



Catalogue



Company Introduction

Bestyre Technology Co., Ltd. Is a leading comprehensive service provider offering integrated solutions of Equipment for the international tyre and Retreading industries, specializing in the comprehensive recycling of rubber machinery and rubber tires.

More than 20 years of professional experience and technology in tire retreading.

In line with international standards, the company restructuring technique and solution services team, the introduction of BANDAG, MARANGONI core technology strength, relying on the Chinese tire renovation and recycling association, Qingdao university of science and technology, combining production, study and research, to provide overall solutions to global companies, mining new profit model and plan, implement one-stop professional services.

Featured service scheme

1-Tyre Retreading Total Solution (Tire Retreading machine;tyre retreading tools;tyre retreading materials...)

2-Tire Rebuilding Total Solution (Using tire retreading line and process to produce new tyre)

3-Rubber powder and processing&Rubber floor/Rubber tiles making line(tire recycling...)

4-Laser marking and laser cleaning in Rubber&Tyre filed.



Core team expert



Martin Kalagin

- 35 years in the Tyre and Retreading Industry
- Trained Retreading Specialist
- Engineering & Retreading Manager at Bridgestone Ireland and Europe (13 years)
- Sales & Technical Director at Marangoni Retreading System Europe and Asia (12 years)

- 35 Jahre Erfahrung in der Reifen- und RE Industrie
- Ausgebildeter Vulkaniseur
- Technik & Runderneuerungs-Manager bei Bridgestone Irland & Europa (13 Jahre)
- Verkaufs- & Technischer Direktor bei Marangoni Retreadings System Europa & Asien (12 Jahre)



Tonny Xu

- More than 20 years of experience in tire management and fleet development.
- Expert of the Highway Research Center of the Ministry of Communications.
- Former Chief Representative of USA BANDAG in China.
- Former Deputy General Manager of Bridgestone (China) Tire Division

TYRE RETREADING SYSTEM TOTAL SOLUTION

INTERNATIONAL STANDARDS:

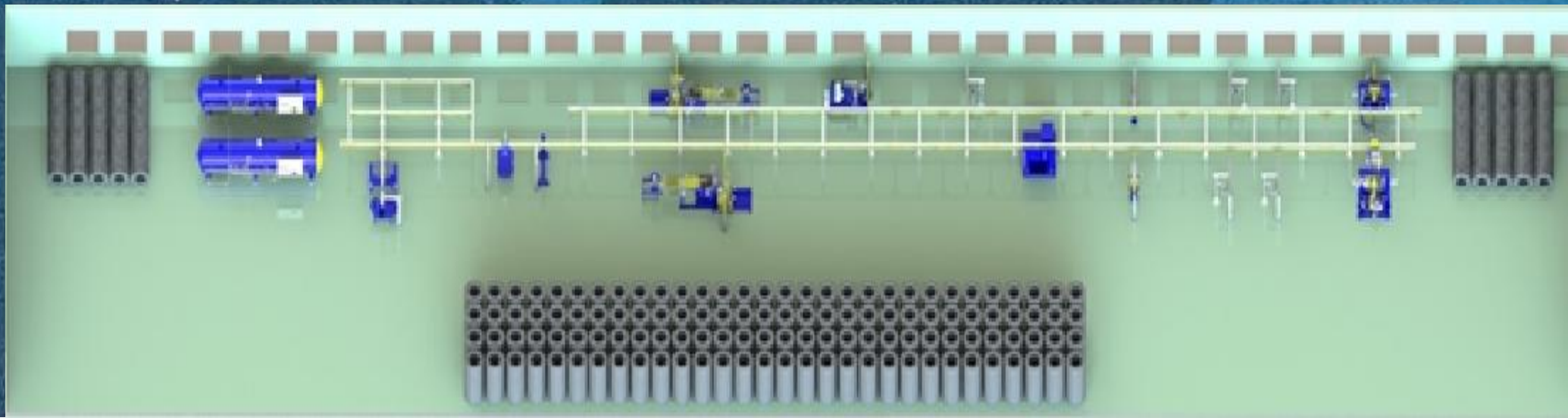


The core members of our company are from the original Bandag/Marangoni technical team
More than 20 years manufacturing experience in TYRE RETREADING SYSTEMS.

FIRST-CLASS SERVICE SYSTEM:

We provide international advanced tire retreading technology and technical training
We provide factory design and construction plans
We provide tyre-retreading plant upgrade and transformation solutions

Excellent price



NEW-TYRE MINIATURIZED SATELLITE FACTORY

Re-building Tyre TOTAL SOLUTION

- Using tire retreading production lines and processes to realize mass customization of new tire production
- Low investment to build a new satellite small satellite factory of its own brand



Factory overall solution

1 Overall Plan

- Factory Design ● Product Selection
- Supply planning of energy and other's ● Process Sllction

2 Equipment and Process Planning

- Equipment selection ● Number of equipment list
- Equipment layout ● Tooling plan

3 Infrastructure Planning

Public works requirements(including power station,water,electricity,steam,air conditioning, etc)

4 Delivery package

- Product plan ● Process flow chart
- List of each process ● Tooling technical equipment parameters

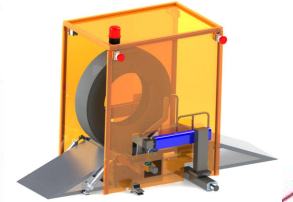
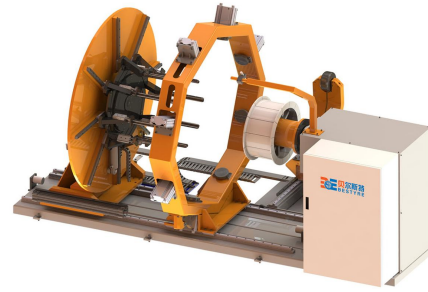
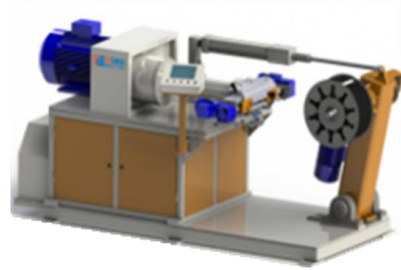
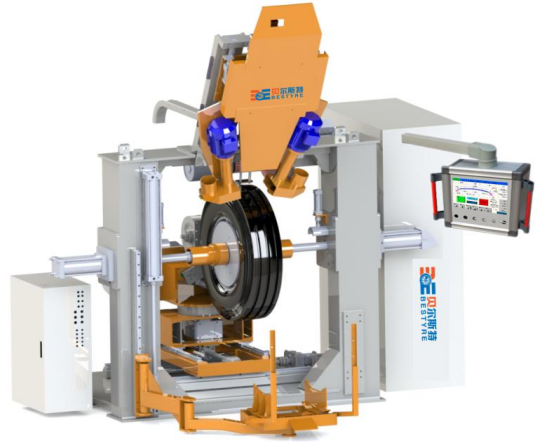
Old factory inspection for improvements

