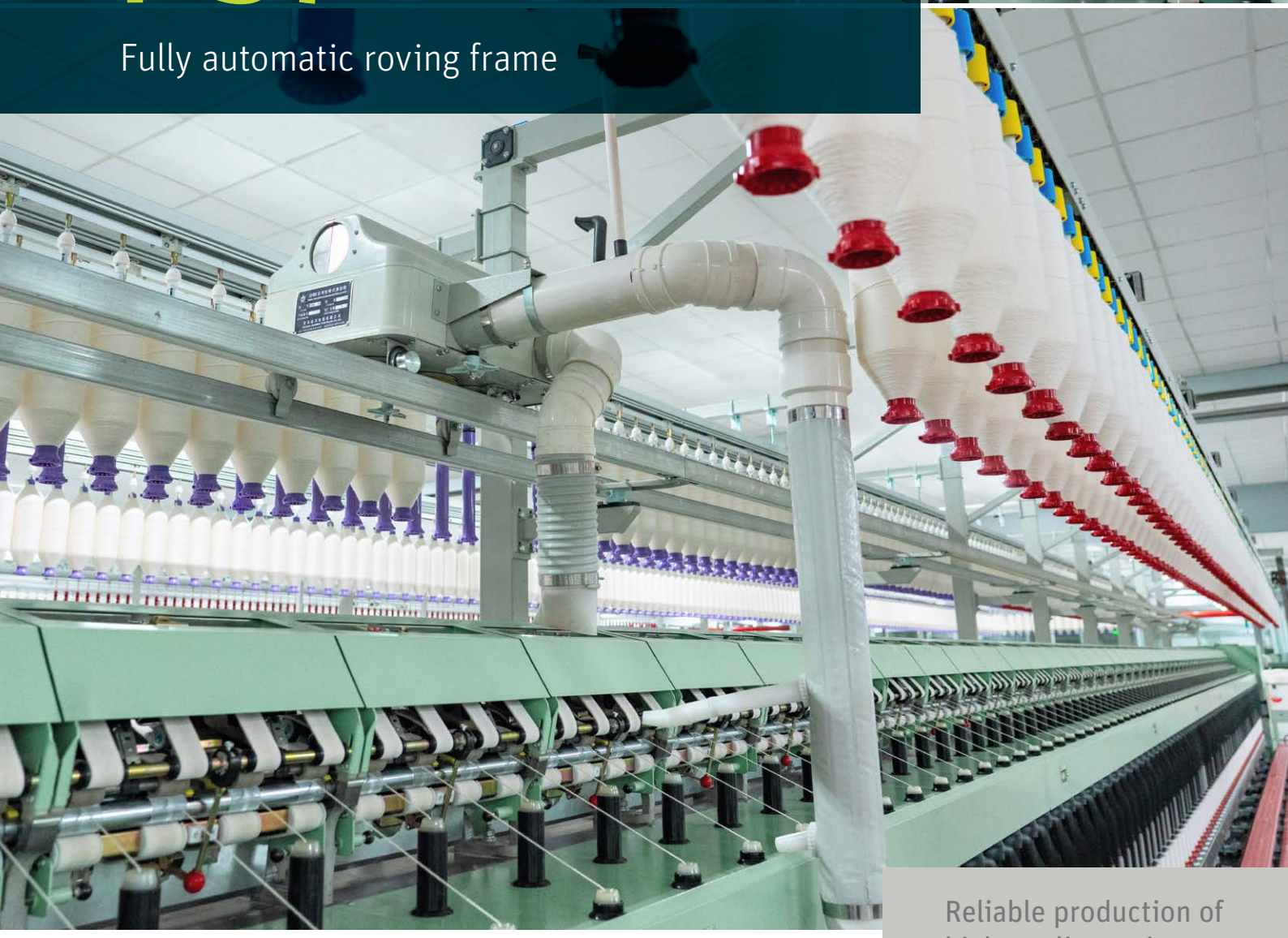
Spinning preparation
Roving frame F 37

RIETER

F 37

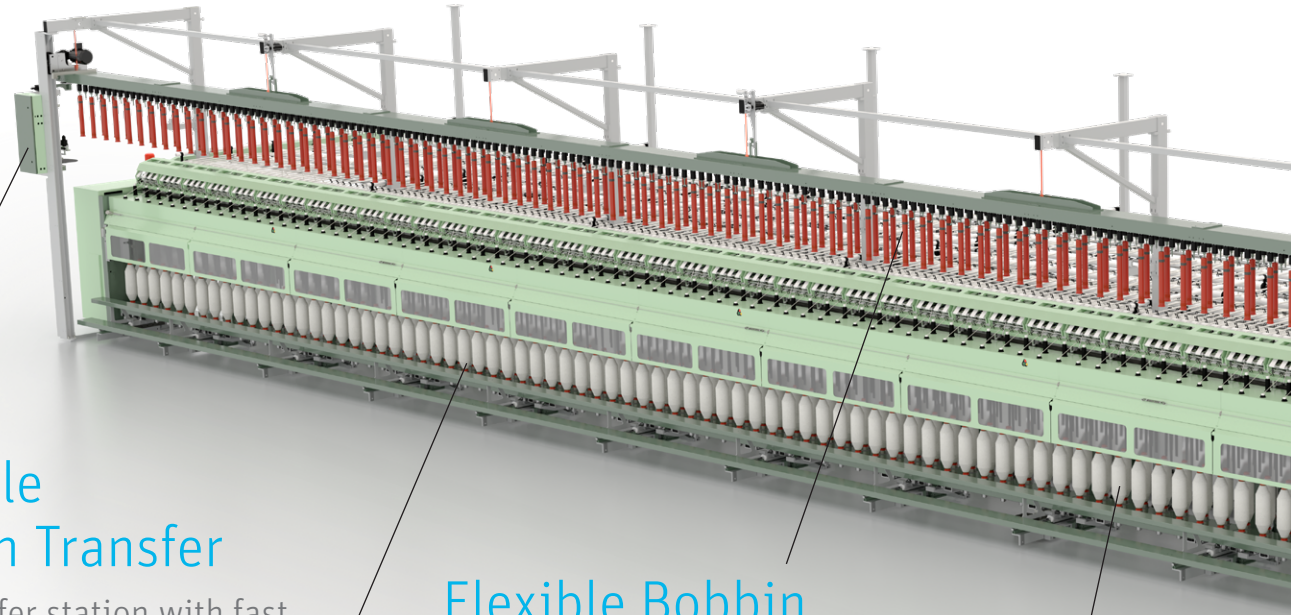
Fully automatic roving frame



Reliable production of high-quality rovings

F 37

OUTSTANDING ADVANTAGES



Reliable Bobbin Transfer

One transfer station with fast bobbin changing

Flexible Bobbin Transport

Connection to automatic roving bobbin transport

Manual change of roving bobbins and manual transport*

Reliable Automatic Doffing

Doffing takes just 120 seconds thanks to the reliable doffing system

