

Smart Spinning Solutions

Digitization | Automation | Sustainability

Card Sliver System | Combing System Ring Spinning System | Mill Monitoring System

LMW offers a complete range of state-of-the-art **Spinning solutions**



Card Sliver System

- > Gentle Blowroom Line
 - Bale Plucker Line
 - Swift Floc Line
 - MB0 Line
- > Card LC363 / 361 S
- > Card LC636 S
- > Card with Drafting System (CDS)

Combing System

- > Non Auto leveller Draw frame LDB3
- > Auto Leveller Draw frame LDF3 S
- > Lap Former LH20 S
- > Comber LK69 Series
- > Lap Transportation System (LTS)

Ring Spinning System

- > Speed frame LF4280 Series
- > Smart Ring frame LR9 / SX / SXL
- > Smart Compact Ring frame LRJ9 / SX / SXL
- > Spinpact LMW Suction Compact System
- > Roving Transportation System (RTS)

Mill Monitoring System

> Spin Connect



LMW

Founded in 1962, Lakshmi Machine Works Limited (LMW) is one of the largest manufacturers of textile machinery in the world offering the complete range of spinning solutions from Blow room to Winding. With customer centricity at its core, a portfolio of machines that harness latest technology and an extensive sales and service network, LMW has emerged as the preferred partner for customers who are gearing up to meet dynamic needs of an evolving industry. LMW works constantly to reduce dependence on skilled manpower by introducing innovative solutions with the right balance of automation and ergonomics. The in-house Research and Development team, staffed with accomplished specialists drive the culture of Innovation & Automation and deliver machines and solutions that consistently meet and exceed customer expectations.

With a strong presence in markets across the globe, LMW ensures that the demands of the local markets are met without compromising global standards. With over 50 million Spindles in operation worldwide, LMW is the preferred global partner for end-to-end spinning solutions in today's global textile market. With an exhaustive range of offerings, the ability to scale and a culture of innovation, LMW is committed to offering superior value today and in future.

CARD SLIVER SYSTEM



GENTLE BLOWROOM LINE

Bale Plucker LA23 / S
Swift Floc LA21
Mixing Bale Opener (MBO) LB3 / 2 & LB3 / 6
Mixing Opener (MO) LB3 / 5 & LB3 / 7
Varioclean LB9 / 2
Unimix LB7 / 6
Unimix LB7 / 4
Flexiclean LB5 / 6
Supremoclean LB10 / 2
Blending Solution
Auto Blend LA10

The Blowroom line is configured to meet the requirements of

Higher productivity

Consistent quality

Homogeneous blending

The Blowroom line ensures

Gentle cleaning

Gentle opening

Effective microdust extraction



CARD LC363 / 361 S

SALIENT FEATURES

Higher production up to 130 kg/hr

Triple / Single Licker-in arrangement with arcual combing segment

Direct feed to card with pressure regulated chute

Feed weight control system

Inverter drive for cylinder

Aluminium alloy flats with increased number of revolving flats (36 nos.)

Highest Active Flat Index (AFI)

Replaceable end connector for flats

Automatic piecing aid

Linear 40" x 48" coiler with high speed can changer

Optimum waste extraction at right place

Metal detector and earthing stop motion

Online quality monitoring system

OPTION

Fix Fil Can Changer for bigger can Card with Drafting System (CDS)

CARD LC636 S

SALIENT FEATURES

Higher production up to 250 kg/hr Working width of 1500 mm Direct feeding to card with pressure regulated chute Feed weight control system Multiple feed plate arrangement for highest degree of levelling Single Licker-in arrangement with pair of arcual combing segment Inverter drive for Licker-in and cylinder External knife adjustment for waste extraction setting in Licker-in zone Highest active carding area of 1.95 m² and cylinder area of 3.95 m² Aluminium alloy flats, 101 nos. with increased number of revolving flats (36 nos.) Replaceable end connector for flats Optimum cylinder diameter of 1017 mm leading to lower thermal expansion and higher centrifugal force Automatic piecing aid Linear 40" x 48" coiler with high speed can changer Optimum waste extraction at right place Metal detector and earthing stop motion Online quality monitoring system OPTION Fix Fil Can Changer for bigger can Card with Drafting System (CDS)