Modernization of existing equipment

Production capacity and process machinery improvement

Quality performance improvement

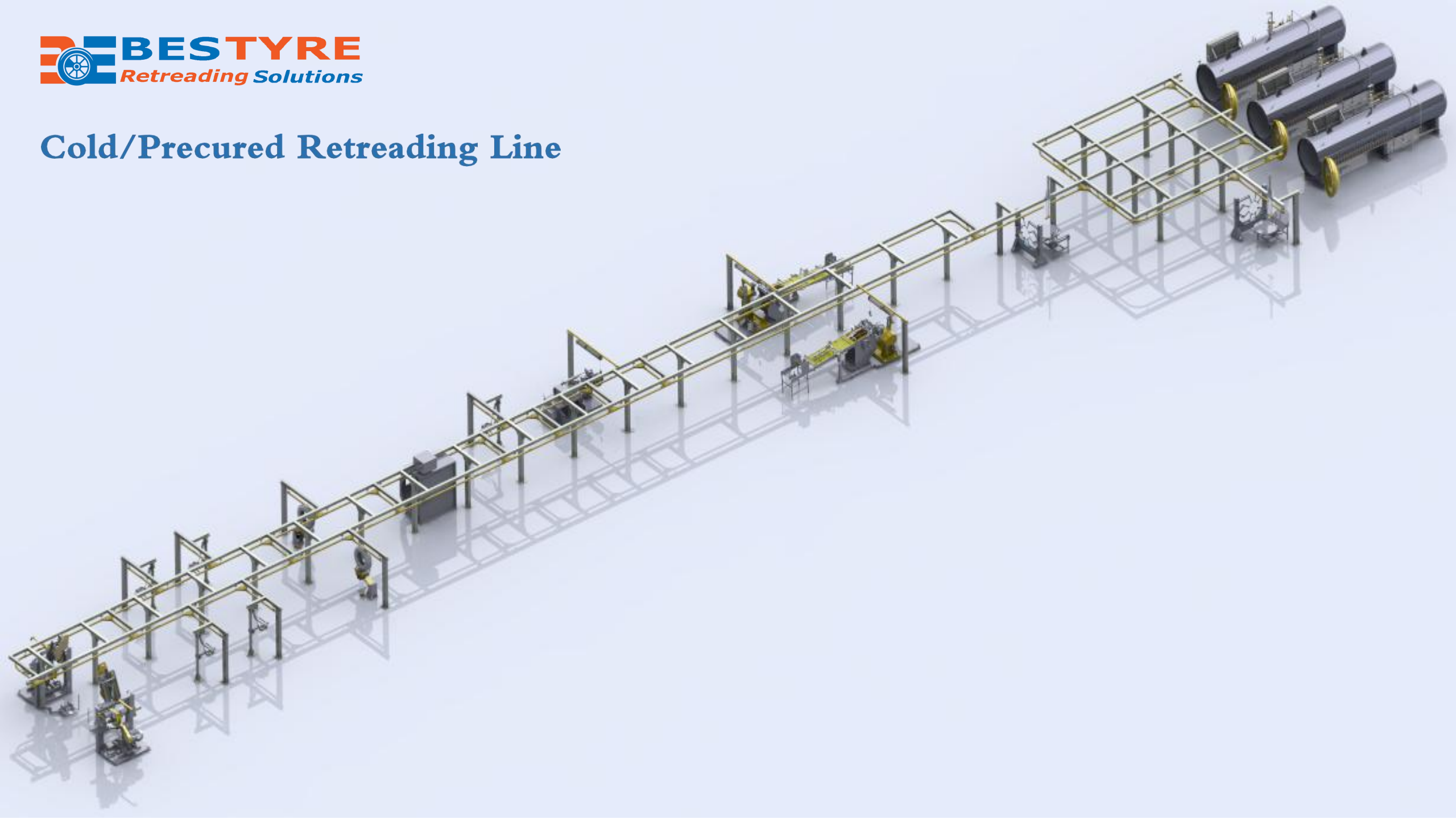
Productivity improvement



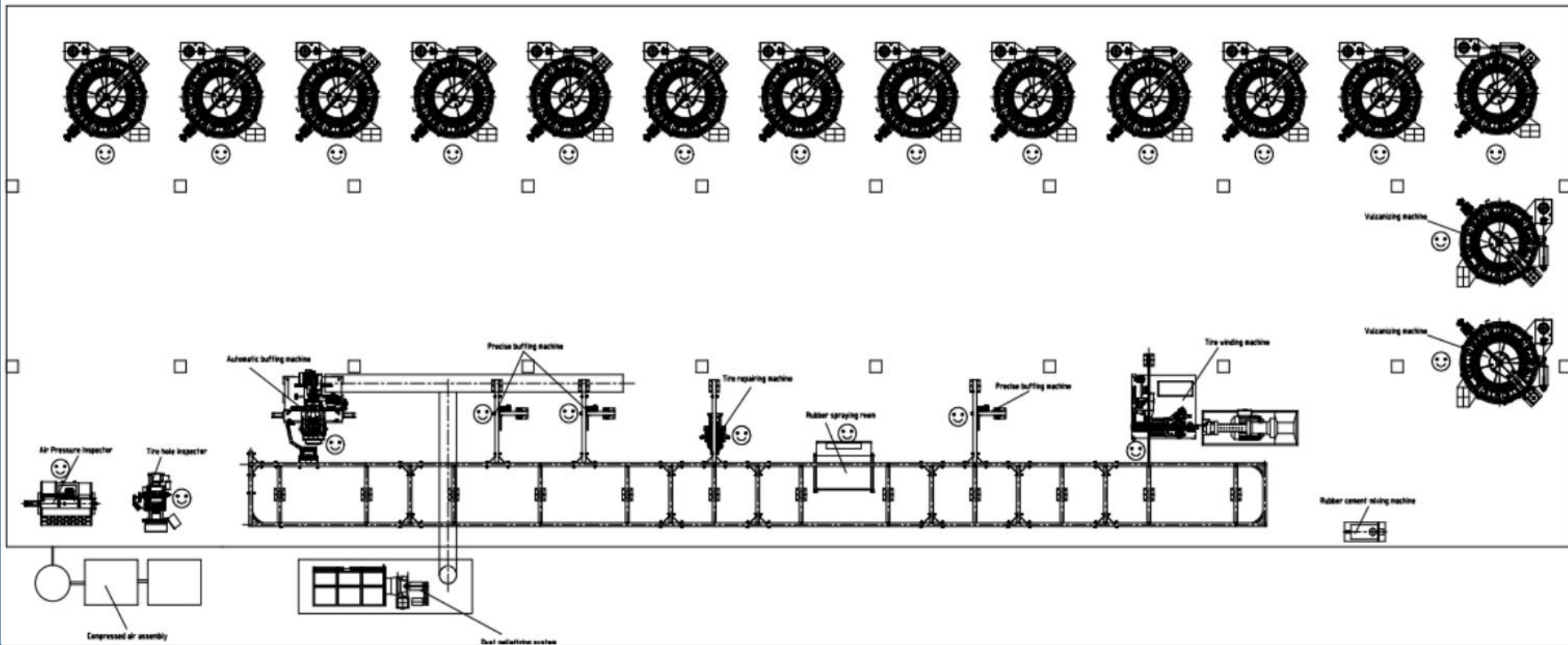
TBR Retreading Line



Cold/Precured Retreading Line



Hot/Mould Retreading Line



RM-Z225 Automatic Tyre Buffing Machine



Technical Parameter

Applicability	16"-24.5"
Tire Diameter	700-1250mm
Tire Weight	Max 110Kg
Air pressure	0.6~0.8MPa
Power Supply	AC380V \pm 10% 50HZ \pm 2%
Power	58Kw
Weight	4000kg
Outer Dimensions	3500x3200x2500mm
Productivity	15-20 piece/hour

**machine can be further customized according to customer request.*

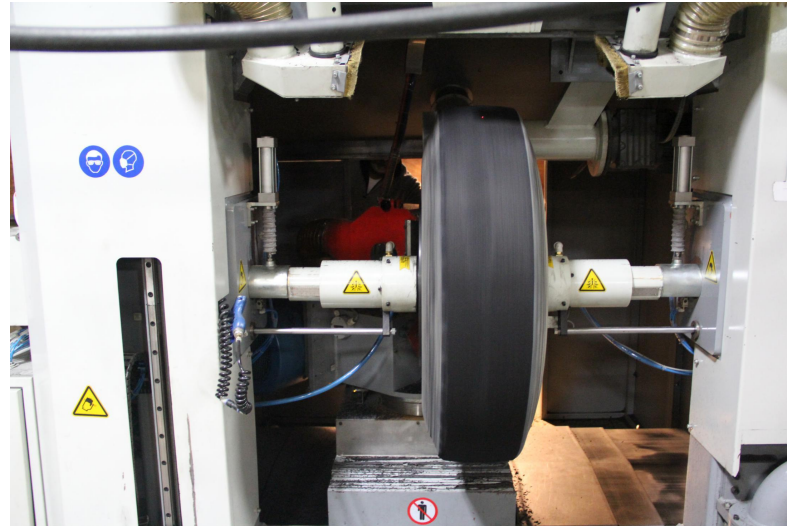
NO.	Components	Brand
1	PLC	OMRON
2	Motor	SEW /NORD
3	Servomotors and drives	OMRON
4	Servo reducer	APEX
5	Pneumatic parts	SMC
6	Low voltage devices	Schneider
7	Guides	HIWIN

RM-Z225 Automatic Tyre Buffing Machine



Equipment Features

- 1、 Automatic tire centering system.
- 2、 Automatic correction of the buffing profile to compensate any tire offset .
- 3、 Automatic detection of the rest rubber thickness
- 4、 With sidewall cleaning/buffing device controlled by servo motor for sidewall brushing.
- 5、 Gradle type lift to facilitate tire loading/unloading from the monorail system.
- 6、 Blade cooling device reduces buffing temperature and blade wear.
- 7、 Various safety devices, to ensure operator protection.
- 8、 Self diagnostic and troubles-shooting system.Remote diagnosis and debugging can also be provided.



RMG-Z225 Automatic Tyre Buffing Machine



Technical Parameters

Rim Size	16"-24.5"
Tire Diameter	700-1250mm
Tire Weight	≤160kg
Productivity	10-15 piece/hour
Power	45Kw
Dimensions	2600x2400x2600mm
Weight	2400kg

Equipment Features

- 1、X/Y/Z three-axis servo motors to achieve spatial curve buffing with high accuracy.
- 2、High degree of automation, less manual intervention.
- 3、With thickness sensor and side perimeter sensor to ensure stable buffing process
- 4、Current control grinding, increase production efficiency.
- 5、Blade cooling device reduces buffing temperature and blade wear.
- 6、Simple structure, convenient and fast maintenance.

RM-225 Semi-automatic Tyre Buffing Machine



Equipment Features

- 1、 Simple mechanical Buffer which is easy to operate.
- 2、 Equipped with rasp water cooling system and blade sharpening device. Increases buffing blade life by up to 50%.
- 3、 Comes with automatic belt detection system and Automatic belt measuring device.
- 4、 Features an Expandable Rim for quick and easy fitment of TBR casings.

Technical Parameters

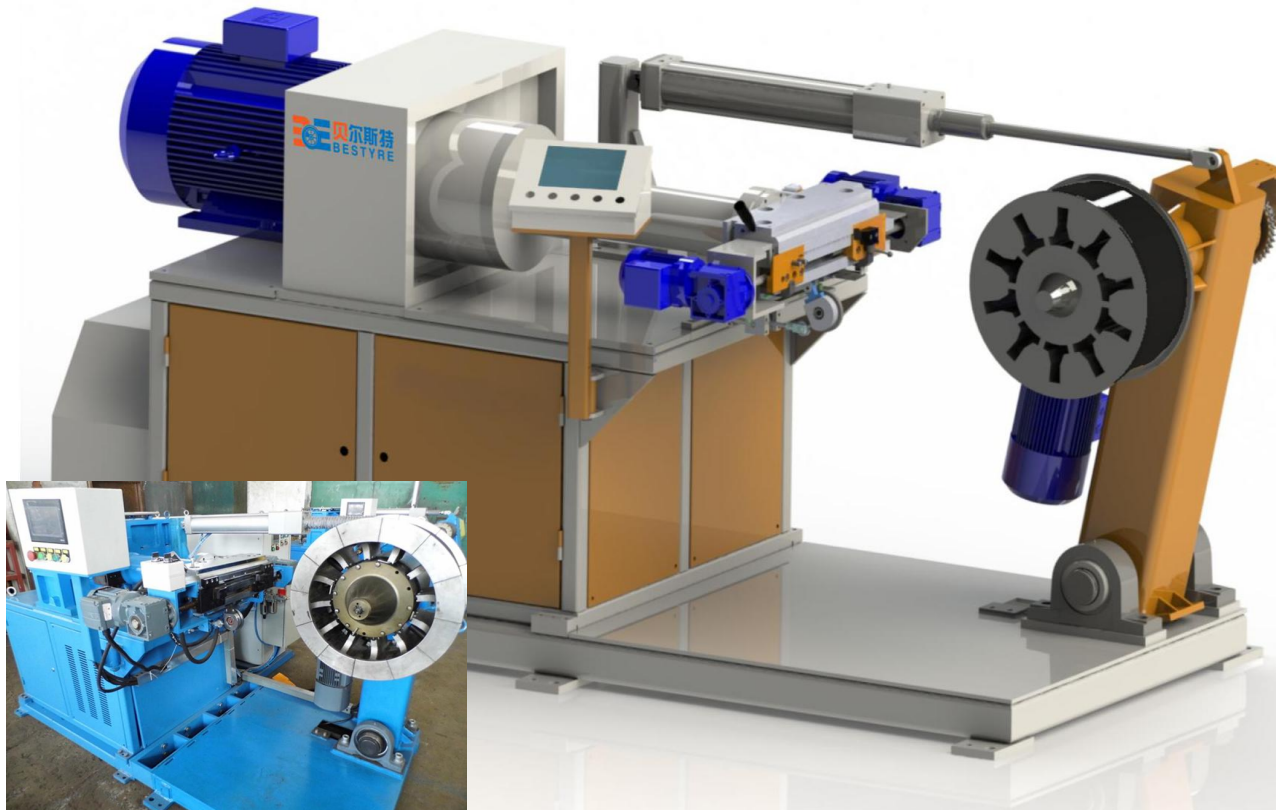
Rim Size	16"-24.5"
Tire Diameter	700-1250mm
Tire Weight	≤160kg
Buffing radius	260-1050mm
Productivity	10-15 (piece/hour)
Power	28.5Kw
Dimensions	3780x1660x2060mm
Weight	2200kg





Cold/Precured Retreading

RDJ-60 Automatic Tyre Extruding Machine



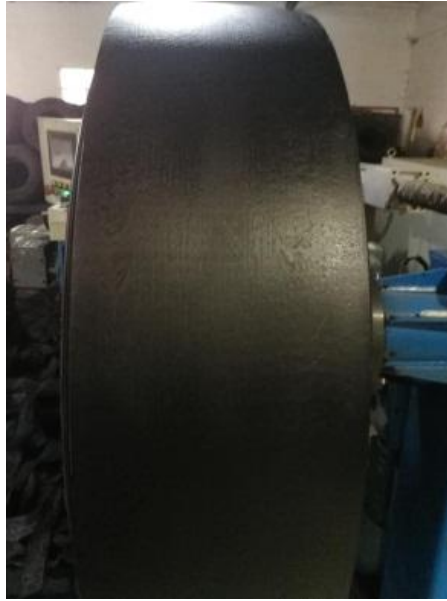
Equipment Features

- 1、 The PLC controls the speed, temperature, and pressure of the feeding strip the extrusion to ensure optimal bonding of the cushion-gum sheet on the casing.
- 2、 The thickness of the extruded is very even, in order not to waste rubber and ensure low running temperature.
- 3、 Skiving-craters can be self-filled within 5mm.
- 4、 According to the width of the move to beginning of the sentence.
- 5、 With independent temperature control system and water circulation system.
- 6、 Transfer extrusion,high extrusion pressure,good plasticizing effect.

