

## Loptex

Loptex, a leading company serving the textile industry for more than 25 years, offers state of the art technologies for the fibres quality improvement in cotton and in non-woven industries.

Its assembly facility is in Northern Italy, Como Area, close to the Swiss border. It includes R&D department, Commercial and Administrative offices. Loptex sources from Italian and European sub-suppliers.

The most comprehensive and accurate system for the detection and

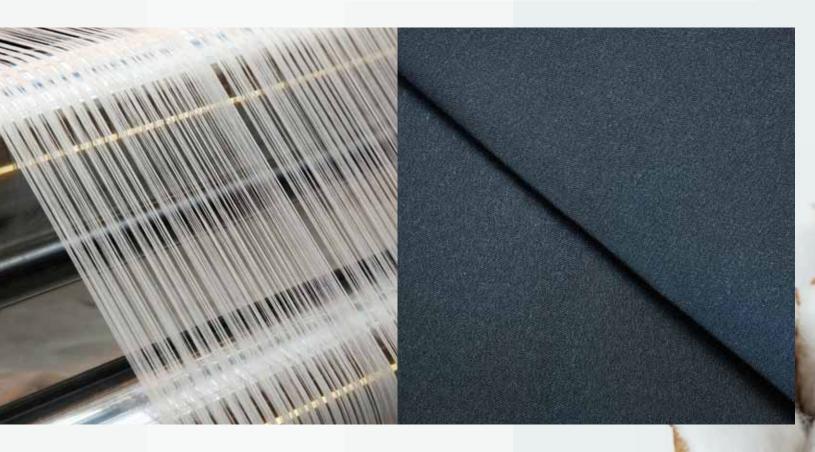
removal of contamination

Loptex stands out for its pioneering vision and innovative spirit. It successfully faces the challenges and the quality demands of the market through its know-how, flexibility, experience and practical approach to problems.

Loptex is part of ACIMIT, the Italian Textile Machine Association.
Acimit, in collaboration with RINA, an international certifying body, invites all its associates to join the sustainability program which consists on delivering on yearly basis a Green Label certification.

The Green Label is based on parameters, values, methods which certifies Loptex commitment to deliver systems with minimum impact on industrial and natural environment.

# Spinning



The contamination content in cottons have dramatically increased.
Quality awarness of final consumers is boosting. Market requires state of the art Sorting systems to face contaminantion in preparation lines.

## Nonwoven

#### NW-Hygiene and medical

#### NW-Automotive

#### NW-Insulation



Loptex supplies sustainable and suitable solutions for the significant reduction of contaminaton on finished webs in Spunlace processes.

One of the key success in these applications is the supply of embedded technologies which keep into account the critical conditions of the industrial environment. The final products are made for hygiene and medical purposes. They have to guarantee purity, delicacy and comfort to the human skin.

Loptex offers sustainable and suitable solutions to contamination problems on automotive applications.

Contamination refers to bunches of colour fibres, bale packaging material, pieces of wood and any other environment debris which may become a potential threath on product apperance and performance.

Loptex offers sustainable and suitable solutions to contamination problems on insulation applications.

Contamination refers to yellow and black fibres, bale packaging material, pieces of wood and any other environment debris which may become a potential threath on product durability and insulation performance.

# Mhy Loptex?

EXA modular concept leads to tailor made solutions on customer demand.

EXA combines multiple technologies which can monitor and detect contamination of natural, artificial and sinthetic fibres. EXA monitors different fibre mixing and colours. EXA detection performance, by means of arrays of embedded colour camera systems with a combination of different source of lights, features:

Direct viewing (no mirrors) with high resolution and accuracy. Elimination of optical side distortion.

Completely sealed optical path.

Constant sensitivity level on measuring channel width.

# Classification of contamination: advantages and benefits

#### On-time supply control

It grants supply transparency and selection of vendors. Standardization of business practices.

# Comprehensive quality control

It ensures objective selection of the raw material according to quality demand. Optimization of the downstream process.

#### Yield improvement

It controls indirectly the maintenance status of the production machines and the industrial environment. Quality and profitable production.

Traceability
It is a key element
of the textile value
chain. Transparency
and supervision of
the final product.

## EXA Technology



EXA is a forefront system designed to grant comprehensive and accurate detection of contamination in Spinning and in Nonwovens Industries. EXA implements robust technologies to face the critical conditions of blow room lines.