Uniform Bobbin Build-up, High Roving Quality

Centered bobbin rail drive with precise up and down movements

Sectional drive (tooth belt) of flyer and bobbin

*Optional

Lower Production Costs

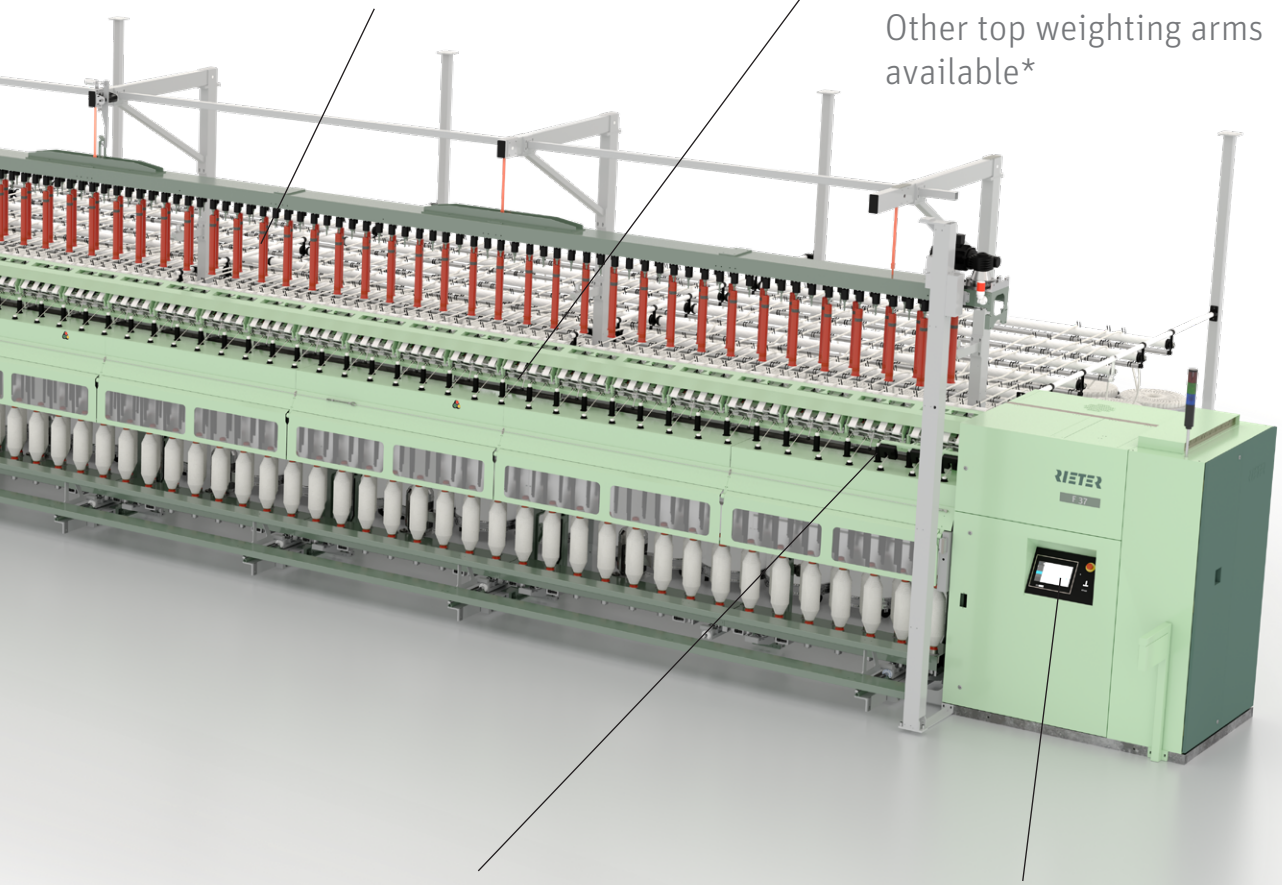
Up to 220 positions, ideal for long ring spinning machines

Compact, space-saving design, gauge of 110 mm

High and Constant Roving Quality

Suessen top weighting arm HP 4080 is standard

Other top weighting arms available*



High Efficiency

Continuous monitoring of running behavior

Roving tension control

Individual roving break control

High Degree of Flexibility

With electronical drive* roving count can be set on the touchscreen

Bottom spindle drive or top spindle drive*

Most Economic Solution with High Efficiency

Optimized number of spindles

With up to 220 roving positions, the roving frame is ideal for ring spinning machines with 1 824 positions. The high number of spinning positions per machine reduces investment and production costs.