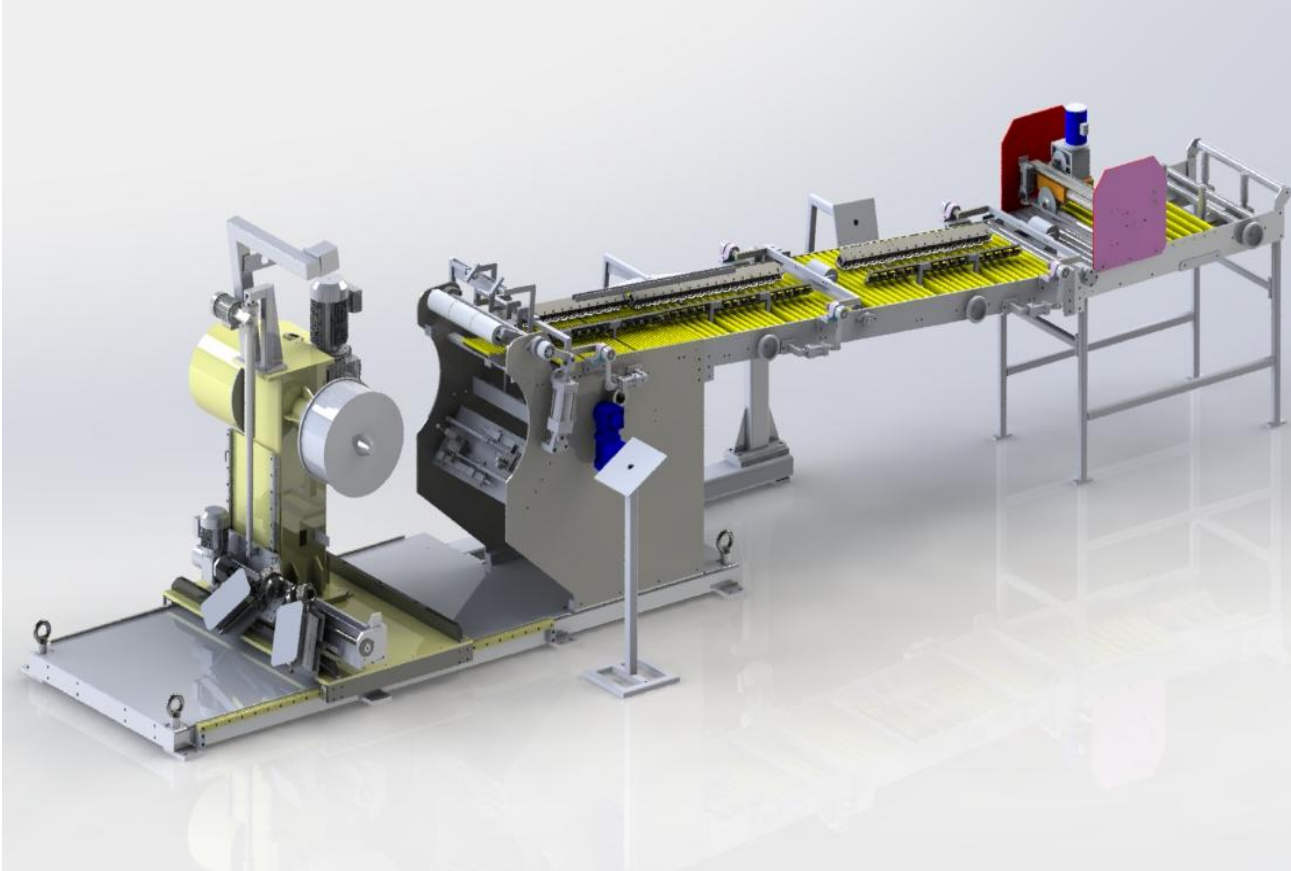
Technical Parameters

Cushion Gum width	100-420mm
Cushion Gum thickness	1-3mm
Cushion Gum temperature	60-90°C
Screw type	MCT60x10D
Productivity	20-30piece/hour
Power	30Kw
Dimensions	2900x1300x1500mm
Weight	1500kg

RDJ-60 Automatic Tyre Extruding Machine



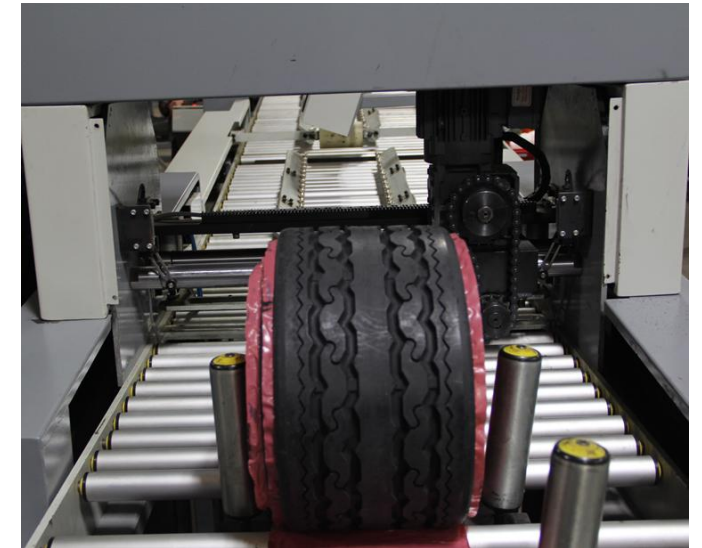
RTT-Z225 Automatic Tyre Building Machine



Equipment Features

- 1、 Equipment with automatic length measurement, tread-cutting and tread applicator.
- 2、 Automatic tread centering device to ensure perfect and symmetric tread application.
- 3、 The tread stretch device generates preload force on the tread, which presses the tread tightly on the casing.
- 4、 Equipped with automatic diameter measurement device.
- 5、 Equipped with safety mat, providing security for operation.

Technical Parameters	
Rim Size	16" -24.5"
tread width	≤400mm
Tire Diameter	700-1250mm
Productivity	10-20 piece/hour
Power	6kw
Dimensions	7000x1800x2100mm
Weight	4000kg



RTT-B225 Semi-automatic Tyre Building Machine

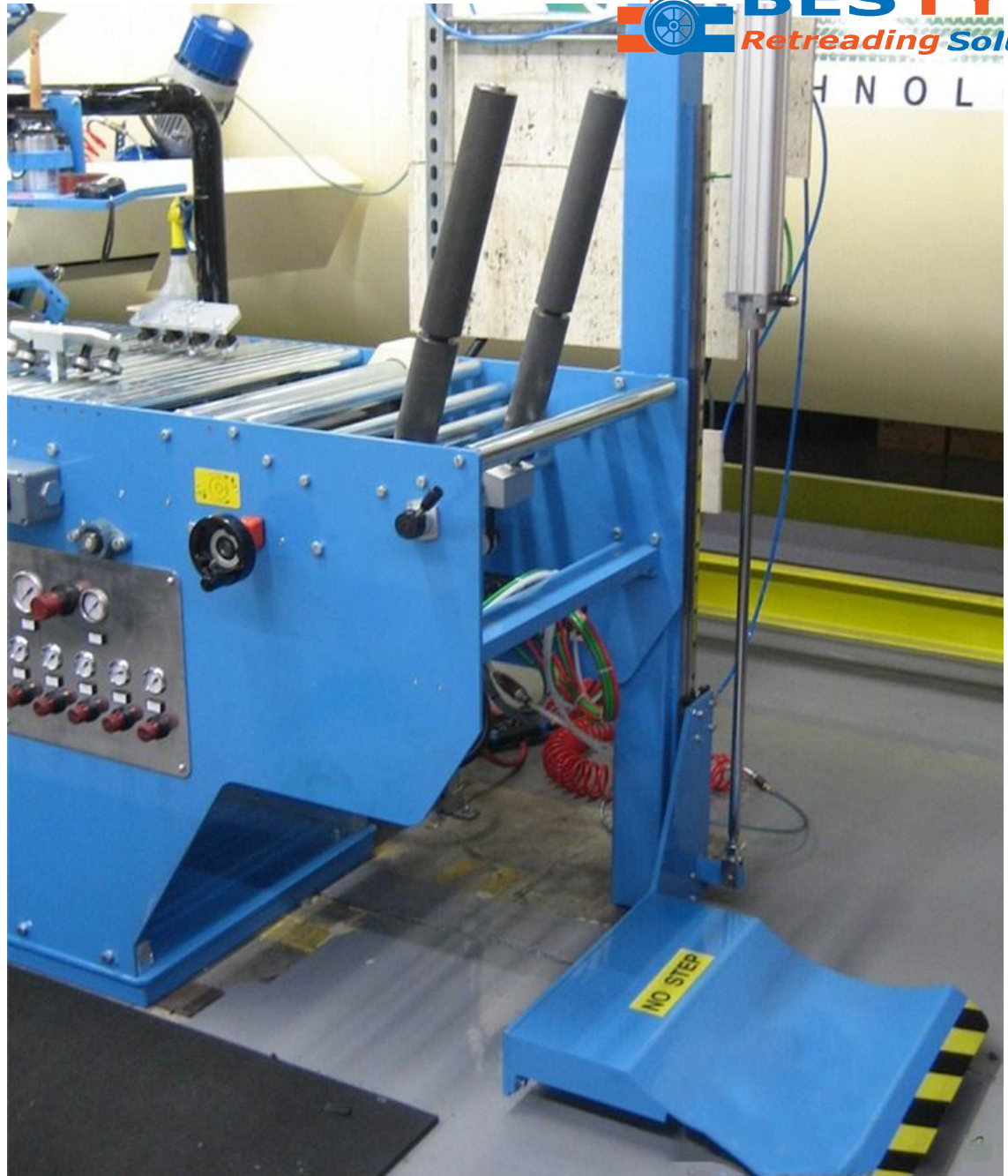
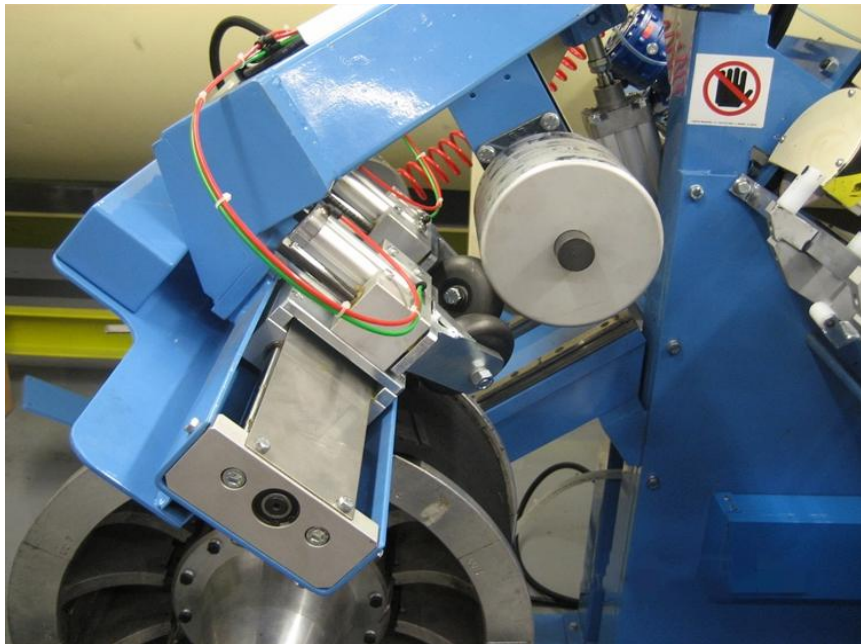


