

## NON-CONTACT WIDTH OR THICKNESS MEASUREMENT & CONTROL

### Mastertrak System

The Proscan Mastertrak is a complete on-line thickness or width measurement and control system. Using non-contact measurement technique to measure the thickness or width profile of continuous or piece products as they are being produced.

When used to measure the thickness the system can be supplied either to measure single or multiple points across the width of the product. The Mastertrak is capable of measuring accurately on materials such as soft, fragile, abrasive and many other types of product, where traditional contact methods have proved not to be effective. Even in industries where traditional contact methods have been used successfully the Proscan Mastertrak offers a more reliable measurement with less maintenance.

Proscan Mastertrak is a real time thickness or width monitor, displaying absolute dimensions to the process line operator. In addition, the system logs every measurement, enabling detailed statistical reports to be produced. The Proscan Mastertrak has the option available for proportional feedback control for automatically regulating the process to maintain the correct dimensions.

### System Composition

The system comprises of a pair of measurement sensors, one either side of the product. These sensors continuously measure the dimension of the product as it passes between them. These measurements are fed to a windows based software package, which has a variety of features.

### System Features

#### Display:

- Numeric and graphic display of real time
- Length display (input from encoder).
- Tolerance and Control limits status indicators.
- Manual control override buttons.

#### Summary Report:

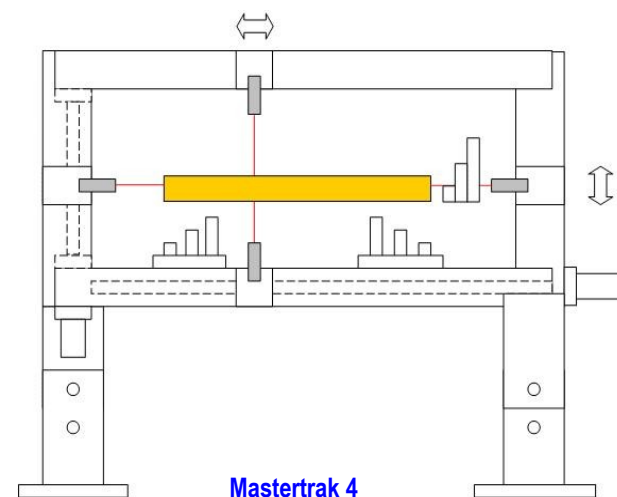
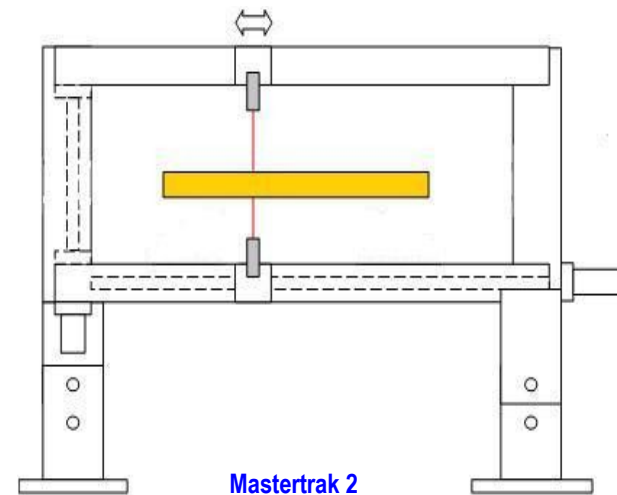
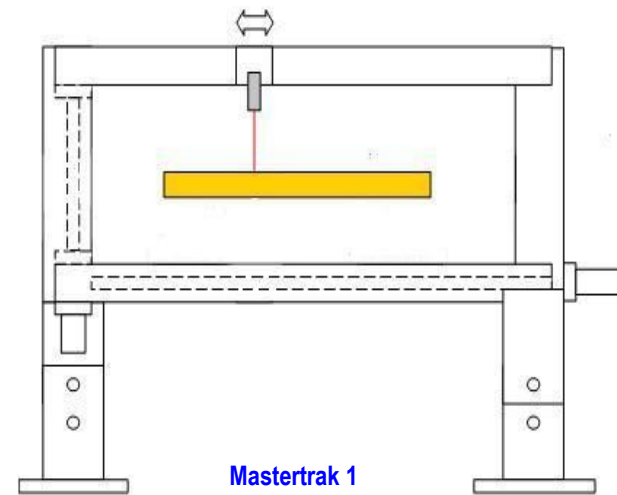
- Report will contain product information and basic measurement statistics such as; number of samples, min, max, std deviation, range, cp & cpk.
- Automatic generation of summary report after each measurement sequence.

#### Process Control:

- Dynamic proportional thickness control via a relay output card fitted to a PC.
- Control of single process variable such as speed.

