

4S SUSTAINABLE
SMART SOLUTIONS FOR
SPINNING
SUCCESS



RING FRAME LRJ 9 SERIES



Versatile



LRJ 9 Series

LMW's Smart Ring Frame LRJ 9 Series is built with superlative technology to spin high quality yarn. Compatible with Industry 4.0 standards, this advanced new-age machine is flexible and engineered with smart features which ensure high productivity, enhanced quality, lower energy consumption, and sustainable features for the future.



**Highly
Efficient**

Specific Features

Energy Saving

- High energy efficient motor
- Inverter controlled fan motor
- Instantaneous power monitoring

FLEXI Drive for Drafting

- Servo drive for drafting
- No change gears for draft & twist
- Better management of torsional forces to get uniform yarn quality

Fancy by Design - Multi Effect Fancy Yarns

- Flexible to produce fancy yarns (Slub, Multi Count, Multi Twist, Injection)



LRJ 9 Series

HPM (High Performance Module)

- DDPC (Digital Drafting Pressure Control)
- CAM (Compressed Air Monitoring)
- Inbuild electrical protection system during power deviation

ECO Friendly

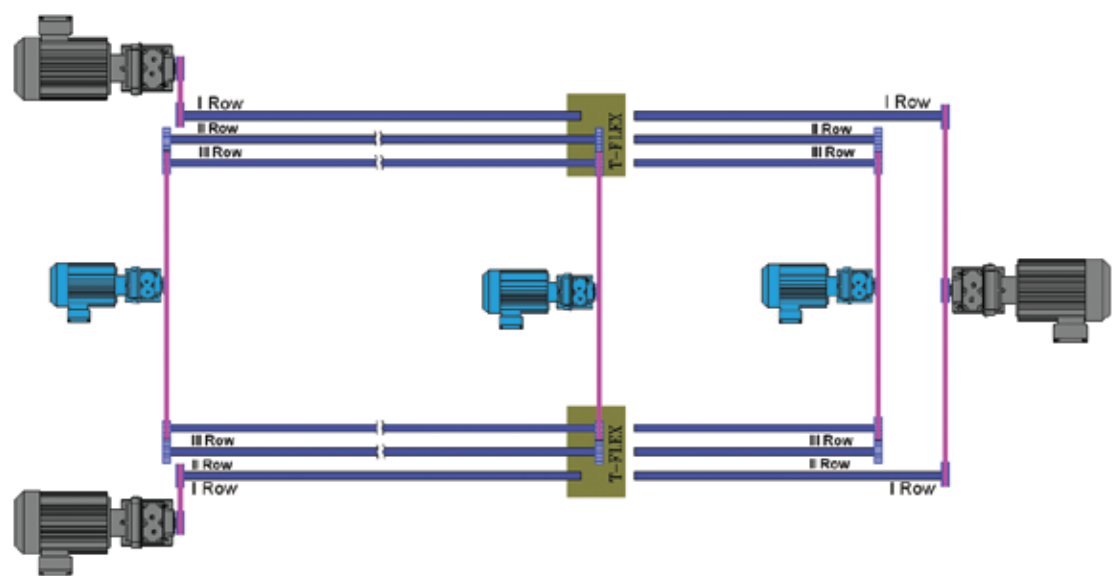
- Low decibel silent spindles

Longer Machine with Space Saving

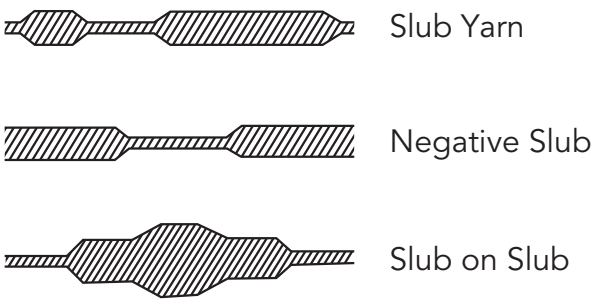
