm)	800-4000	800-6000	800-8000
10	Lifting Speed (mm/min)	500	500	500
11	Movement Speed (mm/min)	2000	2000	2000
12	Console Lifting Mechanism	Lead Screw	Lead Screw	Lead Screw



Customer Cases