#### Engineering Evaluation Database:

- Utilization % ie (total shift hours compared with total logging hours).
- Password protected area containing productivity information.
- Number of coils/reels or pieces per shift.
- Average time to produce each coil/reel or piece.
- Actual length of each coil/reel or piece.



## MASTERTRAK THE KEY TO PERFECT ON-LINE MEASUREMENT

### Applications

#### Thickness Applications:

Mineral wool insulation material, Glass wool insulation material, Profile of polystyrene insulation products, Thermal insulation products, Acoustic insulation products, Thermal insulation boards, Thickness & profile of Polyurethane foam products, Bedding foam products, Laminated Products, Rubber extrusion, Particle board, MDF board, Plywood, Wallboard, Metal plates or slabs, Battery plates, Roof tiles, Metal strip, Roofing panels & building panels.

#### Width Applications:

Mineral wool width, Polystyrene extrusion width, Polyurethane extrusion width, Thermal insulation Materials, Extruded plastic, Bedding foam products, MDF board, Plywood, Fire retardant board, Steel slabs Furniture panels, Wood products, Concrete blocks, Building bricks, Roofing panels & building panels.

### Benefits

**Improved Accuracy:** A choice of Sensor options allows you to maximise measurement accuracy for your application.

**Improved Repeatability:** As the Proscan MasterTrak is non-contact it is not subject to wear or variables associated with mechanical or human intervention. This means that regular remastering is not required.

**Cost Savings:** By continuous monitoring and reducing the need for manual measurement significant cost savings can be achieved. In many cases improved process control makes it possible to reduce nominal values to the lower end of the specified tolerance band resulting in material cost savings. Typically the investment cost of a Proscan MasterTrak system will be recovered in just a few months.

**Improved Quality:** The Proscan MasterTrak can form a very important part of a quality control system ensuring 100% dimensional logging and control.

**Low Maintenance:** Because the Proscan MasterTrak has no contact with the product there is very little maintenance required.

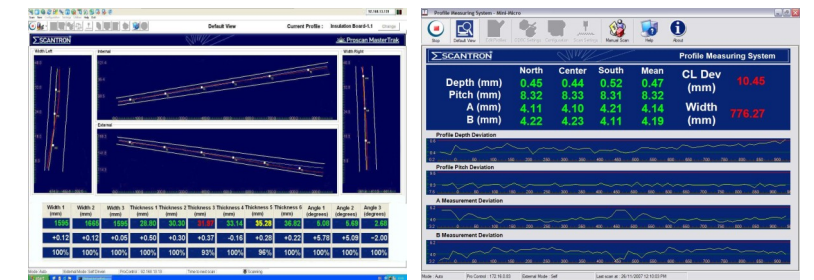
**Reliability:** The system has been robustly designed to give reliable operation in production environments.

**Simple installation:** The Proscan MasterTrak has been specially designed to make the installation simple by minimising the implementation costs.