- Maximum spindlage upto 1920



Ultimate Flexibility in Yarn Spinning



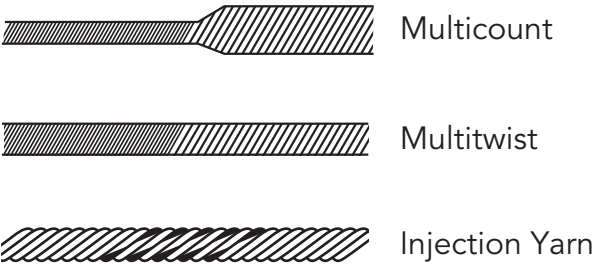
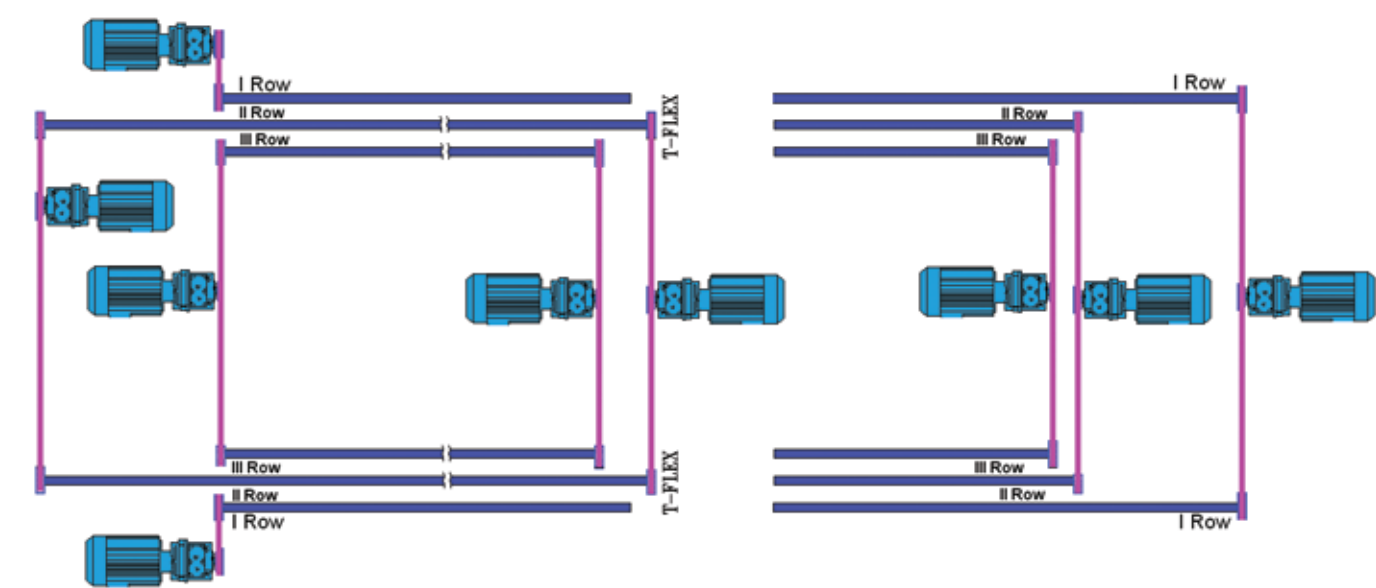
The Ring Frame LRJ 9 Series machines are change gear-less machines with a host of features that provide flexibility in terms of producing regular and fancy yarns such as Siro, Slub, Short Slub, Injection slub, Multicount, Multitwist & Multieffect yarn with higher productivity and quality.



Options	1	2
Front Roller	Induction - 3	Servo - 3
Middle & Back Roller	Servo - 3	Servo - 3
Yarn Types	Normal / SIRO / Slub	Normal / SIRO / Slub / Multi count / Multi twist / Multi effect

High Flexibility Through
Servo Drive for Swift Changeover
of Draft & Twist

Injection Yarn / Injection Slub

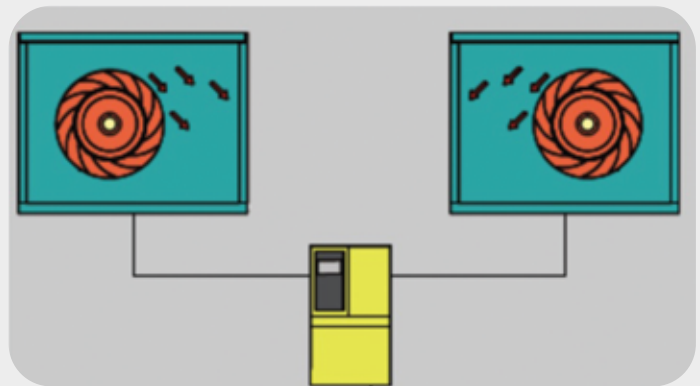


Options	3	4
Front Roller	Servo - 3	Induction-3
Middle Roller	Servo - 3	Servo - 3
Back Roller	Servo - 3	Servo - 3
Yarn Types	Normal / SIRO / Slub / Short Slub Multi count / Multi twist / Multi effect / Injection yarn / Injection slub	Normal / SIRO / Slub/ Injection yarn / Injection slub

Inverter Drive System - for Fan Motor

The inverter varies the pneumafil suction fan speed based upon the suction requirement during regular running of the machine.