Equipment Features

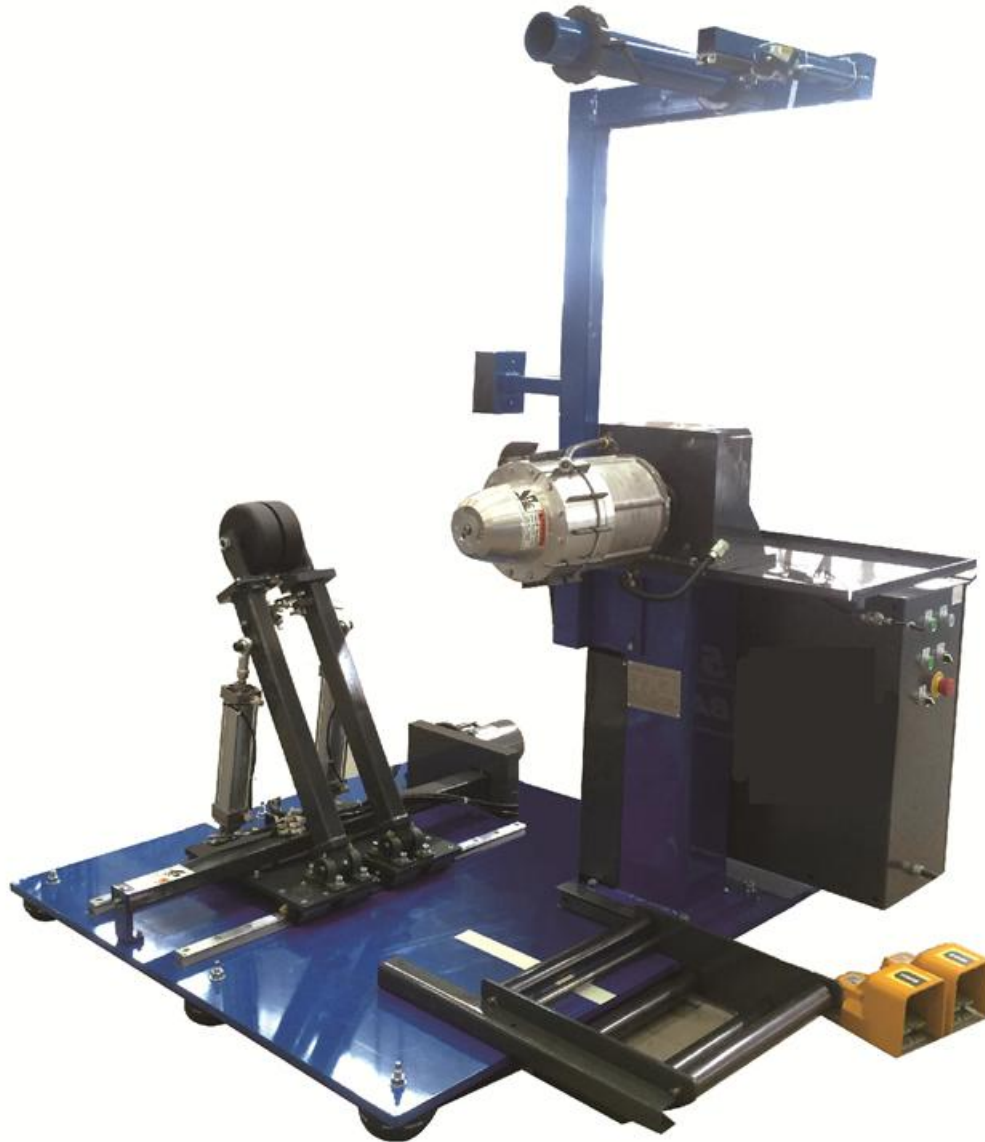
- 1、 The equipment is controlled by PLC, simply operated and does not require a lot of manual labour input.
- 2、 Equipped with automatic tread measurement and cutting device.
- 3、 The upside stitching roller can provide more stitching force.
- 4、 Automatic tread application and even stretch of the tread.

Technical Parameters

Rim Size	16" -24.5"
Tread width	≤350mm
Tire Diameter	700-1250mm
Productivity	10-20 piece/hour
Power	3.8kw
Dimensions	3600x1600x2100mm
Weight	2000kg



RTT-225 Manual Tyre Building Machine

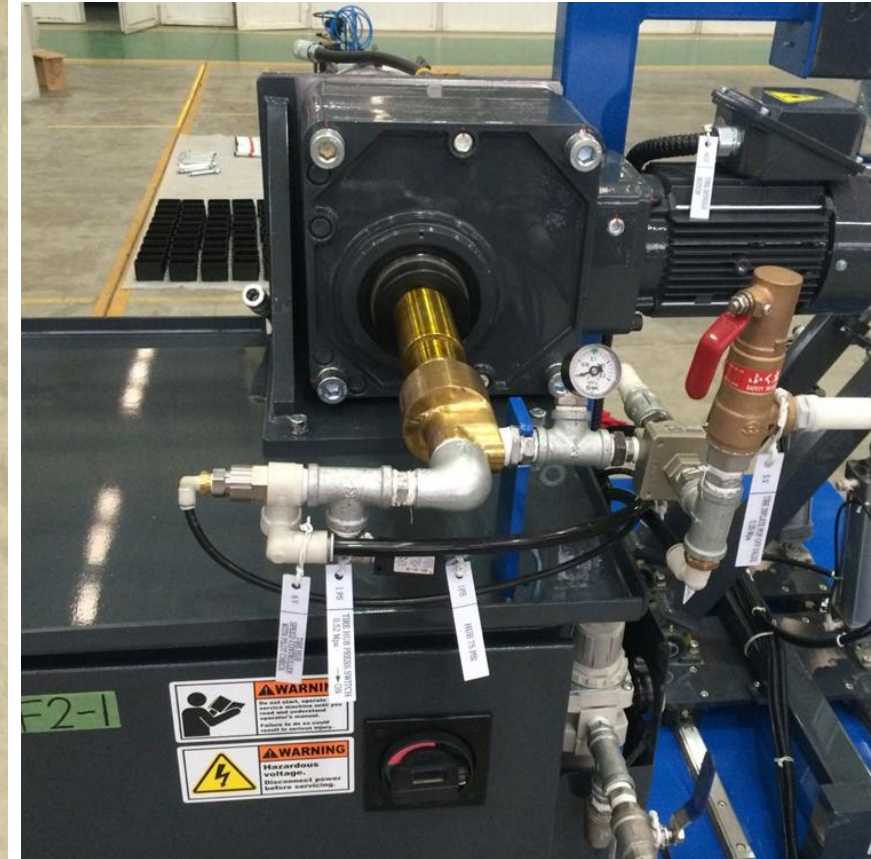
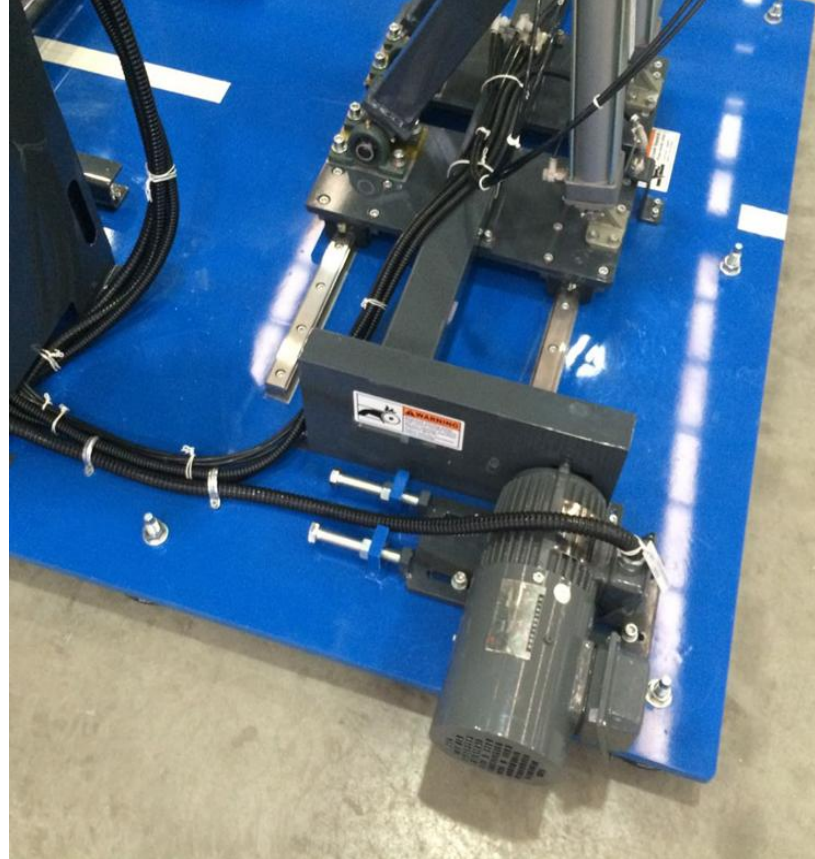


Equipment Features

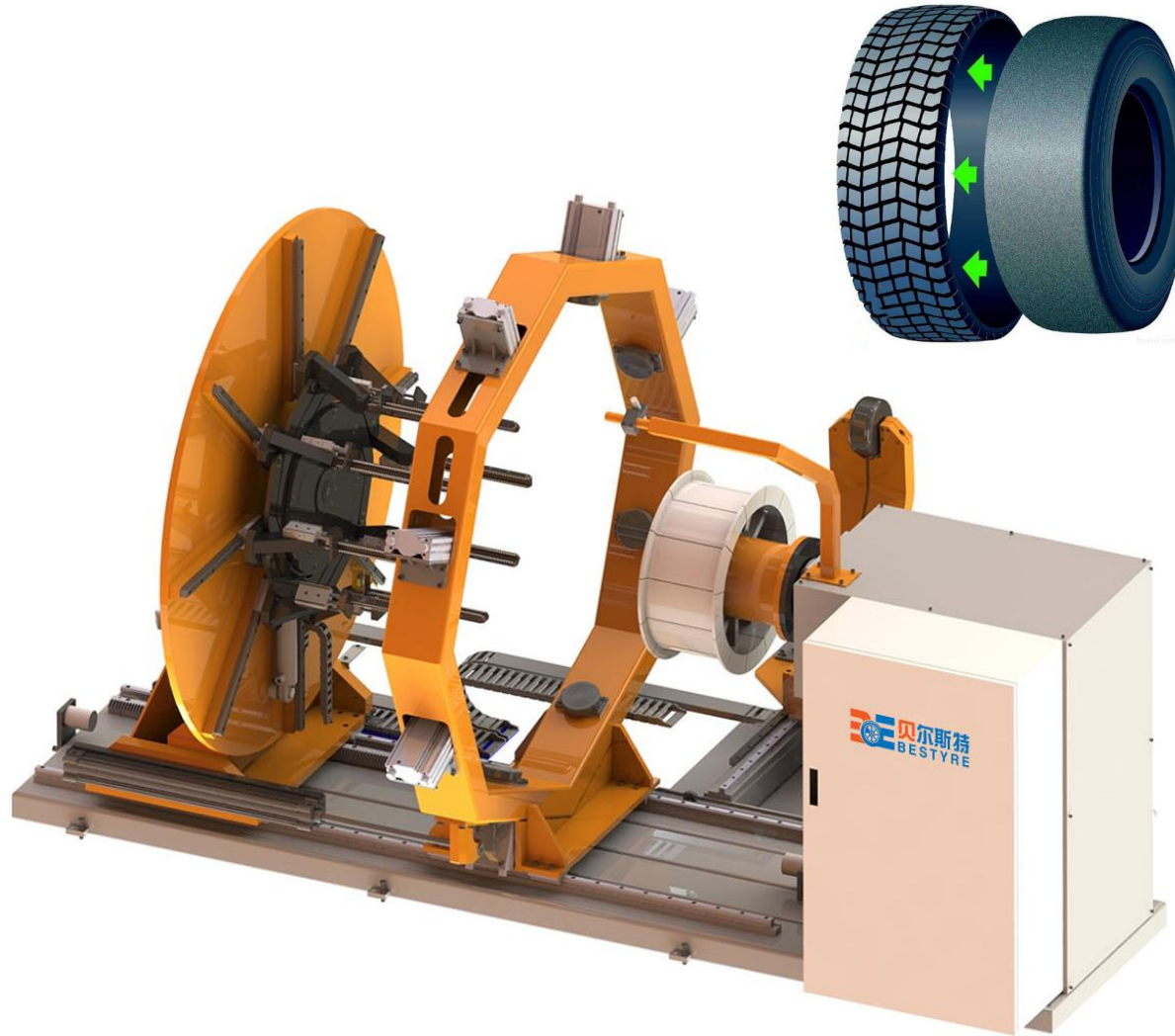
- 1、 Very simple, completely manual Builder and stitcher.
- 2、 Simple structure.
- 3、 Simple maintenance.