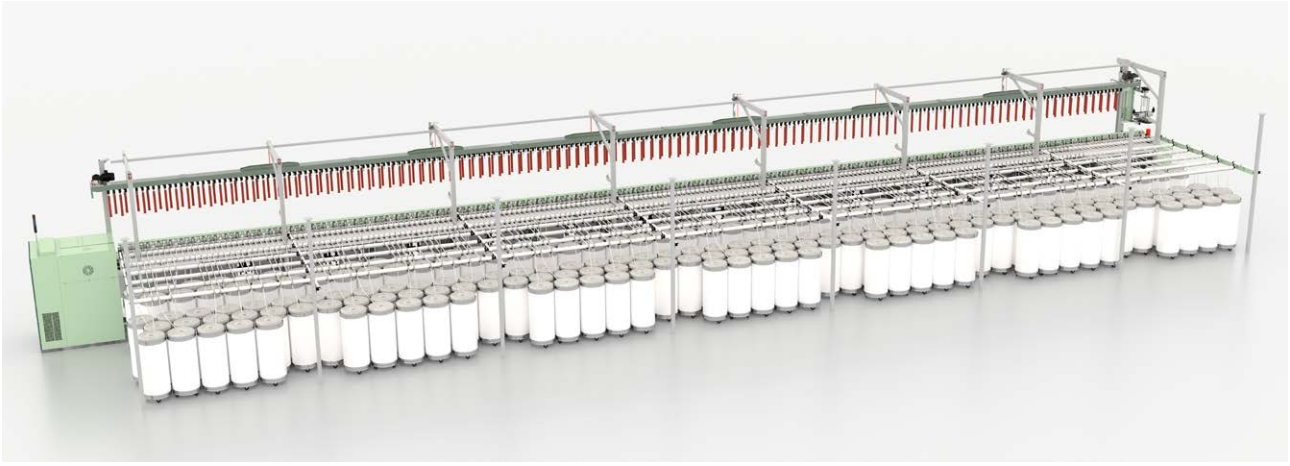
Fast doffing with F 37

The roving frame F 37 with integrated, fully automatic doffer changes the bobbins within 120 seconds. The machine stops automatically when the set roving length is reached. The bobbins are stored at the front of the machine.

The transport rail with empty tubes moves down and replaces the full bobbins. The bobbin rail then returns to the working position. The roving is positioned on the empty tube and production re-starts automatically. Fast and simple movements enable fast doffing process.

Space-saving design, with a gauge of 110 mm

Efficient replacement of full bobbins



With up to 220 roving positions, the F 37 is well suited for long ring spinning machines.

Flexible Production – Flexible Bobbin Handling

Efficient bobbin transfer station and fast bobbin change

The F 37 is equipped with a transfer station that transfers the full bobbins to a roving bobbin transport system. The transfer of the bobbins begins after doffing and is decoupled from the spinning process.

With a short changeover time of just 12 seconds, the capacity of only one transfer station is sufficient to reliably change 220 roving bobbins before the next doffing process. The transfer station has a simple, clearly structured design, resulting in low air consumption and less maintenance.

Flexible automation

Via the transfer station the roving frame F 37 is connected to automatic roving bobbin transport systems.

Spinning mills with manual roving bobbin transport can benefit from automatic doffing, combined with the manual change of roving bobbins and their replacement with empty tubes (option).

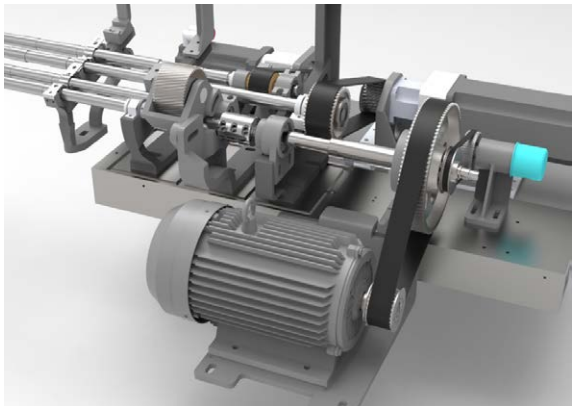
An independent bobbin stripper (option) can be integrated into the circuit of the roving bobbin transport system SERVOtrail, to clean the tubes. One bobbin stripper can work for several roving frames.