During pre-doff function, the same inverter runs the pneumafil fan motor at normal power of 50 Hz.



Energy Saving

Energy module consists of INX OPTI main motor - IE4 standard, energy efficient IE3 standard fan motors, inverter drive to fan motors, new suction system and module to monitor power.

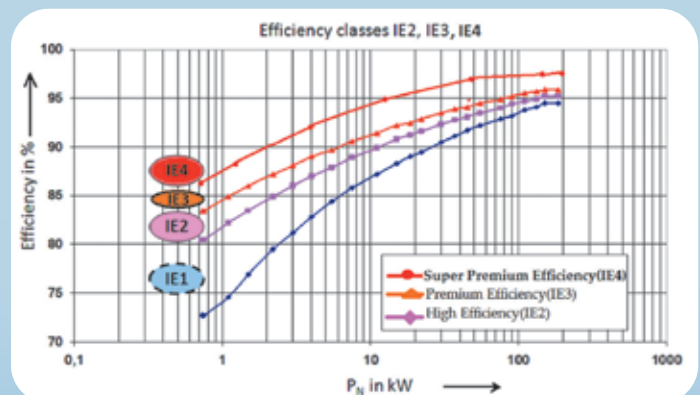


Energy Efficient Main Motor

INX OPTI motor has power saving @2.5% to 5% compared to INX motor. Temperature reduction to the tune of 20 to 30 degrees celsius.

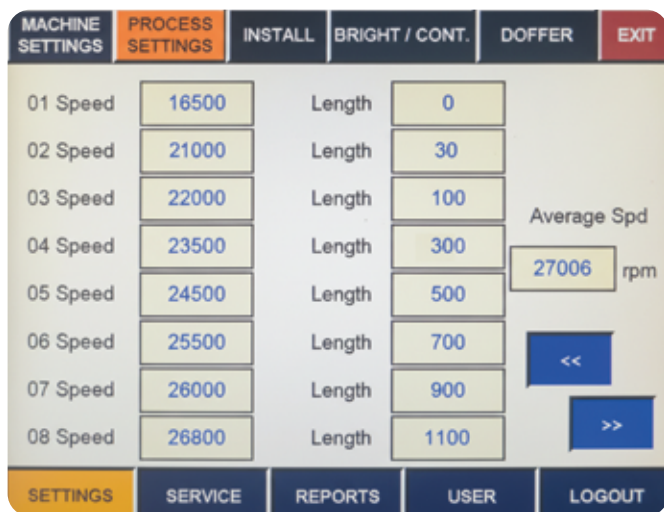
Power in kWh is stored in the report screen for every doff.

Continuous data can be stored on a USB device (optional).



Efficiency classes IE1, IE2, IE3, IE4

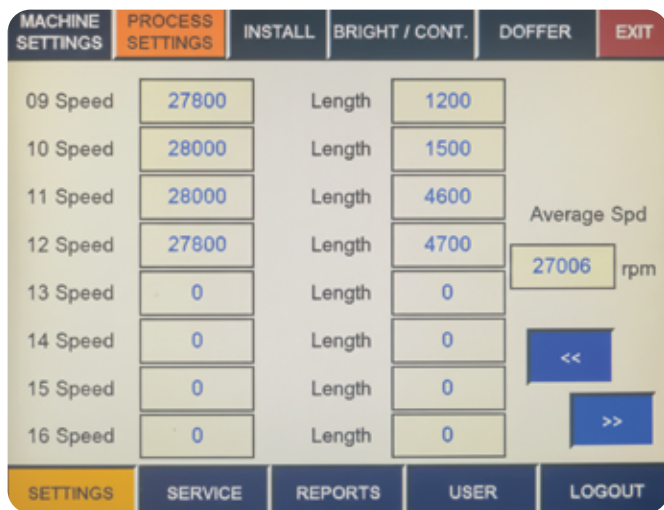
Innovative energy efficient drives



HMI Display

Machine settings made easy with HMI display. Dynamic lot/count changes are made possible with the 5 different process settings available in memory.