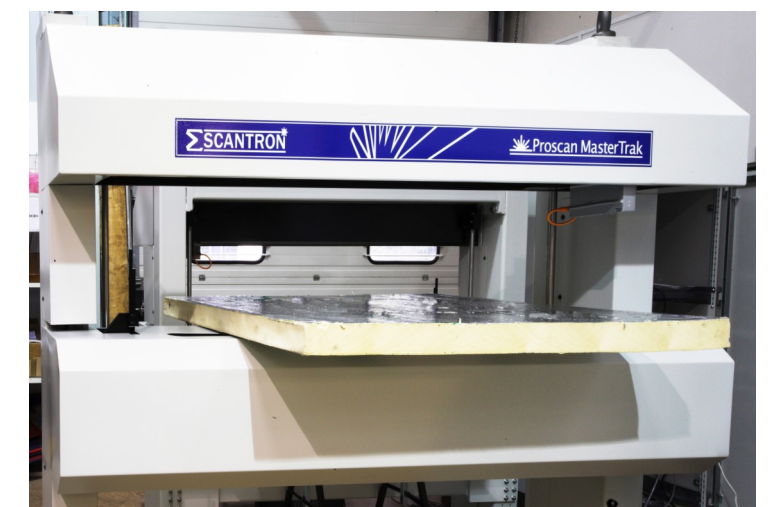
Mastertrak 1 Screen Shot

Mastertrak 2 Screen Shot



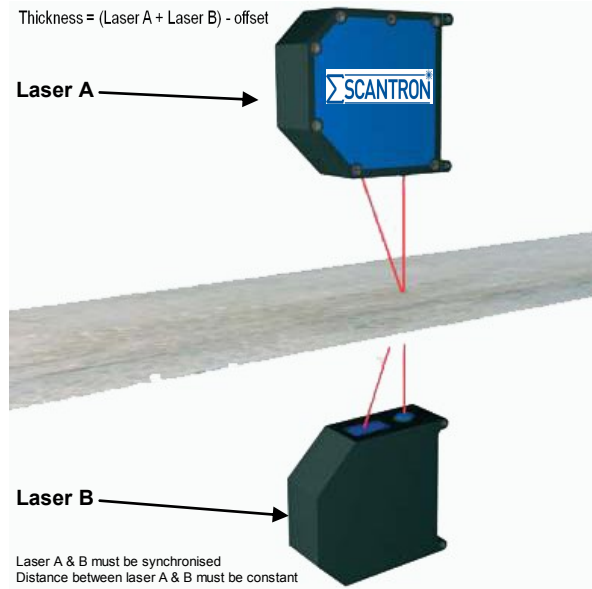
Mastertrak 4 Screen Shot

Sectional View Software

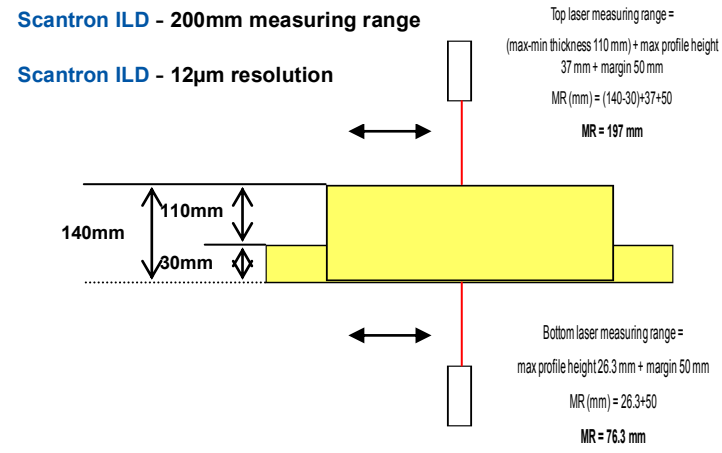


# SYSTEM OVERVIEW

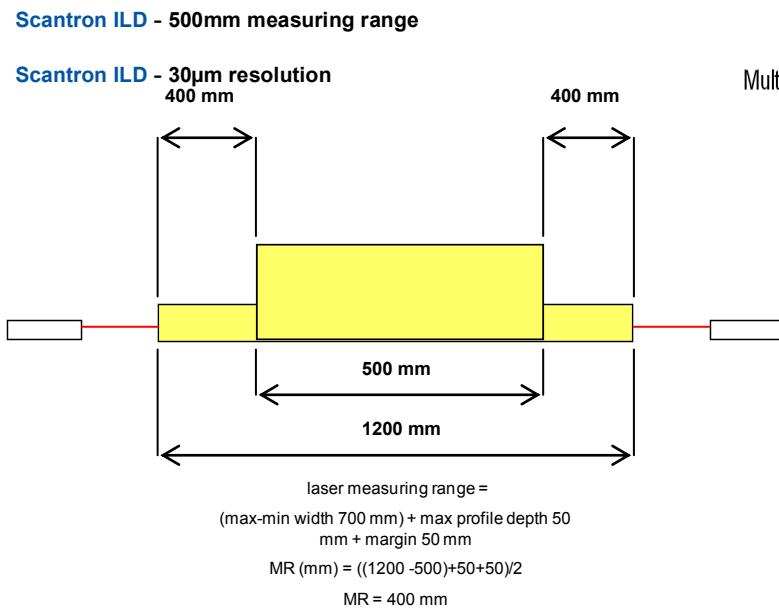
## Laser Triangulation Thickness Or Width



