

# SWASTIK

ESTABLISHED 1937

## DRYER FOR LOOSE FIBER



Model LFD - 160

**SWASTIK GROUP OF COMPANIES, AHMEDABAD, INDIA**

Swastik Premises, Amraiwadi, Ahmedabad - 380 026. INDIA

**Tel. :** (+91)(79) 6543 5017, 2274 3553, 2274 9068, 2274 8551, (+91) 99245 12299 **Fax :** (+91) (79) 2274 9131  
**e-mail :** info@swastiktextile.com : swastik.intl@rediffmail.com **www.swastiktextile.com**

**DRYER FOR LOOSE FIBER model LFD-160 / LFD-180** is suitable for drying scoured or Bleached / dyed / washed fibers of natural fiber like cotton, wool, jute, coir or man-made fiber like Polyester, Viscose, Acrylic and their blends.

**FIBER LOADING :** Fiber normally is fed to the machine through a hopper feeder or uniformly loaded by manually means. The Hopper feeder is not an integral part of the dryer and is offered at extra cost.

**DRYER :** Based on closed circuit circulation system, the LFD is of modular construction, and is fabricated from structural steel and incorporates insulating panels all around the machine. Each module is equipped with a Radial Blower directly coupled to A.C. Motor, and a heat exchanger.

**MAIN FRAME :** Fabricated from mild steel sections as per general Engineering practice, and connected with strong cross supports. Each section consists of a ventilating unit, a dynamically balanced radial blower and necessary Jet Nozzles elements.

**INSULATING PANELS** on all the side will be 50 mm thick. Top and Bottom (floor) Panels will be 50 mm thick. The

insulation panels are fabricated using steel sheets on both sides with best quality Rock-wool insulation.

**HEATING :** The machine is equipped with an indirect heating system with Heat Exchangers for heating the air. Heating media can be dry saturated steam at not less than 6.5 bar pressure or Hot Oil at 2 bar circulating pressure. Natural Gas Burners can also be provided.

**TRANSPORT CONVEYOR SYSTEM** essentially consists of a conveyor chain manufactured out of special steel, with arrangement to hold fabricated steel slats at regular intervals. Special arrangement is provided to reduce fiber flying out of the conveyor.

**DELIVERY :** The material (dried fiber) exiting the dryer is permitted to fall freely to the floor where a collection arrangement can be made.

**Salient Features of the Machine :**

- Very Low fiber loss.
- Very Low Power Consumption.
- Highly energy efficient
- Easy to maintain and use

**WET FIBER OPENER AND CONVEYOR WITH HOPPER FEEDER**

**The Wet Fiber Opener** essentially consists of a set of Cast-Iron walls holding a central spiked drum. The spikes are manufactured from special Carbon steel for wear resistance.

Two Spiked Rollers of Ø 80 mm with spikes arranged in a set pattern and running in opposite directions and at different speeds are provided to open the fiber without damaging it. The large spiked central drum Ø 450 mm is fabricated from steel and spikes are fixed on it at regular intervals. Spiked Rollers and conveyor have a face width 1 meter and are suitable to open approximately 150Kg of fiber per hour. The open fiber exits the machine where it can be easily collected.

The whole assembly is properly protected with necessary guards to prevent the possibility of injuries.

The machine is supplied complete with motor and starter.

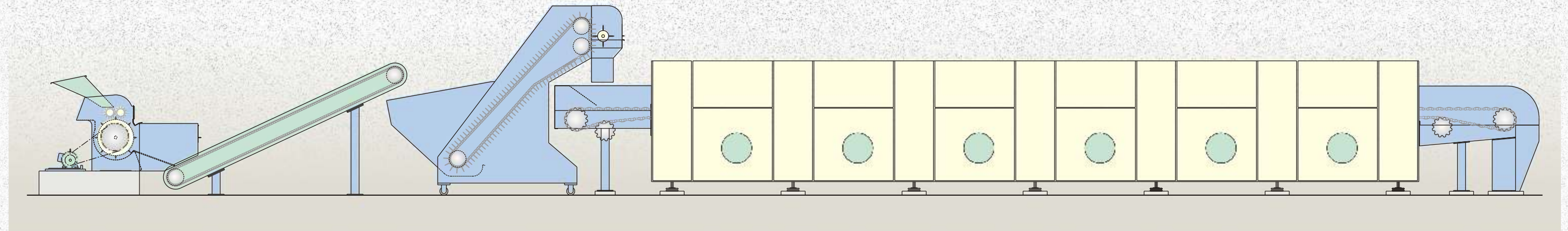
**The Conveyor and Hopper Feeder** system is used for larger capacity machines to load fiber uniformly on the conveyor. It consists of a chain driven steel conveyor which transports the fiber from the wet cotton opener and delivers to the hopper feeder. The Hopper Feeder consists of a series of spiked elements which transports the material to the dryer through a "comb" device, which prevents lumps and excess material going to the conveyor.