COMBING SYSTEM





DRAW FRAME LDB3 SERIES

VARIANT

LDB3 S Electronic Drafting Machine

LDB3 Mechanical Drafting Machine

SALIENT FEATURES

Delivery speed of up to 1,100 mpm (mechanical) Delivery speed can be changed using touch screen Two materials can be processed simultaneously at different speeds

Automatic sliver cutting and Auto can changer Top roller end bush with lifetime lubricant – Top roller buffing without removing end bush Programmable oscillating stripper for top rollers Drafting drive through timing belts

Separate drive for coiler and can

LDB3 S FEATURES

Closed loop digital sliver control system Servo drive for drafting e-sliver cutting Auto piecing arrangement Quality monitoring system

OPTION

Inverter driven fan motor

DRAW FRAME LDF3 S SALIENT FEATURES

Delivery speed of up to 1,100 mpm (mechanical)

Duo-digital auto levelling system

Servo drive for drafting

4 Over 3 drafting arrangement with pressure bar Automatic suggestion for best Levelling Action Point (LAP)

Self cleaning top rollers through programmable oscillating strippers

Pneumatically aided auto piecing

Separate motor for coiler and can

Inverter controlled main drive

Spectrogram for self identification of mechanical faults

Power saving and kinetic backup technology

Delivery can dia. 12" to 24" / Delivery can ht. 36", 42", 45" and 48"



LAP FORMER **LH20 S**

SALIENT FEATURES

Production up to 680 kg/hr

Average delivery speed up to 200 m/min (depending on raw material)

Minimum doffing time ensures higher efficiency and productivity

PRO-IN control system for better lap preparation

Unique single head drafting system with servo drive

Full lap weight monitoring

Lap weight levelling – Lap 1 mtr CV less than 0.5% Compact and uniform lap sheet across the width Ergonomically designed static creel for sliver feed

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COMBER LK69 Series

VARIANT

LK69 S Electronic Drafting Machine

LK69 M Mechanical Drafting Machine

SALIENT FEATURES

Production up to 2.1 tons / day

Speed upto 600 npm

PACT for versatile operation

3/3 pneumatically loaded inclined drafting system placed over the coiler for direct entry of silver to coiler calender roller

Can changer – Minimum space requirements

24" x 48" with two reserve cans

Modular construction – with 2 modules

LK69 S FEATURES

Change gearless drafting drive through Servo motor

Hank monitoring system to verify consistent delivery

Machine speeds can be changed through display

OPTION

40" x 48" with one reserve can



RING SPINNING SYSTEM



SPEED FRAME LF4280 SERIES

VARIANT LF4280/A Non-doffer Machine LF4280/SX Auto-doffer Machine

SALIENT FEATURES Spindleage up to 280

Spindle speed up to 1500 rpm (mechanical)

Auto doffer with provision for roving transport system

Doffing time less than 2.5 minutes

Automatic roving tension controller for minimal and uniform roving stretch

4 segment drive - Drafting, Bobbin, Flyer & Trough

Dual drive arrangement for drafting

4 over 4 or 3 over 3 spring loaded drafting system

Effective suction arrangement with CQ duct

Main draft & twist per inch can be changed in display

In-built safety system during running & doffing

Monitoring of drives / motor parameters from display



SMART RING FRAME LR9 / SX / SXL

SALIENT FEATURES

Change gear less Ring frame – Swift changeover of draft & twist through display

Provision to produce fancy yarns such as siro, slub, injection slub, multicount, multitwist and multieffect yarn

Inbuilt HPM Module for unmatched performance

MRFL – Best choice for multiple Ring frames with single link coner

Autodoffer with basket type tube loader and provision to link with winders

Maximum Spindles up to 1824

Maximum Spindle speed up to 25,000 rpm (mechanical)

Total draft up to 100

Dual side suction for broken end with inverter drive for fan motor

Servo drive for ring rail

HLLD low decibel Spindles to reduce the noise generation



SMART COMPACT RING FRAME LRJ9 / SX / SXL

SALIENT FEATURES

Hi-tech, unique suction compact system with ease of handling

Maximum number of Spindles up to 1824Easy drive system for compact rollerUni-compact nozzle made from special Aluminium
alloy for eight SpindlesUnique top suction arrangementSpecial spinning angle for enhanced performanceConsistent quality through Direct Loading System (DLS)4Q-2M/2Q-1M drive for drafting with T-flex driveAC Servo drive for ring rail movementTPI change from displayInbuilt HPM Module for unmatched performanceAuto doffer and provision to link with winderEnergy module with higher efficient main motorAuto doffer with basket type tube loader