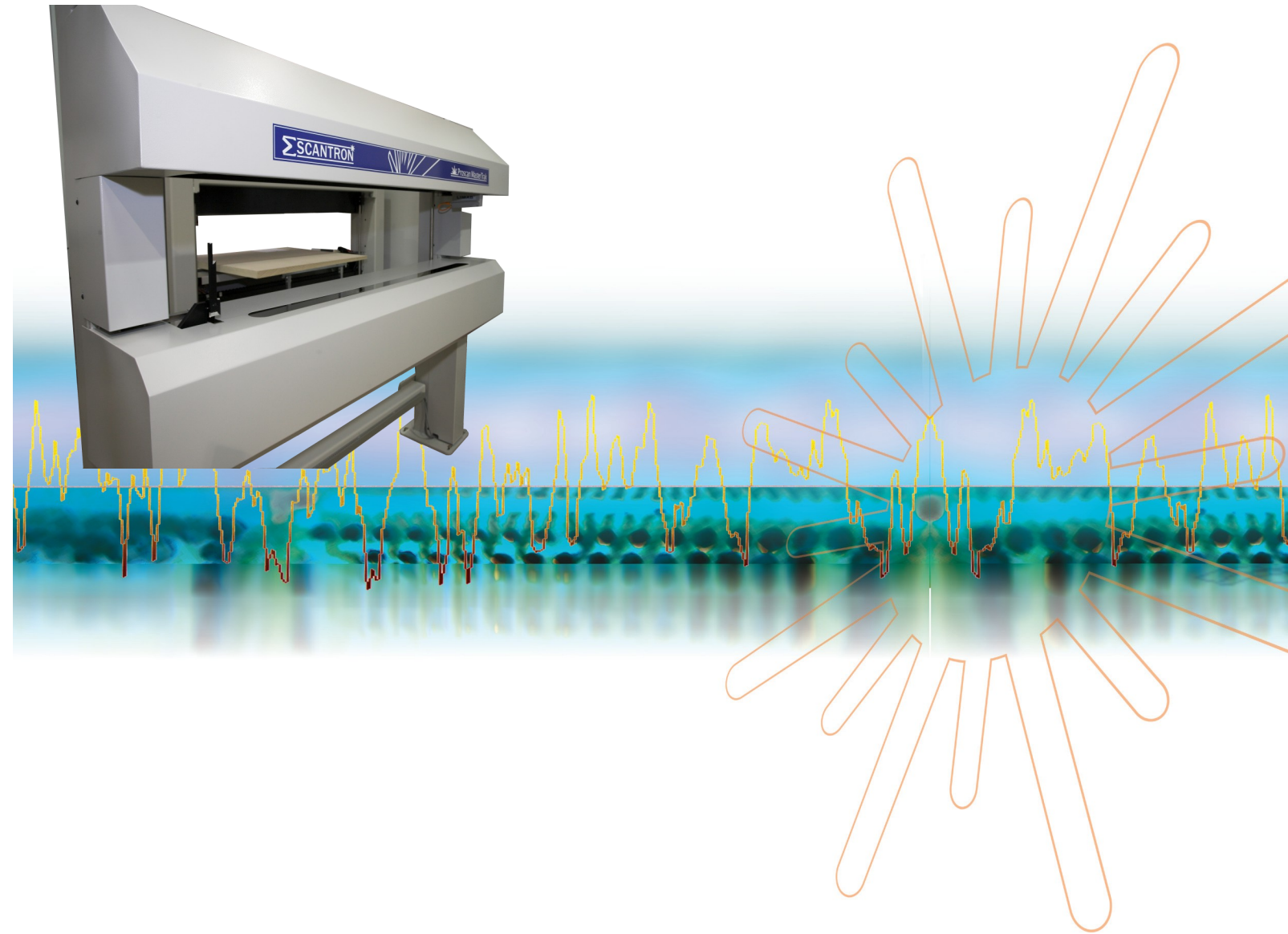
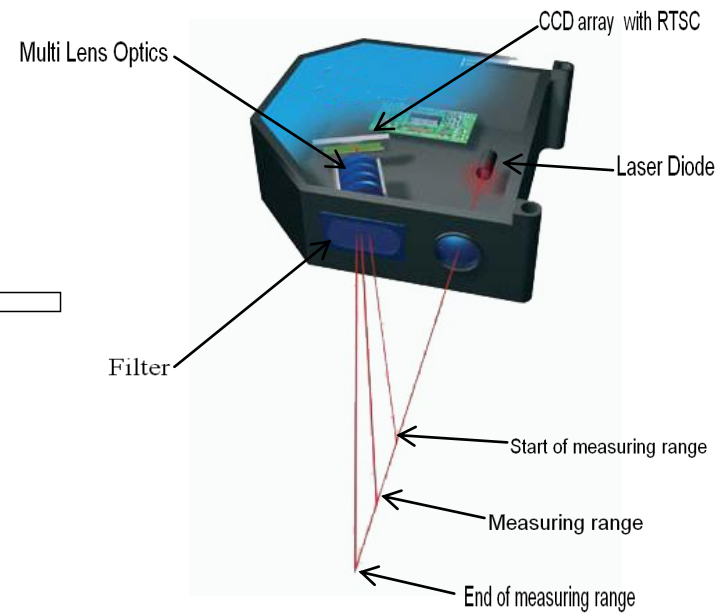
## Thickness Top and Bottom Profile



## Width and Edge Profile



## Laser Triangulation Principle



# PROSCAN MASTERTRAK

PRECISE NON-CONTACT SURFACE  
MEASUREMENT FOR ONLINE APPLICATIONS



Scantron Industrial Products Ltd  
Monarch Centre Venture Way Taunton Somerset England TA2 8DE  
Tel +44 (0) 1823 333343 Fax +44 (0) 1823 333684  
E-Mail scantron@scantron-net.co.uk Web www.scantronltd.co.uk