The speed pattern can be set for the optimum cop build-up, to increase productivity without affecting quality. This is effected by the smooth change in the speed pattern as programmed in the display. The number of steps programmable is up to 16 steps. Every process control parameters like underwinding speed, time & position are fed through display.



Credo+ Rings for Superlative Performance

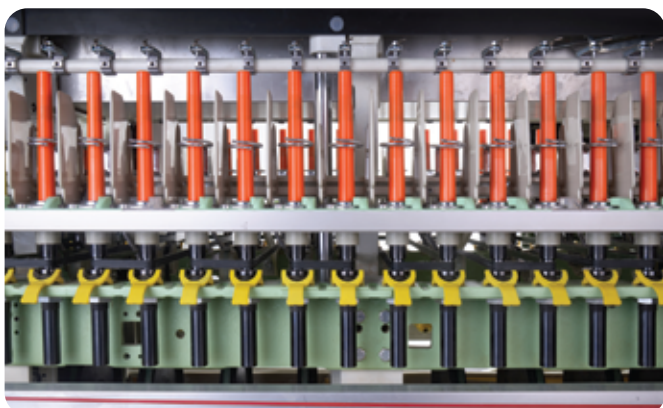
Credo+ Rings are best established for Compact, Combed, Carded Yarn Processes, Synthetic blends and dyed synthetic material. Its consistent performance with best productivity is already proven at different spinning mills for various materials and applications.

The Credo+ Rings precise profile geometry ensures shorter running-in period. Increased micro hardness leads to extended life of the rings. While the higher wear resistance guarantees the consistent performance throughout the life with consistent yarn quality.



Low Decibel Spindles (HLLD) for Best Working Atmosphere

These low decibel spindles ensure very low noise levels and very low vibration levels for assuring higher spindle speeds by the use of double elastic viscous damping construction in the bolsters. The noise level is reduced up to 5 dB.





Energy Efficient Silent Spindle (HLED with HK RYC)

HLED Spindle is specially designed with a double elastic viscous damping construction which can handle higher radial loads and allow smoother running performance at higher speeds.

- Reduced wharve dia of 17.5 mm and HK RYC (High-speed Kinematic Ring Yoke Construction) technology results in power savings of up to 10% (40s and finer count – Cotton material)
- Reduction in noise level up to 5 dBA
- Reduction in spindle bolster vibration level by 50%
- Spindle oil consumption reduced up to 25% per spindle
- Can run up to 30,000 rpm mechanically

CAM (Compressed Air Monitoring) and DDPC (Digital Drafting Pressure Control)

Display of compressed air consumption in HMI. The data can be integrated to our SPINCONNECT 2.0 software. Drafting pressure can be monitored through HMI. Drafting pressure change through digital pressure switch.



Direct Link to Winding Machine

Any make of winders can be linked directly to LMW Ring Frame. Tube transfer rate is upto 40 tubes / minute.



MRFL - Best Choice for Multiple Ring Frames with Single Link Coner



Smart Doffer

Well proven user-friendly intermediate peg system with aluminium extruded gripper rail and the sturdy steel scissor arm ensures perfect doffing.

Pneumatically operated piston type gripper ensures positive grip on the cops without disturbing the yarn content. Snap fit type gripper cap for facilitating easy mounting onto the gripper offers the ultimate user friendliness to customers.

Stand Alone Basket Type Tube Loader

The Ring Frame tubes from winders can be put into the basket of the Tube Loader. This has reduced the operator fatigue since the loading is made easy by stack-free loading. Tube feeding rate is up to 36 tubes/minute.