SPINPACT

SALIENT FEATURES

Suction nozzle with unique cross section made with special Aluminium alloy

Eight Spindle drive for enhanced suction management and easy maintenance

Inverter controlled compact suction motor to adjust & fine-tune the required compact suction pressure Special geometry for prolonged compacting and hence matchless lower hairiness and better strength of yarn

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Top suction system for user friendliness

Can be retrofitted in all Ring frame models

Ready to make Single and SIRO compact

AUTOMATION



CARD WITH DRAFTING SYSTEM (CDS) FIX FIL CAN CHANGER **CARD WITH DRAFTING** SYSTEM (CDS)

SALIENT FEATURES

Maximum speed up to 700 m/min

2/2 drafting system with Servo control

Pneumatic loading of Top Rollers – Easy adjustment Auto levelling of sliver through Servo drive control Auto piecing of sliver

Simplified yarn preparation process for Airjet and Open-end spinning

FIX FIL CAN CHANGER

SALIENT FEATURES

Can changer mechanism with minimal movement of can (Inside the machine)

Improved efficiency - No reduction in running speed during can changing

Dual can plate with individual drive arrangement - Less mechanical & no pneumatic components

In built can pusher arrangement - Operator friendly

Doffed can monitoring sensor - Safety and intelligence in-built

Can dia up to 1200mm with height of 1200mm -Increase in can content up to 50%

Improved Card and Draw frame efficiency due to minimal can movement, reduced number of doff and reduction of piecing in Draw frame creel

LAP TRANSPORTATION SYSTEM (LTS)

SALIENT FEATURES

Fully automated Lap Transportation System ensures automatic transportation of laps & spools between Lap former & Comber

Accurate positioning of laps

Gentle and reliable handling of laps, ensures consistent combing quality

Increases the Comber machine efficiency User friendly HMI display system for easy

operation

Lap Turntable option provides layout flexibility Elimination of manual error

Reduces operator fatigue

Manpower reduction / savings

One system can supply 3 Lap Former & 18 Combers connected in a straight line with maximum travelling length of 90 mtr





ROVING TRANSPORTATION SYSTEM (RTS)

SALIENT FEATURES

Highly reliable, specially designed track made of extruded Aluminium and Anodized rail for smooth transportation

Motorized drive for train movement

Track motor with brake for bobbin transfer and for positioning of bobbins in Bobbin Stripper / Exchanger

Execution with Bobbin Holder (Four Leg)

Train speed can be varied through Inverter drive

Separate storage area for full bobbin & empty bobbin

Automatic Roller Clearer Arrangement

Automatic cleaning of empty bobbins by Stripper Arrangement

Exchanger available for Automatic & Fully Automatic RTS

Can be installed in existing layout / machines with flexible design

Production Module Bale Management M/c Production Data Uptime - Utilisation / Stoppage Automatic generation of advice for Mix or a Count **Energy Module** Power - UKG Air flow monitoring **Online Quality Module SPINCONNECT** Online quality for Card, Draw frame, Comber Condition Monitoring Module Critical parts health monitoring, Fancy Yarn Pattern Generation Temperature, Vibration Pattern Generation Tool - FYS Servo drive & Inverter data (Kw, Nm, A, RPM) **Maintenance Module** YBS / RSM module Scheduled maintenance alerts Individual Spindle analysis Rogue Spindles Analysis - Doff, Cop stage, Spindle Pneumafil waste Þ <r K

Web Based Anything, anywhere -Access on the go through browser

Mobile App

from anywhere any time

MILL MONITORING SYSTEM

E-Alert SMS & Mail alert system for deviations & abnormalities in the process, along with a service call & escalation matrix

Reports & Charts

attain targets

Read Write User defined performance Don't just view, have the report & charts to fix & power of controlling the process parameters



Real time update and quick access of mill performance





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