

TEXTILE RECYCLING

LABORATORY SHREDDING MACHINE



An innovative and sustainable solution for the recycling in the textile and fashion industry.

Mesdan Laboratory Shredding Machine transforms any industrial textile waste (fabrics, yarns, slivers, etc.) and worn-out clothes both pre- and post-consumer textiles back into their original fiber forms.

The equipment is designed to assist textile manufacturers, institutes and R&D laboratories to evaluate any possibility of mechanical recycling, even with a very low quantity of material, before scaling up to large-scale production.

Very compact design and user-friendly controller allow to easily get the most suitable setting according to the primary material to be processed, to optimize the fiber length and the level of opening.

Specifically designed to obtain fibers to be re-used in a spinning process (textile-to-textile recycling) and to work in combination with the Mesdan Lab Mini Spinning line.

An ideal solution for circular economy research in the textile industry.



LABORATORY SHREDDING MACHINE

CODE 337S



Main Features:

Composed of two feeding rollers, five workers and a main drum, all individually driven by an inverter.

Independent speed setting of feeding rollers, main drum, workers and air suction.

All cylinders are covered with high-quality wire clothing.

Opened fibers are delivered into the collection can via air suction.

Distance between the main drum and the workers easily adjustable to 0,25 mm or to 0,40 mm, for optimized fiber processing.

The machine is equipped with a programmed PLC and a user-friendly control panel, to optimize the level of opening and the fiber length, according to the material being processed.

Possibility to save customized recipes, and recall them when needed.

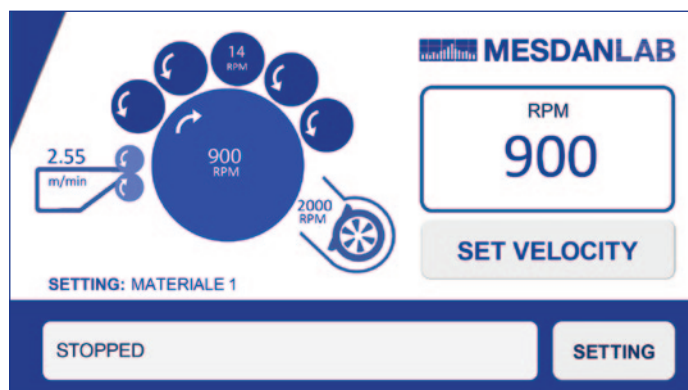
Very easy and fast maintenance.

Working width: 450 mm.

Feeding belt dimensions: 930 x 440 mm (testing area: 750 x 440 mm).

Feeding speed: adjustable, from 0,1 m/min to 4 m/min.

Production capacity: up to 1 kg/min (depending on the weight of the feed material).



Range of processed materials:

Post-consumer textiles
Pre-consumer textiles
Spinning industry waste
Post-industrial traditional / technical textile waste
All natural and synthetic fibers and more...

End use applications:

Spinning
Nonwovens
Bedding and furniture filling
Automotive
Insulation materials and more...

DIMENSIONS / POWER SUPPLY

Weight: 600 kg
Dimensions: (L) 2450 x (W) 926 x (H) 1350 mm
Power supply: 400 Vac, 50/60 Hz, three-phase, 5 kW

Photographs and descriptions of the present leaflet have to be considered as purely indicative and not binding