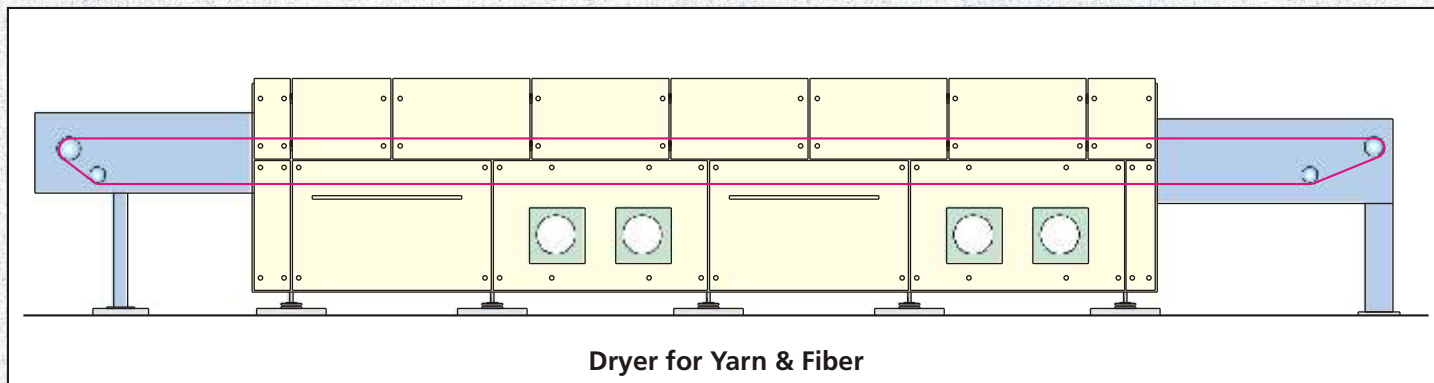


**WET FIBER OPENER**



**CONVEYOR & HOPPER FEEDER**





For very high production requirements, SWASTIK offers a specially designed Dryer suitable for Fiber as well as Hank Yarn. The conveyor width of the dryer can be upto 3500 mm. A special synthetic conveyor is supplied with wider machines.

The Dryer has an air circulation system from top and bottom . While processing fiber, only low velocity air from the top is used, while for processing yarn, high velocity air circulation from both top and bottom is used. Variable air flow is achieved with the help of Variable Frequency controllers. Blowers are directly coupled to 2.2 / 3.6 kW AC motors. Machines are suitable for Steam / Thermic fluid or Natural Gas heating systems. Production machines can be offered upto 8-10 Tons capacity for yarn or fiber.

<b>TECHNICAL SPECIFICATIONS - LFD 160 / LFD 180</b>	
<b>Drying Chambers</b>	2 - 5 Drying Chambers of 3 meter length. Installed Power 2 Kw per chamber
<b>Heating System</b>	Hot Air generated by use of Heat Exchangers working with dry saturated steam through a water separator at not less than 6.5 bar / Thermic Oil
<b>Face width of Conveyor</b>	1600mm / 1800mm - Wider machines for higher productions on request upto 3500mm.
<b>Material of Conveyor</b>	Mild (Carbon) Steel slats running on conveyor chain
<b>Mains Power</b>	3 phase 415 V $\pm$ 5%, 50 Hz, 4 wire system with solidly earthed neutral, unless otherwise specified
<b>Drive</b>	1 - 1.5 kW variable speed drive with AC interter

*Manufactured by*

**SWASTIK TECHNOMECH PVT. LTD.**  
**SWASTIK TEXTILE ENGINEERS PVT. LTD.**

*Selling Agents*

**SHREEJI ENGINEERING & MARKETING SERVICES**

Swastik Premises, Amraiwadi, Ahmedabad - 380 026. INDIA

**Tel. :** (+91)(79) 6543 5017, 2274 3553, 2274 9068, 2274 8551, (+91) 99245 12299 **Fax :** (+91) (79) 2274 9131

**e-mail :** info@swastiktextile.com : swastik.intl@rediffmail.com **www.swastiktextile.com**

**Mumbai Office :** 11, Sir Vithaldas Chambers, 16, Mumbai Samachar Marg, Fort, Mumbai - 400 023. INDIA

**Tel. :** (+91) (22) 2204 9812 **Fax :** (+91) (22) 2288 1481