Technical Parameters	
Rim Size	16" -24.5"
Tread width	130-450mm
Tire Diameter	600-1300mm
Productivity	10-15 piece/hour
Power	2kw
Dimensions	1520x1450x1960mm
Weight	800kg

RTT-225 Manual Tyre Building Machine



RCH-225 Automatic Ring Tread Building Machine



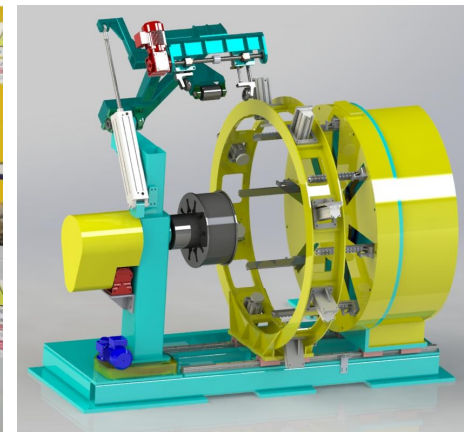
Equipment Features



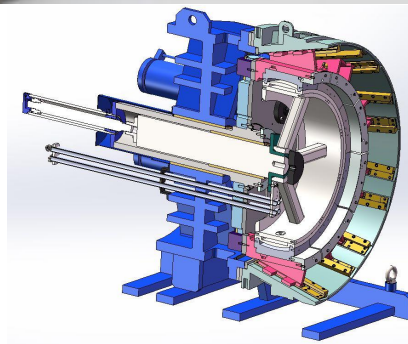
- 1、 Automatic ring-type tread application.
- 2、 Equipped with tread centering device, to ensure perfect tread symmetry on the casing.
- 3、 Tread applied with without any stress and no tread splice, in order to ensure high grade tire dynamic performance.
- 4、 Machine features 8 press-on fixating pistons, to ensure that the tread perfectly stays in place, when the applicator-fingers move out from underneath the tread during the building process.

Technical Parameters

Rim Size	16" -24.5"
Tread width	≤400mm
Tire Diameter	800-1280mm
Productivity	12-20 piece/hour
Power	25kw
Dimensions	3600x3000x2050mm
Weight	4000kg



BTRC-U225 Uni-circle Curing Press



Equipment Features

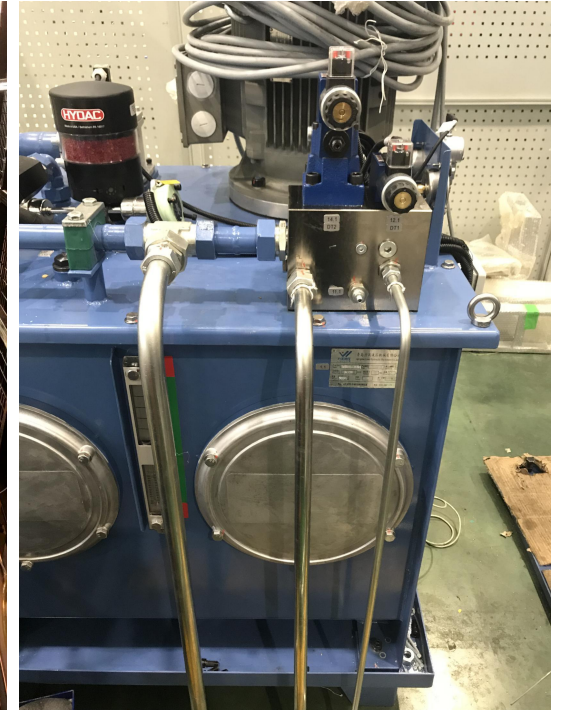
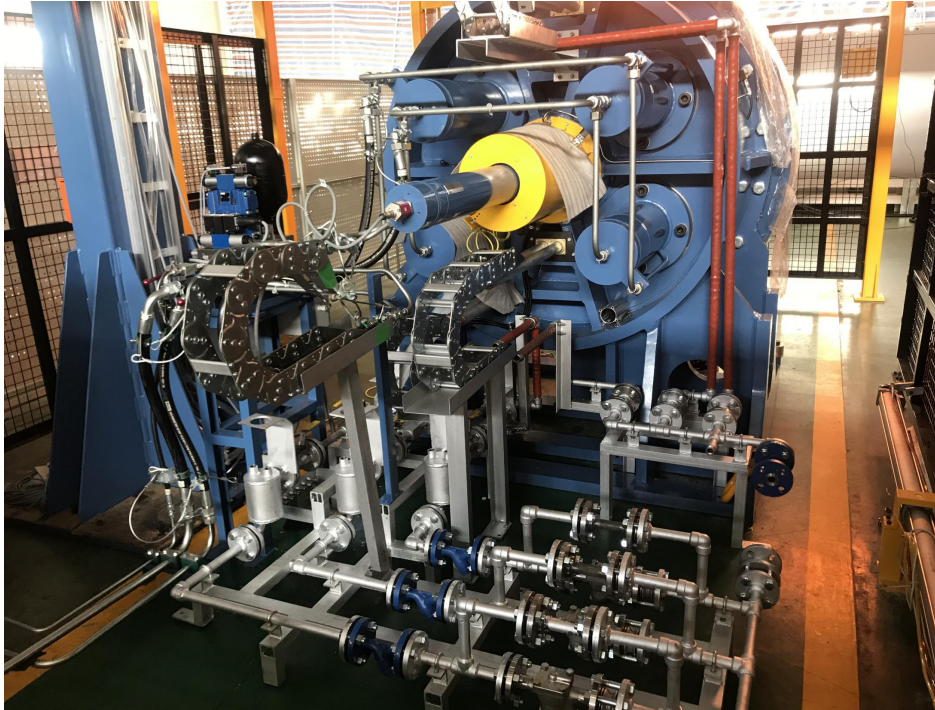
- 1、 High degree of automation, less manual intervention.
- 2、 Accurate temperature control, good curing effect.
- 3、 Simple structure, convenient and fast maintenance.

**Customized services accepted.*

Technical Parameter

Press Core Outside Diameter	Min: 775mm (30.52 in.) – Max: 1057mm (41.63 in.)
Press Core Inside Diameter	Min: 609mm (23.98 in.) – Max: 865mm (34.06 in.)
Tread Ring Outside Diameter	Min: 807mm (31.77 in.) – Max: 1108mm (43.63 in.)
Tread Width Range	Min: 190mm (7.48 in.) – Max: 270mm (10.63 in.)
Tread Weight Range	Min: 6.5 Kg (14.4 lbs.) – Max: 24.1 Kg (53.2 lbs.)
Tread Temperature Range	Min: 90° C (194° F) - 190° C (375° F)
Squeeze Force Max.	475kn
Dimensions	4000*3200*2400mm
Weight	8900kg

BTRC-U225 Uni-circle Curing Press



RLG 8/12/18/22/24 tyre Autoclave



Equipment Features

- 1、 Automatic temperature, pressure and timing controlling. Automatic curing data recording and saving. Equipped with data searching and printing function.
- 2、 The DPC pressure is accurately controlled. The warning and error detecting functions work well, due to the joint working of several security devices .
- 3、 Heating method of the chamber can be customized to electrical heating, steam heating or oil heating.
- 4、 Chamber capacity: 8/12/18/22/24 pcs.
- 5、 The chamber can be equipped with automatic loading system, in order to improve production efficiency.

Technical Parameters					
Capacity(time)	8	12	18	22	24
Dimension(mm)	4500x2600x2700	5800x2600x2700	7700x2600x2700		9700x2600x2700
Inner Dia (mm)	1000-2500mm				
Electric Heating Power (Kw)	35	50	72	90	102
Steam Heating Energy (kcal/h)	30100	43000	51600	64500	70000
Weight(kg)	3300	4300	5800	6800	7300

RLG 8/12/18/22/24 Chamber



There are different basic envelope sealing systems used in the retreading industry.

Double Envelope Method (Inside/Outside)

The edges of the Envelopes are shorter because the seal is in the sidewall area

Seals from sidewall to sidewall



Rimless System Seals On The Face Of Bead (ARC)

The edges of the Envelopes are longer because the seal is in the bead area

Seals on the bead with metal or rubber rings / ARC System



Rimless System Seals On The Face Of Bead (ARC)



RBT-225 Envelop Fitting Machine



Technical Parameters

Dimensions	1300x1000x1300mm
Weight	150kg

RBL-225 Vertical Envelop Fitting Machine



Technical Parameters

Tire Diameter	600-1200mm
Dimensions	1800x700x1800 mm
Weight	350kg



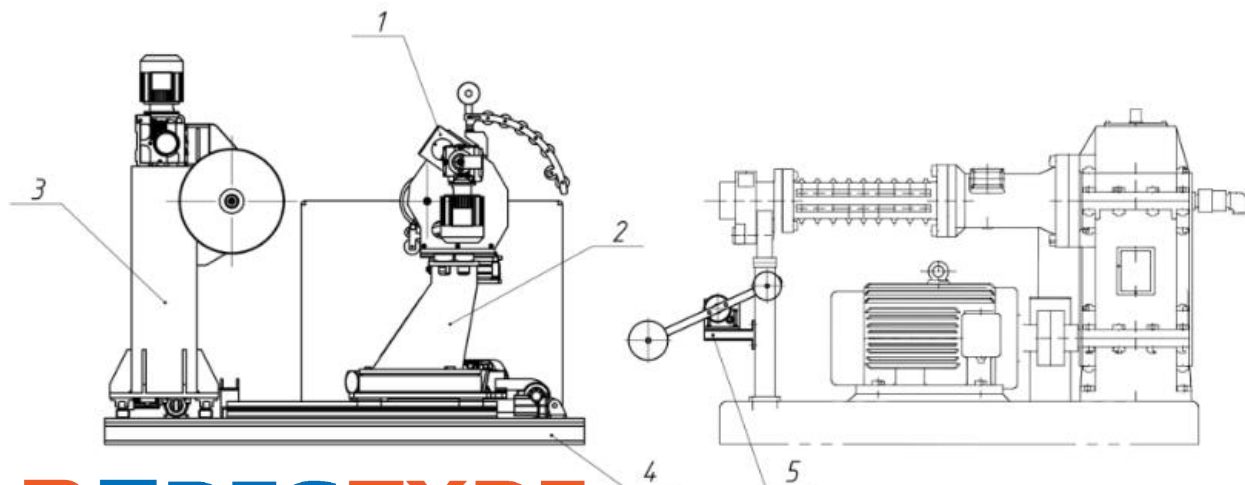
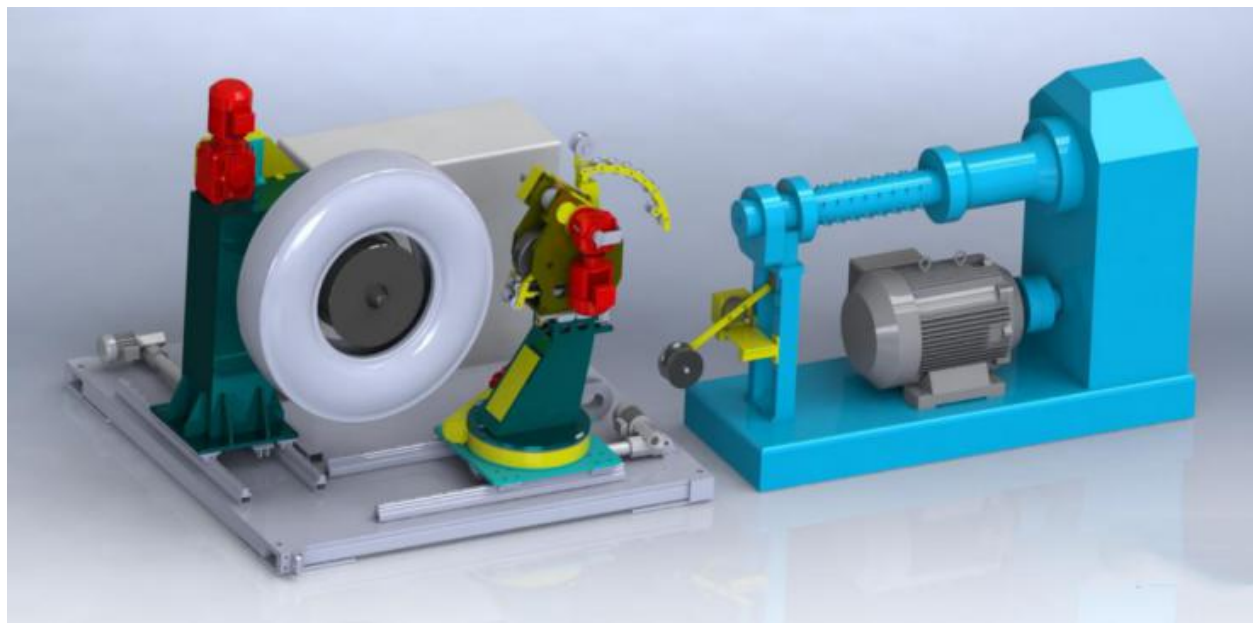
Hot/Mould Retreading