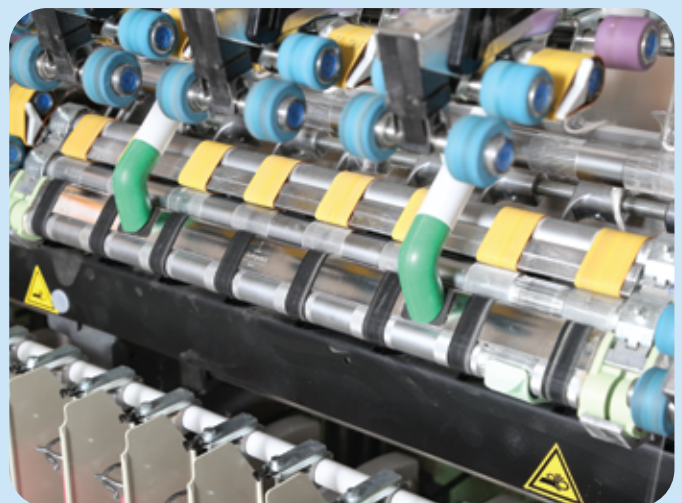
Carriage Tube Loader

Featuring a detachable trolley for easy collection and transfer of empty cops, it includes a separate belt-driven unit for unloading full cops and can load up to 36 tubes/minute. Safety is ensured with a 6-level sensor in the funnel and dispenser, as well as sensor protection for unloading full cops and filling the trolley.

Ring Frame LRJ 9 Series with Inbuilt Suction Compact System - Spinpact



- Hi-tech, unique suction compact system with ease of handling
- Maximum number of spindles up to 1920
- Idler gear with play adjusting provision for transmitting drive from front bottom roller to compact bottom roller
- Uni compact nozzle made up of special aluminium alloy for eight spindles
- Unique top suction arrangement
- Special spinning angle for enhanced performance
- Lesser power consumption