EXA, by means of arrays of multiple embedded camera systems and multiple illumination sources, detects, classifies and eliminates all type of contaminants.



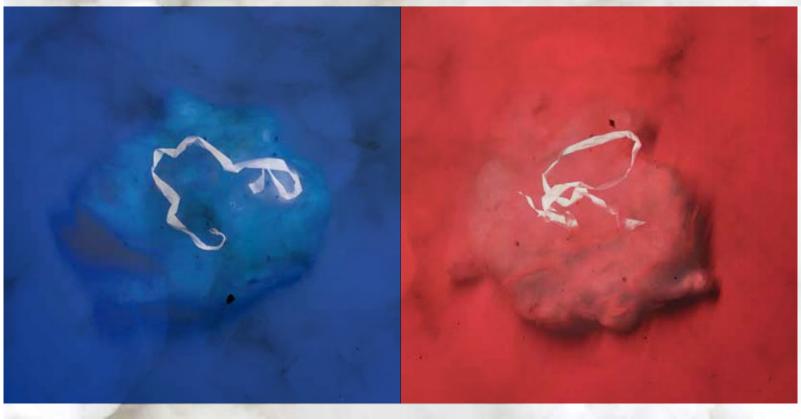


Optical technology



Optical technology







UV light spectrum

Identification of optically brightened contamination.



Red light spectrum

Identification of glossy contamination surface.



White light spectrum

Identification of colour and light colour contamination.

#### Removal of contamination



Loptex EXA separates contamination in a continuous fibres flow.
It does not interfere with the production of the line.
It guarantees efficient removal of contaminants.

#### Array of solenoid valves

The array of solenoid valves enables on-time separation of contamination. Only one valve is activated for the targeted expulsion of the contaminant.

#### Intelligent software

Intelligent software synchronizes the detection systems with the solenoid valves through dedicated hardware. Each valve contains three nozzles.

#### Minimum loss of non-foulty material

The filtering of fibers tufts and the measuring of their speed allow significant reduction of false rejections. The loss of good fibres is than reduced to its minimum.

### **EXA Class**



EXA Class is a Data Acquisition and Contamination Classification System. It downloads statistical data and contamination images from the Sorter units. It classifies the contamination according to colour and size. It provides important quality information on processing material.

#### Images capturing

EXA, by means of array of embedded colour cameras positioned of both sides of the monitoring channel, scans the processing fibres and captures the images of the colour and light colour contamination.

#### Images downloading

EXA, through dedicated firmware and software, downloads the captured images for further analisys and processing.

#### Images classification

EXA, by means of external PC Images classifies the contamination according to colour and size. EXA provides additional statistical and historical data.

#### **Spinning**



Light thin colour PP strings













Colour pieces of fabrics





#### Hygiene-Insulation



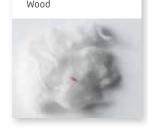


Black spots









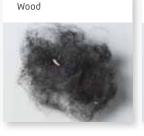




#### **Automotive**









## Industry 4.0

EXA, within the textile value chain, offers the tools to create a valuable platform to companies to pursue business continuity, growth and competitiveness. EXA cutting-edge digital embedded technology along with human experience helps to fill the competence gap in the production process.

#### **EXA Compliance**

EXA supplies key data for process optimization and contributes to generate new revenues in the production textile chain.

#### **EXA Remote control**

EXA remote control option enables the optimization of settings and calibration. It provides to operators full assistance.

#### **EXA Maintenance**

EXA, by means of virtual sensors, features predictive maintenance analysis and on-line control of components.

#### Loptex support Loptex services Italy headquarter Loptex S.r.l. Via Valtellina, 16 22070 - Montano Lucino Como - Italy Loptex through continuous innovation Phone: +39 - 031 47 11 99 improves the competitiveness and quality Mail: info@loptex.it Bangladesh www.loptex.it China Mexico of its customer. Loptex systems are Korea suitables to all exsisting and new opening India lines of worldwide machine Indonesia Belgium manufacturers. Loptex through agencies Iran Holland Malaysia and service stations in the main textile England | Argentina Pakistan Austria areas of the world, guarantees an Brazil Taiwan France excellent service and support to its Colombia Thailand Germany Perù Uzbekistan (Central Asia) customers. Local technicians are trained Poland Vietnam IUSA on regular basis in Italy by Loptex Pourtogal specialized personel. Spain Egypt Turkey Japan