BTEW-1/90 Extruding & Winding machine





BTEW-1/90/120 Extruding & Winding machine



Tire size range	20"-24"
Tire holding type	Frame (default)
Control type	PLC+7" Touch screen
Size	4340×1550×1450
Winding efficiency	10-12tire/hour
Feeding way	Side Pressure Roller feeding automatically
Feeding system	Next to the pressure roller gear drive
Screw materials	38GrMoAcA
Screw Hardness	900-950HV
Cylinder liner hardness	950-1000HV
The depth of Azotization	0.4—0.7mm
Extruder center high	1070mm±20mm
Pressure control	with the pressure sensor and the pressure protection value to adjust
Draw ratio	14: 1
Pin number and Rows	6*8
Screw diameter	90mm
Screw speed	0-55r/min
Max output	About250kg/h
Voltage	AC380V50HZ
Hardened reducer	BTEW-Screw and decelerate of hard tooth machine connected by spline. The drive motor is installed in the bottom of the Hardened reducer, drive belt for the V-shaped high-intensity narrow-band, belt cover to protect the observation hole
Extruder Dimensions	2400 (L) × 1200 (W) × 1620 (H) MM
Mode of speed control	frequency control of motor speed
Frequency transformer	Delta
Extruder Main motor power	55KW
Motor Brand	Siemens\AB
G weight	5300kg

BTCP225 Curing Press



Function:

The casing is measured and selected for a precise fit in the mold .

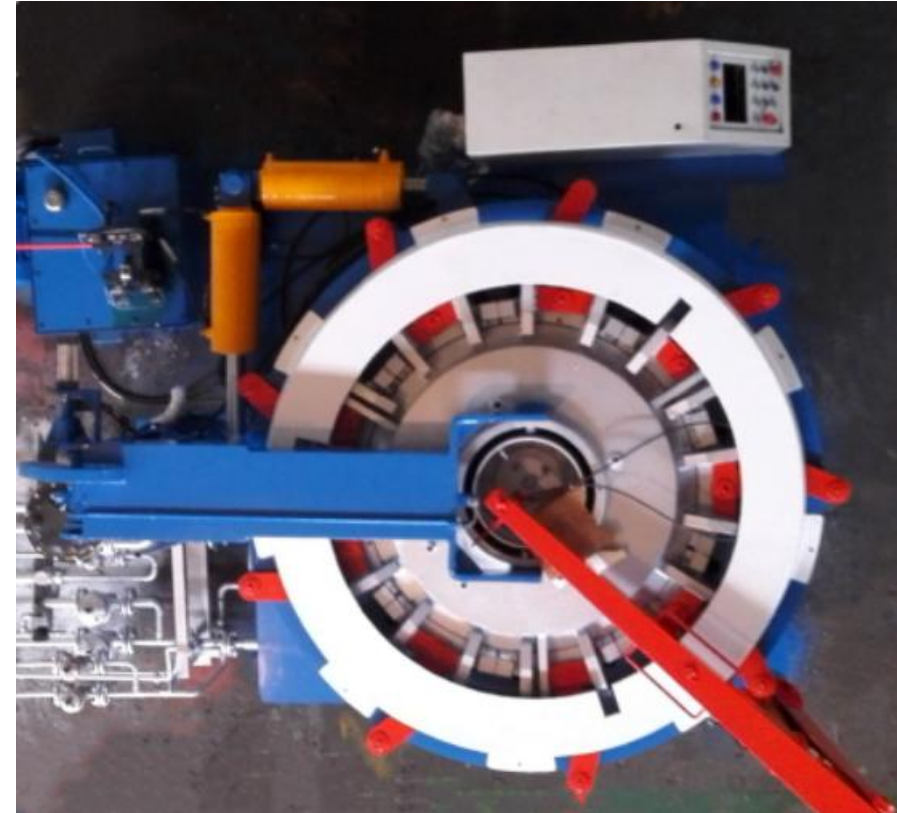
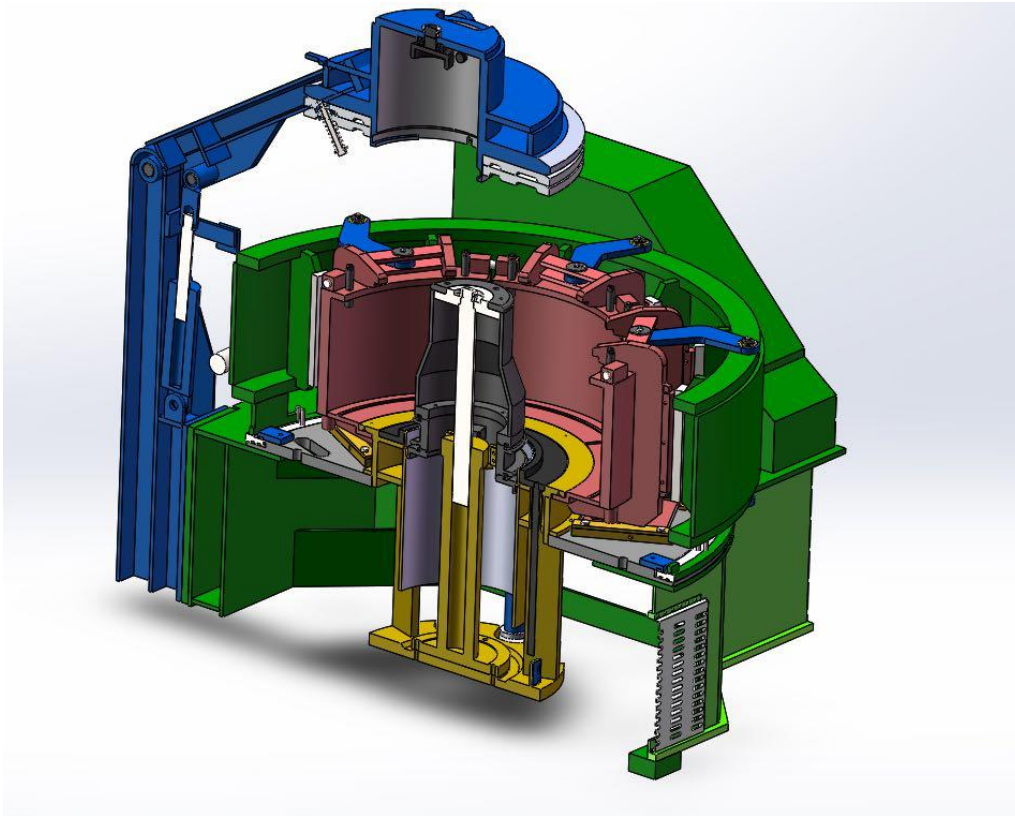
This machine can be used to cure/vulcanize the regular tyres and aircraft tyres. As a professional manufacturer, we also offer the segmented molds to be used in this machine.

Features:

- 1.To be used with segmented internal mold .
2. Equipped with mechanical arm, guarantees for tyre loading and unloading.
3. Special multi-interlock, guarantee operating safety.
4. Heating system can be oil, steam, or electric.
5. Hydraulically controlled
6. Optional center structure, curing bag or bladder.

**further customization possible.*

BTCP225 Curing Press



Station pressure (Mpa)	6~10
Electric machine power (kw)	1.5
Maximum inner pressure(MPa)	<1.8
Power supply	AC380V,50HZ

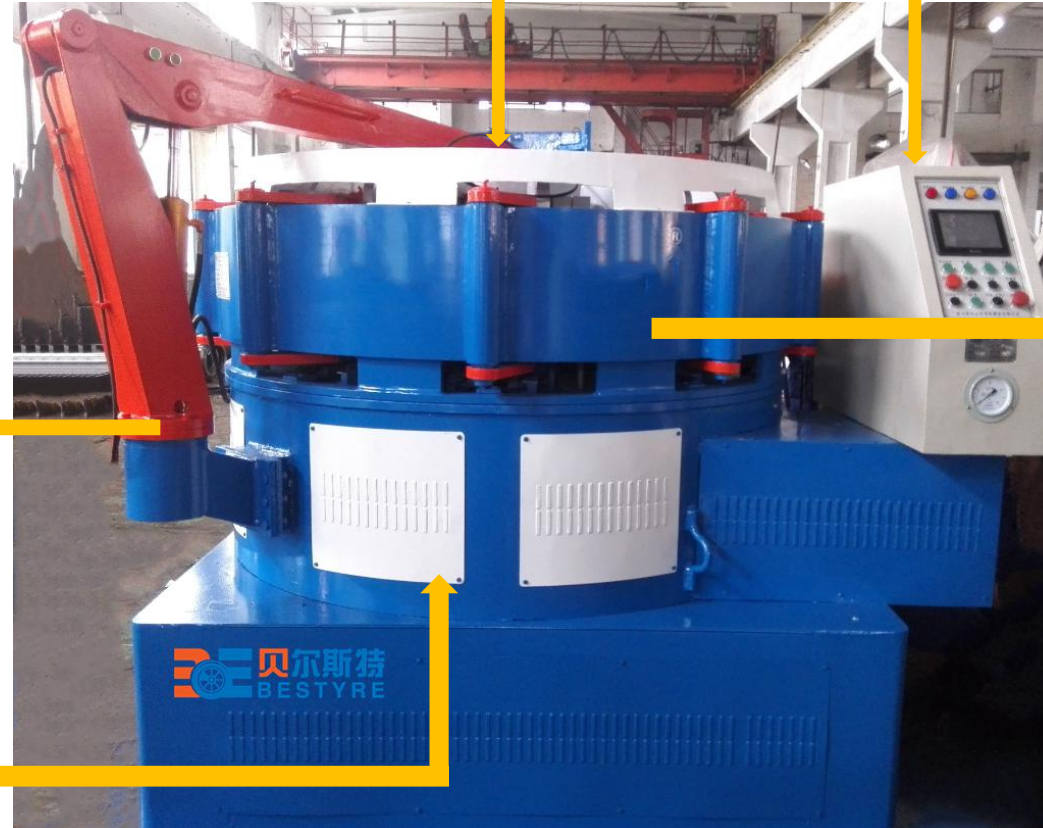
Equipment component

Fold the upper

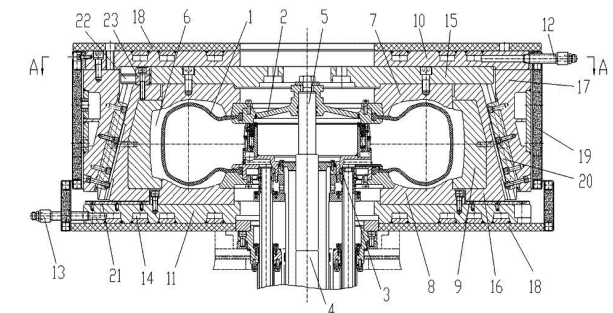


Mechanically assisted arm

Maintenance access



PLC and Touchscreen Control System





Inspection Machine

RJ-D225 Nail Hole Detector

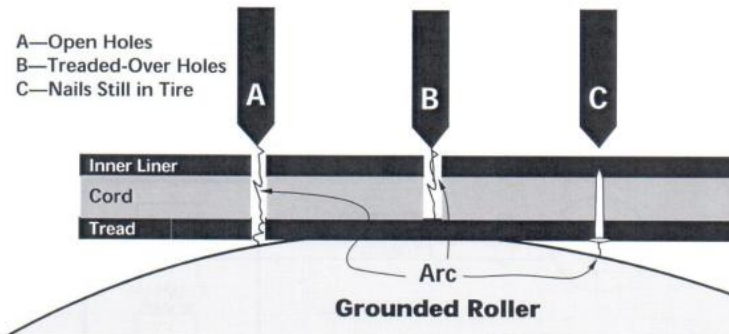
Equipment Features

- 1、 Any nailhole can be detected within two circuits of the casing. Detecting accuracy is higher than 90%, detection failure rate can be lower than 5%.
- 2、 penetrating holes in the crown area
- 3、 Detecting time of each casing is shorter than 2mins, including loading and unloading.