Reliable change of 220 roving bobbins before next doffing process

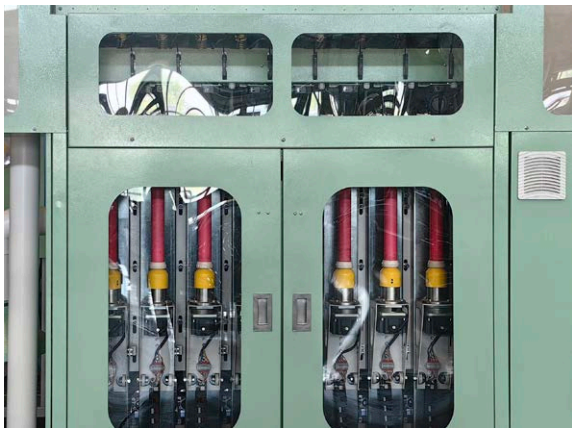
Optimal adaptation to different raw materials

The electronic drafting system (option) supports the flexible processing of different raw materials and the production of different roving counts. The parameters for main and break draft can be easily set via the machine's touchscreen and ensure optimum adaptation and fine-tuning. This enables manufacturers of small lots to respond quickly to market demands.

The basis for high roving quality is already laid by the constant, uniform sliver feed. The feeding speed in the creel can be adjusted so that the slivers are fed to the drafting system with high precision.



Fully electronic drafting system for high flexibility



Independent bobbin stripper for tube cleaning

Precise Bobbin Build-up for High Roving Quality

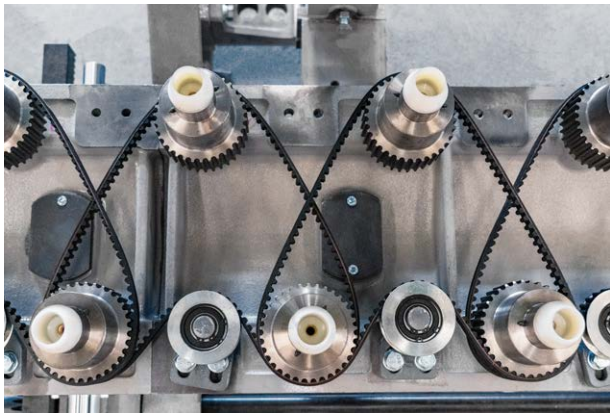
Perfect bobbin build-up

The bobbins are bottom-driven. The tube is attached to the bottom pin of the spindle, to ensure that the tube remains in the correct position and rotates at the same speed as the spindle.

The sectional drive of the roving frame and the bobbins by tooth belts is the basis for precise winding of the roving during the bobbin build-up as well as low noise levels and low power consumption.

The reliable gear and rack drive mechanism for the bobbin rail ensures exact and precise up and down movement and minimizes quality variations of the roving bobbins. For F 37 machines with more than 156 spindles the bobbin rail drive is positioned in the center. This ensures a stable and strong drive for an accurate bobbin build-up, even on long machines.

Precise bobbin build-up for high-quality roving



Minimal quality variations thanks to a reliable and strong drive.

Consistent roving quality

The new Suessen top weighting arm HP 4080 keeps the roving quality constant. All components of the top weighting arm are perfectly coordinated. The fibers are guided precisely with the new top apron cradle. The precise loading elements for the top rollers ensure consistent roving quality throughout the entire machine.

Continuous monitoring of running behavior

The bobbin build-up is continuously monitored. On the one hand, optical sensors measure the tension at the first three spinning positions. If the tension is outside the limit values, the winding speed is adjusted accordingly. This ensures uniform roving tension and precisely built-up bobbins. The roving then runs smoothly on the ring spinning machine.