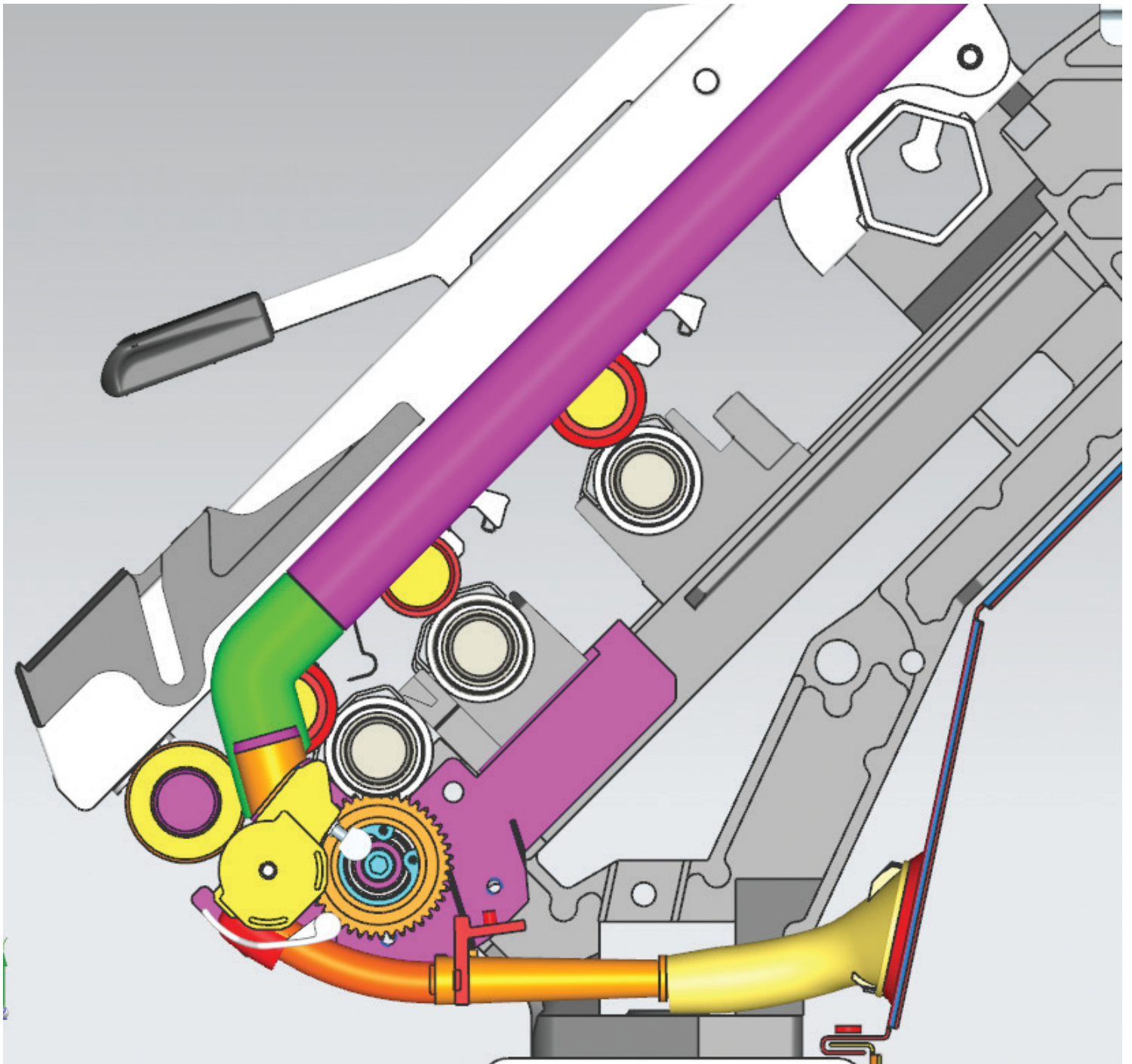


The versatility of LMW Suction Compact system to work with Cotton, Polyester, Regenerated Polyester, Viscose, Modal, Micro Modal, PV blends, PC blends, Melange, Bamboo, Modal Cotton Blends, Lyocell and for the applications of weaving and knitting has made the system acceptable by top end spinners.

Integrated Top Arm and Roller Stand ensure precision in roller setting and reduction of parts.

Superlative performance with LMW Spinpact is well proven all around the world with the following yarn quality parameters.

Increase in Yarn Tenacity by up to 15%, ZWEIGLE yarn hairiness S3 reduced up to 85%, Uster Hairiness Index improvement up to 30% and improvement in Yarn imperfections and classimat faults.



Spinconnect 2.0

Digital Automation our Passion

Integration of Ring Frame through SPINCONNECT 2.0

Smart Ring Frame LRJ 9 Series can be integrated with Spinconnect 2.0, a web based monitoring and control application. The HMI details are transferred through Wi-Fi / LAN connection and all the parameters can be viewed and controlled from a centralized computer.

Editing of process parameters from a central location for better process control and lot changes across machines.

Remote viewing of machine PLC status from any location for trouble shooting and for software updgradation.

User defined reports and charts for analysing the Ring Frame performance can be generated for further improvement.

Predefined shift-wise, daily, weekly, monthly reports can be sent through mail to respective users.



Technical Data

Material	:	Cotton, Man Made Fibers & Blends up to 60 mm
Spindle gauge (mm)	:	70 mm, 65 mm
Spindles per section	:	48
No. of Spindles	:	Max – 1920 Spl., Min – 144 Spl.
Spindle Type	:	HLLD / HLED
Spindle speed	:	Maximum up to 30,000 rpm
Ring Type	:	CREDO+
Lift (mm)	:	160, 170, 180, 190 & 210
Tube Length (mm)	:	180 to 240
Ring diameter (mm)	:	34, 36, 38, 40, 42, & 45
DUI (mm)	:	16 / 18 / 20 / 22
Wharve Dia (mm)	:	17.5 / 18.5 / 21
Count range (Ne)	:	12's to 200's (Cotton) 14's to 120's (Synthetic Blend) 16's to 120's (Synthetics)
Hank of Roving	:	0.5 to 3.0 Ne
Drafts	:	Up to 100
TPI Range	:	9.57 to 82.84
Cradle size (mm)	:	36 mm / 39 mm / 41 mm / 43 mm / 59 mm depending on material process
Tube loading type	:	BTL (Basket Tube Loader) / CTL (Carriage Tube Loader) Linking with Winder
Waste Collection System	:	Cotton – Rotary Stationary Synthetics & Blends – Stationary
HPM (High Performance Module) :		DDPC (Digital Drafting Pressure Control) CAM (Compressed Air Monitoring) Inbuilt electrical protection system during power deviation
Options	:	Normal Slub Multi count and Multi twist Injection Slub SIRO Rapid Doff Automatic Waste Evacuation System

LRJ 9 SERIES



LRJ 9 SERIES



Perianaickenpalayam, Coimbatore - 641 020 INDIA.
Phone : +91 422 7192255
Email : info@lmwtmd.com
www.lmwtmd.com



Issue No 2 , April 2026