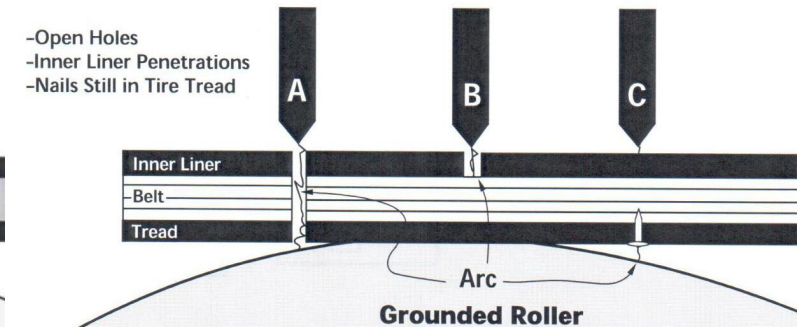
Technical Parameters

Tread width	≤300mm
Tire Diameter	800-1250mm
Productivity	15-25 (piece/hour)
Discharge voltage	60kv
Dimensions	2000x1300x2050mm
Weight	400kg

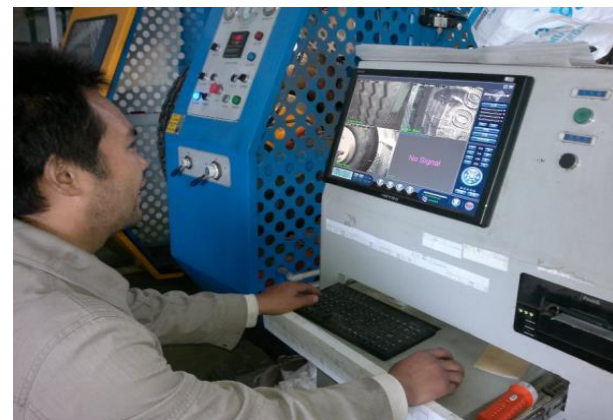
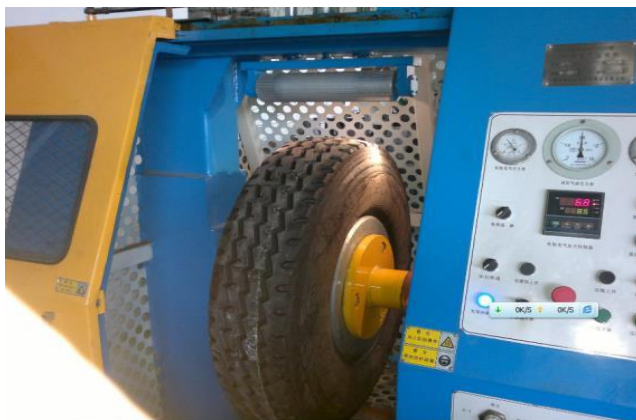
Arcing Through Fabric Tires



Arcing Through Steel Tires



RYL-225 Air Pressure Inspector



Main parameters:

1. Rim diameter: rim 16in-- 22.5in
2. Maximum diameter of tyre to be tested: $\leq 1280\text{mm}$
3. High-pressure test inflation: 0.6mpa--1.5mpa adjustable
4. Low pressure test inflation: $\leq 0.15\text{mpa}$
5. Cylinder work: 0.8-1.0mpa
6. Tyre rotation speed: 1.9-10r /min (CVT)
7. Motor power: 0.55KW
8. Remote Viewing Cameras: 3 Cameras (420 line HD Cameras)
9. Check data storage: 2 years (calculated by working 8 hours per day)
10. Air compression air source pressure: 1.3mpa
11. Power supply: AC380v AC220v 50Hz (as Customer Condition)
12. External dimension (mm) :2600*1950*2200
13. Machine weight: $\approx 2600\text{kg}$
14. A comprehensive system for remote observation of pressure detection records (including 1 label printer)
15. Distribution box electrical components: Schneider knob indicator LIGHT AC contactor
16. The whole machine is equipped with Yadeke pneumatic components

RYL-225 Air Pressure Inspector



Equipment Features

Product Advantages:

1. Multiple remote video Windows can check the tire 360° in all directions.
2. Tyres can be tested with high air pressure (up to 15 bar) for structural integrity of the casing.
3. The machine is controlled by computer.
4. The machine is built very strong and can withstand tyre explosions at full inflation pressure of 15 bar without suffering any damage to its structure
5. The machine is ergonomically designed in design and easy to operate.



Other Auxiliary

RB-150L Rubber Cement Mixing Machine



Technical Parameters	
Capacity	150L
Power	1.5kw
Dimensions	1400x600x1000mm
Weight	260kg

RJF-225 Rubber Cement



Technical Parameters	
Tire Weight	Max 150kg
Productivity	20-30 (piece/hour)
Power	2.75kw
Dimensions	2050x1300x2700mm
Weight	700kg

RXB-225 Repairing Machine



Technical Parameters	
Lift Height	Max876mm
Tire Weight	Max150kg
Productivity	20-30 (piece/hour)
Dimensions	500x920x876mm
Weight	190kg

RMB-225 Skive Machine



Technical Parameters	
Tire Weight	Max150kg
Power	0.55kw
Weight	90kg

RPT-225 Tyre Painting Machine



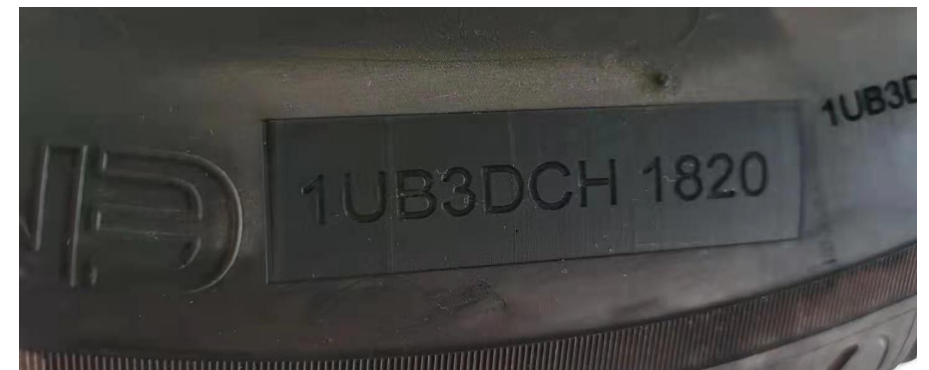
Equipment Features

- 1、Tyre side wall spray painting after retreading.
- 2、Used for appearance beautification and decoration.

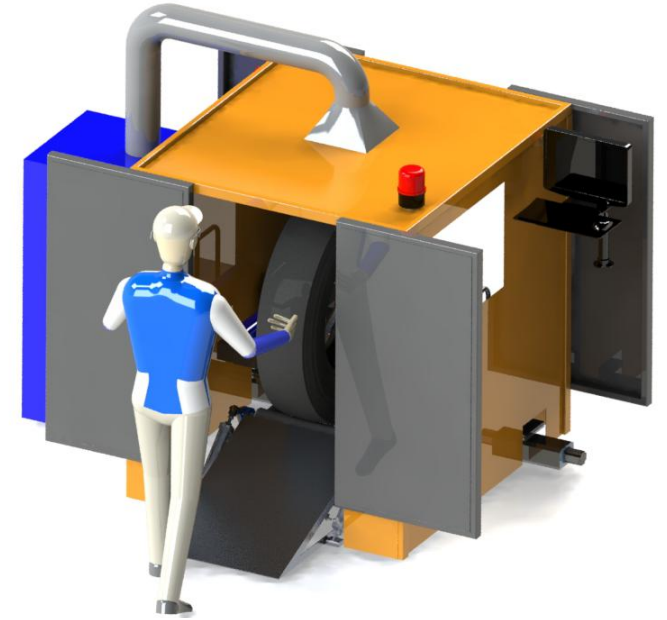
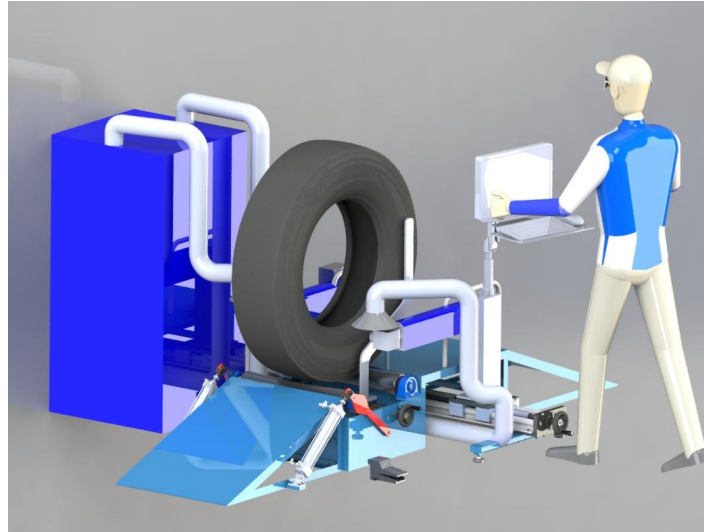
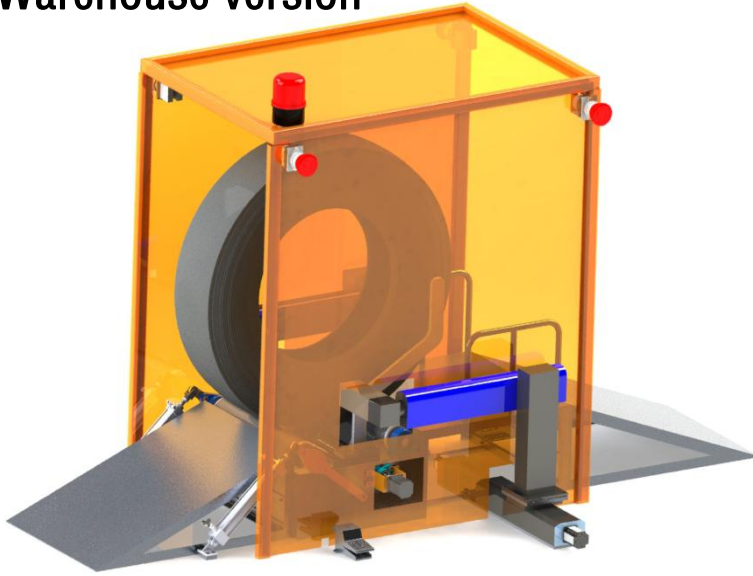
Technical Parameters

Tyre Width	100-450mm
Productivity	10-20 s/piece
Power	1.1kw
Dimensions	1300x850x1750mm
Weight	260kg