On the other hand, the individual roving monitoring system quickly detects roving breaks, so that fast operator interventions ensure high efficiency.

Machine settings and machine monitoring can be easily carried out on the color display of the machine panel. Shift data reports support the operator in optimizing the running performance.

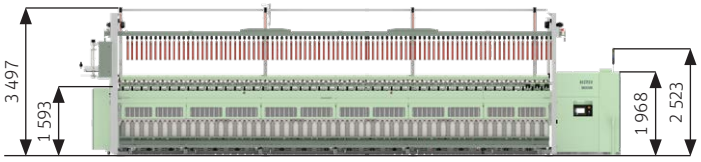
Monitoring of running behavior enables high efficiency and quality.

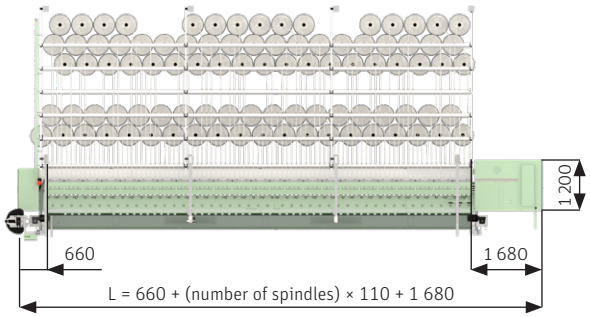
Technical Data F 37

Technological data	
Material	Cotton, man-made fibers and blends, up to 60 mm
Roving count	1250 – 200 tex; Ne 0.47 – Ne 2.95; Nm 0.28 – Nm 1.74
Twist range roving	5 – 90 T/m
Draft range	Mechanical 4 – 13-fold (technologically recommended draft depending on raw material and roving count)

Technical data	
Gauge	110
Number of spindles	60, 76, 92, 108, 124, 140, 156, 172, 188, 204, 220
Bobbin diameter	6" (152 mm)
Winding height bobbin	16" (406 mm)
Can diameter	20" (500 mm) and 24" (600 mm)
Max. number of spindles	220
Max. flyer speed	mechanical up to 1 500 rpm, technologically possible speed (depending on raw material and roving count)

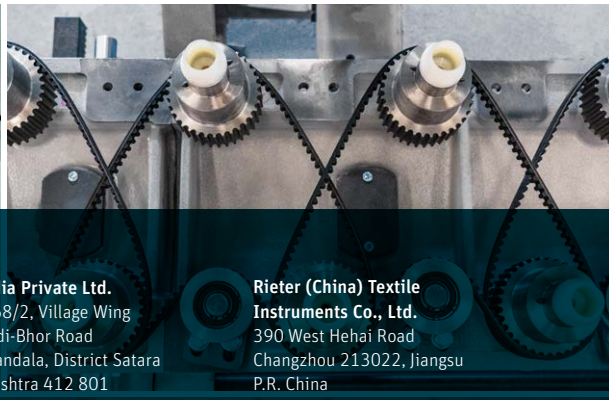
Installed power	
Flyer drive	6 – 18 kW
Bobbin drive	6 – 27 kW
Drafting system drive	3 – 5.5 kW
Suction (optional)	3 – 6.5 kW
Bobbin rail movement	0.37 kW
Other drives including doffing	3.75 – 5.9 kW
Compressed air – min. pressure	7 bar
Compressed air consumption F 37	0.6 m^3/hour





Machine length F 37											
Spindles (110 gg)	60	76	92	108	124	140	156	172	188	204	220
Sections	4	5	6	7	8	9	10	11	12	13	14
Length L (mm)	8 940	10 700	12 460	14 220	15 980	17 740	19 500	21 260	23 020	24 780	26 540

