

# TECHINCAL DETAILS

## OF

### *detectMASTER I*<sup>™</sup> (100mm)

#### 1. INTRODUCTION

The minute pieces of broken needles in the baby garment can be dangerous to the health as the babies cannot tell if they are hurt with broken particle. So in order to avoid any mishappening, certain countries (for e.g. Sweden, Japan etc.) have made it mandatory that whatever any under garment or baby garments enters their country, needs to be passed through the needle detector machines. It is with due consideration to this requirement and our moral responsibility towards the human race that we, at PARAMOUNT, have introduced *detectMASTER I*<sup>™</sup> for the Garment Industry.

#### 2. EQUIPMENT

Paramount's *detectMASTER I*<sup>™</sup> is a Single Channel Equipment, with advanced electronic circuitry having latest control panel, which eliminates all chances of the broken needle parts to escape . It can detect any Iron particle as small as 1.0 mm. Instead of the conventional 8 Magnetic sensors, detectMASTER I<sup>™</sup> is a 10 Sensor Unit which ensures its accuracy and dependability. The lightening indicator on the digital control panel makes it convenient for the operator to find the location of the broken needle. Further the Digital Counter on the panel can also calculate how many units have successfully passed the test and how many have failed. It also gives the the total number of items tested on the unit.

The *detectMASTER I*<sup>™</sup> works on the magnetic induction principal. The Equipment has a detecting width of 600 mm with an effective detecting height of 100 mm.

### 3. DETAILS OF THE MAIN UNIT OF *detectMASTER I*™



1. Detecting Channel – 1.
2. Feather Touch Control Panel.
3. Foot Rests.
4. Acrylic Cover.
5. Conveyor Belt.

### 4. DETAILS OF THE ACCESSORIES SUPPLIED WITH

**detectMASTER I™**



Main Unit



Double end Spanner  
(30 – 27 mm)



Ferrous Ball (Ø 1 mm)  
(To check the sensitivity of the Equipment)



Extra Fuse (6 Amp.)



Allen Key (6 mm)



Screw Driver



This User's Manual



Inspection & Conformance Certificate

**detectMASTER I™** is Supplied Complete with below Accessories:

- |   |          |
|---|----------|
| Main unit   | : 01 No. |
| Allen Key (6 mm)  | : 01 No. |
| Spanner (30 x 27 mm)  | : 01 No. |
| Extra Fuse (6 Amp.)   | : 01 NO. |
| Screw Driver  | : 01 No. |
| Ferrous Ball (φ 1 mm) to check the sensitivity of the Equipment | : 01 No. |
| This User's Manual  | : 01 No. |
| Inspection & Conformance Certificates                           | : 01 No. |

## 5. SALIENT FEATURES

- Specially designed instrument to detect broken needle or any ferrous particles in a garment.
- Latest model with modern aesthetics.
- detectMASTER I™ works on the magnetic induction principal.
- The smallest ferrous particle it can detect is 1.0 mm.
- Product width up to 600mm can be easily checked in this machine.
- Garments up to 100mm thickness can be easily checked.
- An alarm sounds at the detection of any broken needle & the belt stops and comes back to its original position.
- Specially designed Caster wheels at base for easy movement of the machine.
- Complete with all accessories along with  $\Phi$  1 mm card to check calibration.
- Supplied with inspection & conformance certificates.

## 6. TECHNICAL DETAILS OF *detect*MASTER I™

Purpose	: To detect broken needle (Fe) parts.
Channel / Probe Type	: Single Sensor / Channel Type
Needle Detecting Capability (Fe)	: 1.0 mm
Detecting Width Height	: 100 mm (With protection cover 80 mm)
Detecting Width (Conveyor Belt)	: 600 mm
Conveyor Belt (Length)	: 2200 mm
No. of Detecting Sensor	: 10 Nos.
Control of Sensitivity	: Step-less unlimited adjustment
Conveyor Belt Speed	: 30 meters / Per minute
Alarm Method	: Buzzer and Belt Stops
Alarm Sound	: An alarm sounds at detection of any broken needle Particle or Iron (Fe) Piece
After Detection	: The conveyor belt stop automatically and come back to its original position.
Power Consumption	: 60 Watts / Per Hour
Power Supply	: 220V, Single Phase 50 Hz. (Also available 110V, Single Phase 60 Hs.)
Space Required.	: Minimum 4 feet. around machine free from vibrations as the machine is highly sensitive to surrounding vibration.

Dimension (Net)	: 1050 mm (L) x 1650 mm (W) x 900 mm (H)
	65inch      41inch      35.5inch
Weight	: 180 Kg. (396 lbs).

***NOTE : With our constant endeavour to improve & excel, we reserve the right to alter the specification or modify the appearance without notice.***