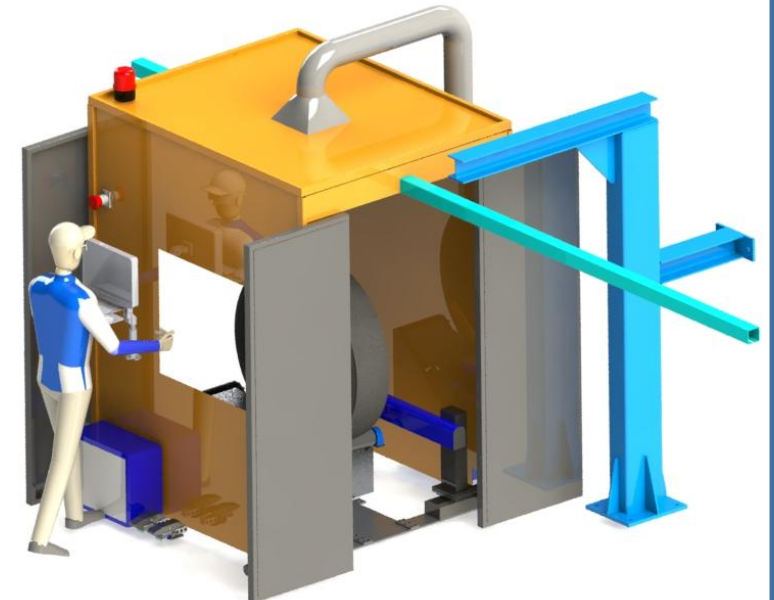
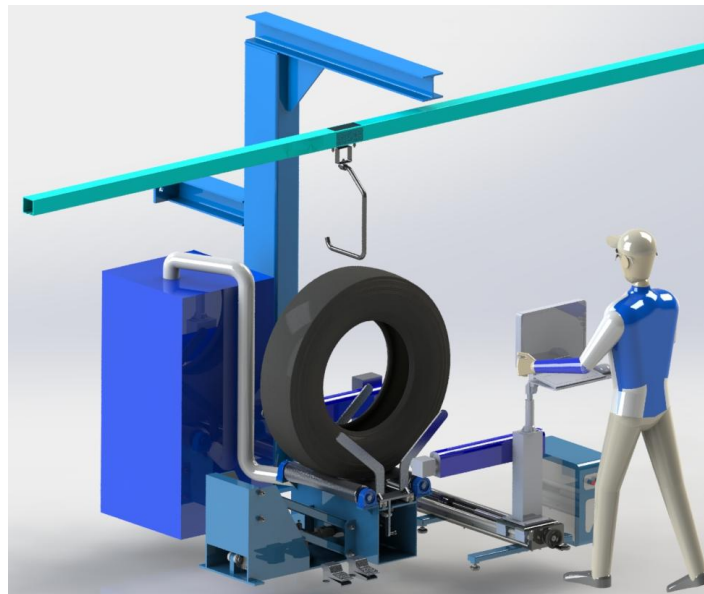
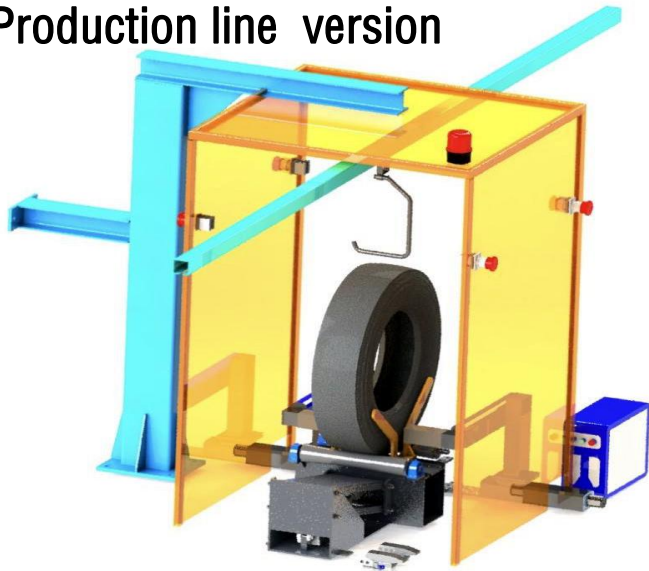
Tyre Laser Coding Machine



Warehouse version



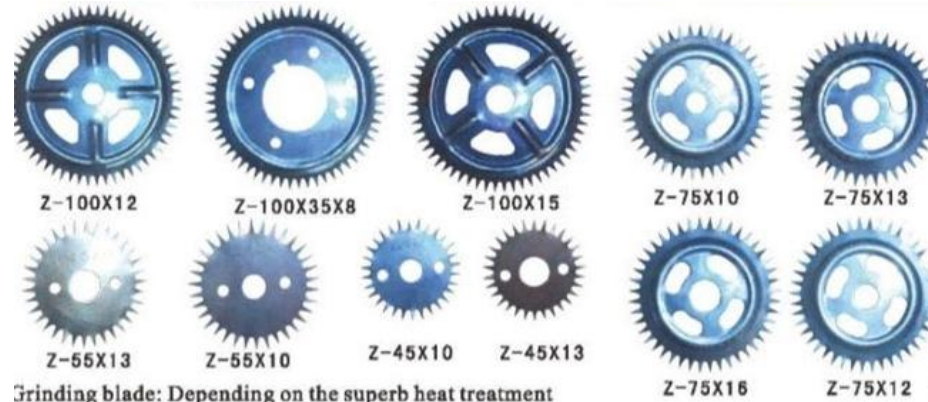
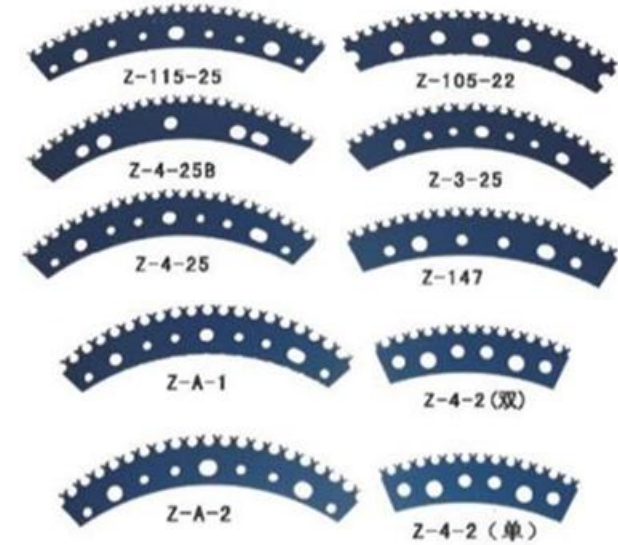
Production line version



Flexible-shaft Grinding Machine

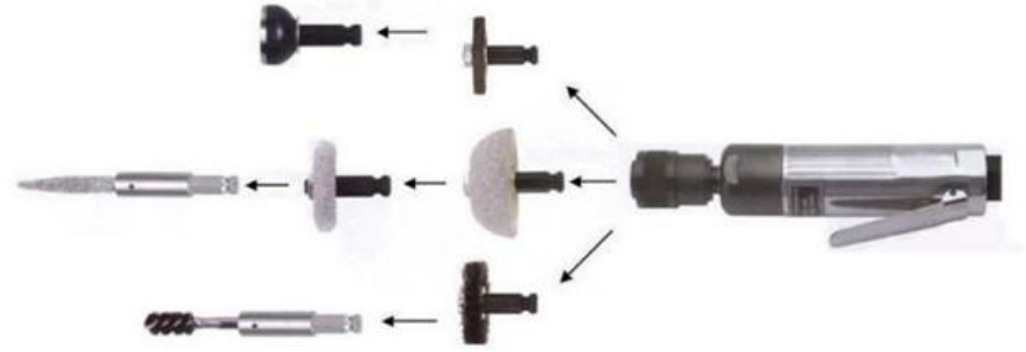


Rasp head





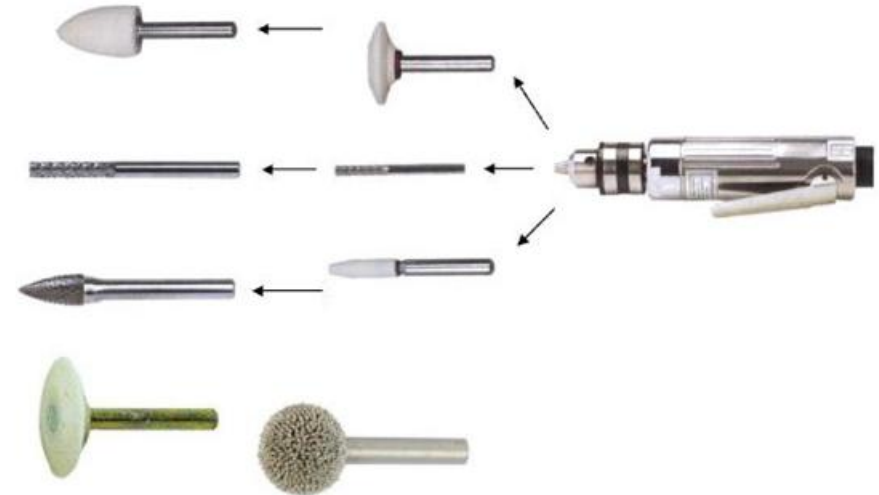
For drilling holes with low speed carbide steel drills



Used for rubber round cutting knife, wire brush, alumina rubber grinding wheel

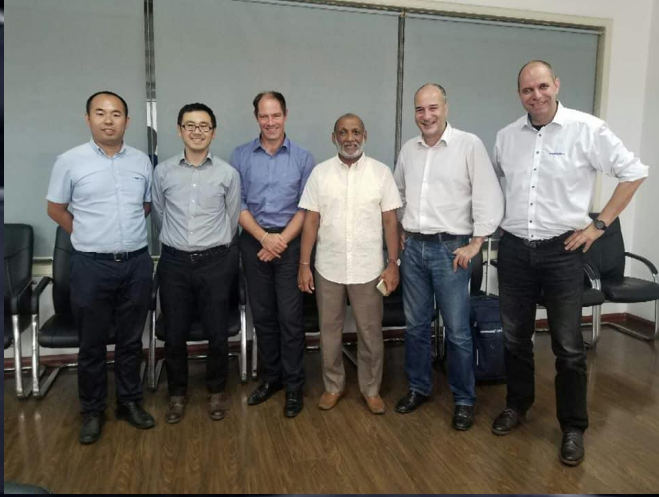


Used for small grinding to treat the injury and repair the surface.



Used for cutting steel wire, high speed carbonized steel cutting bit and aluminum grinding head







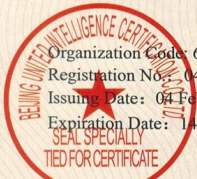
Management System Certification

**QUALITY MANAGEMENT SYSTEM
CERTIFICATION CERTIFICATE**

Qingdao Bestyre Technology Co.,Ltd

No.1,Keyuanwei road,Laoshan District,Qingdao City,Shandong Prov.
Zip Code.266100

**The Quality Management System Conforms to the Standard
GB/T19001-2008 / ISO9001:2008**
Certified Scope:
Refurbishment and service of truck tyre



Organization Code: 69787039-8
Registration No.: 04316Q2017R0S01
Issuing Date: 04 Feb. 2016
Expiration Date: 14 Sep. 2018

Issued By: _____



中国认可
国际互认
管理体系
MANAGEMENT SYSTEM
CNAS C043-M

Only when used concurrently with the Notice of Annual Confirmation of the year from Feb. 2017 to 14 Sep. 2018, can this certificate be valid.

Address: 17/F, Building 3 (Triumph Centre), 170 Beiyuan Road, Chaoyang Dist., Beijing, P.R. China Postcode: 100101 Tel: 010-84850008 Web Site: www.uicc-web.com
This certification information can be queried on the CNCA official website (www.cnca.gov.cn)



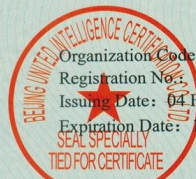
Management System Certification

**ENVIRONMENTAL MANAGEMENT SYSTEM
CERTIFICATION CERTIFICATE**

Qingdao Bestyre Technology Co.,Ltd

No.1,Keyuanwei road,Laoshan District,Qingdao City,Shandong Prov.
Zip Code.266100

**The Environmental Management System Conforms to the Standard
GB/T24001-2004 / ISO14001:2004**
Certified Scope:
Refurbishment of truck tyre and related management activities



Organization Code: 69787039-8
Registration No.: 04316E20107R0S01
Issuing Date: 04 Feb. 2016
Expiration Date: 14 Sep. 2018

Issued By: _____



中国认可
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