Machine width F 37		
	110 gg	
Cans	20“ cans	24“ cans
	5525 mm	6538 mm



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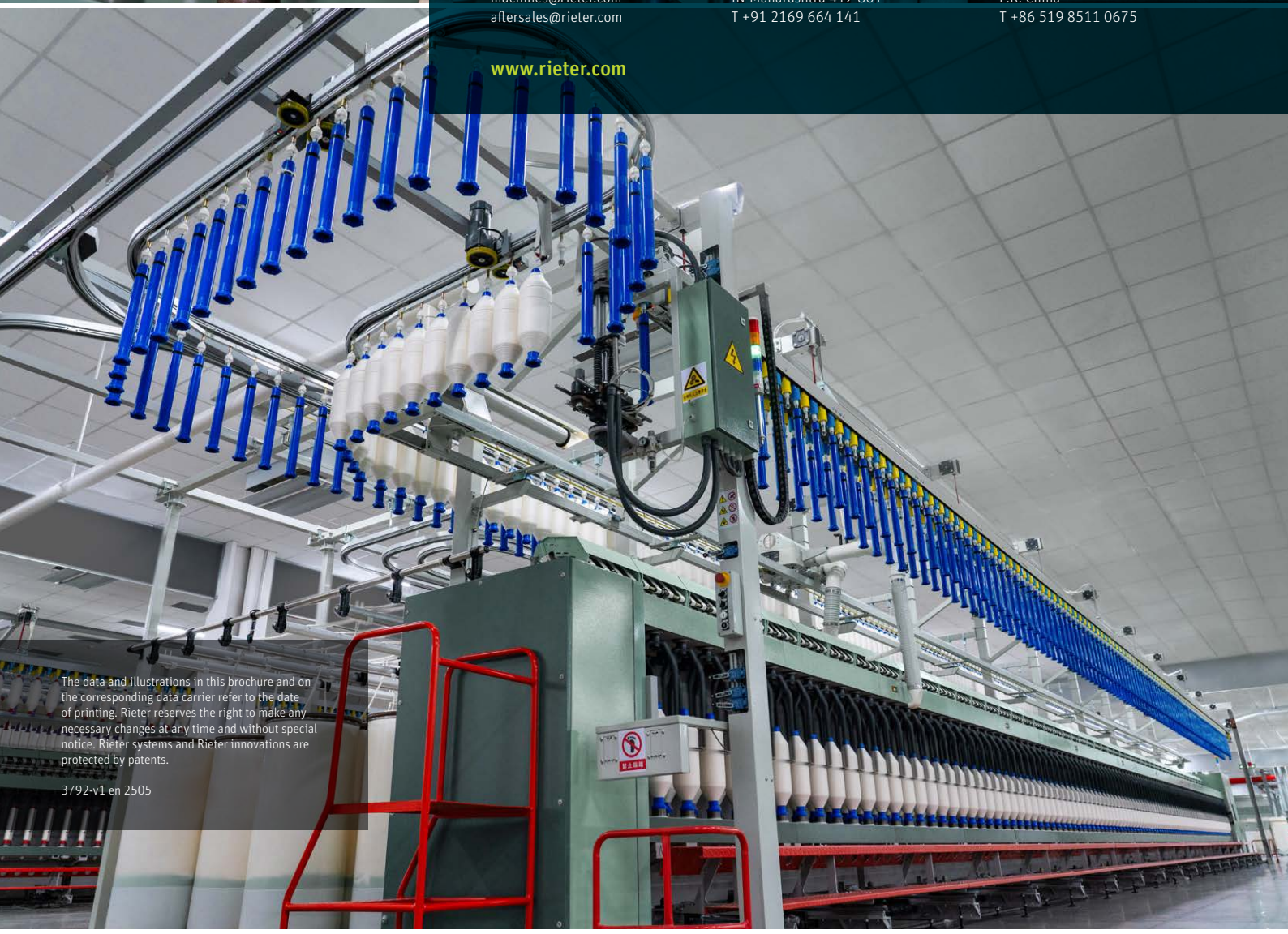

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