

TECHINCAL DETAILS

OF

digitra Nx™ (Digital Traverse Thread Counter)

1. INTRODUCTION

One of the most common measure of the quality of a fabric is the number of threads per unit length in both the warp and weft directions. These are determined normally with the help of an ordinary counting glass having a square or rectangular opening of a specified size.

However, when a greater degree of accuracy in determination of Picks or Ends is needed or the weave is too fine to be checked with an ordinary counting glass, this counting is carried out with the help of *digitra Nx™* (Digital Traverse Thread Counter).

2. EQUIPMENT

PARAMOUNT *digitra Nx™* (Digital Traverse Thread Counter) consists of a motor driven traveling microscope fitted on a base having a translucent (White Acrylic) panel illuminated from below with Light intensity control. The Equipment has a motorized Forward & Reverse Operation with exclusive rapid return feature. The viewing arrangement consists of the microscope fitted on a traveling carriage, which can be moved over two guide rods with the help of a fine controlled motor with reverse/forward function. The unit has a microprocessor based Feather Touch Control Panel.

The microscope has a 10x Ramsden Eye Piece, an achromatic objective glass, a cross wire graticule in the Eye Piece. Focusing is done with the help of a Rack and Pinion arrangement.

The Fabric to be tested is placed below the counting plate (With Calibrated Scale) and over the (White) Acrylic plate. We need to see the construction of the fabric through the microscope adjust the focus with the microscope function knob. Adjust the light with the help of light insuring control start from one side, as the cross line. Gradually microscope travels over the each thread. We need to press the increment switch on the specially desined control Panel for counting. The apparatus is meticulously finished in Metallic Blue Paint .



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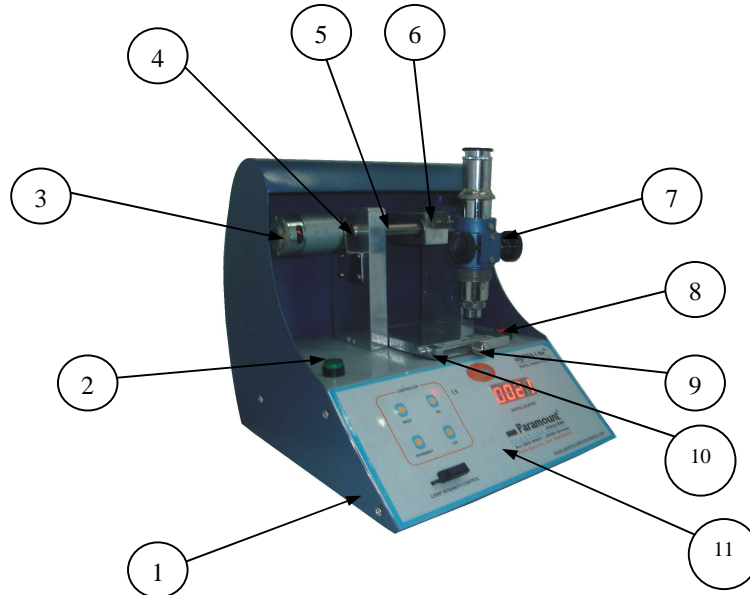


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3. DETAILS OF THE MAIN UNIT OF *digiTRA Nx*™



1. Base of the unit.
2. Reverse Switch.
3. Fine Controlled Motor for movement.
4. Vertical Arms.
5. Guide Rods.
6. Microscope Holder.
7. Microscope Focussing Knob.
8. Forward Switch.
9. Counting Plate (With Calibrated Scale)
10. Counting Plate Adjustment Knob.
11. Feather touch Control Panel.

4. DETAILS OF THE ACCESSORIES SUPPLIED WITH

digiTRA Nx™



Main Unit



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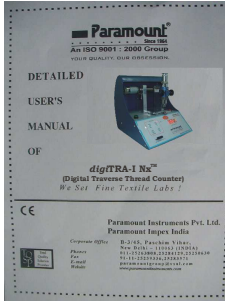
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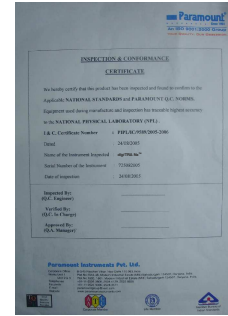
Main Lead with Plug



Dust Cover (Folded)



User's Manual



Calibration & Inspection Certificate

digitra Nx™ is Supplied Complete with below Accessories:

- | | | |
|---|---|---------|
| 1) Main Unit | : | 01 No. |
| 2) Counting Plates (In mm 50mm, 20mm, 10mm)
(In Inch 1 Inch, ½ Inch, ¼ Inch) | : | 02 Nos. |
| 3) Dust Cover | : | 01 No. |
| 4) Mains Lead with Plug | : | 01 No. |
| 5) Detailed User's Manual | : | 01 No. |
| 6) Inspection & Conformance Certificate | : | 01 No. |
| 7) Calibration Certificate (Traceable to NPL) | : | 01 No. |

5. SALIENT FEATURES

- A special fine motorized equipment to check the Reed/Pick of any type of Fabric Conveniently and accurately.
- Ergonomic latest design with modern aesthetics.
- Motorized forward & reverse operation with exclusive rapid return feature.
- Smooth, precision-engineered component for exceptional performance.
- Powerful traveling microscope for sharp image of the fabric.
- 4 Digit Re-settable digital counter for counting the picks/ends.
- 2 slot plates, one in mm, other in Inches can be accommodated in the counting plate.
- Feather touch control panel with variable speed regulator.
- With Inspection and Calibration Certificate.



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6. TECHNICAL DETAILS OF *digi*TRA Nx™

Fabric Slot Plate No.1	: 10 mm, 20 mm, 50mm.
Fabric Slot Plate No. 2	: ¼ Inch, ½ Inch, 1 Inch.
Microscope magnification	: 10 x
Digital Counter	: 4 - DIGITS Re-settable DIGITAL COUNTER. (Registers each increment with a Beep) – 0-9999, L/C : 1.
Motor Capacity	: Geared Motor (8 Rpm) 220 Volt 50 Hz.
Speed of the microscope	: Maximum 15.25 mm per min.
Illuminator Unit	: Invariable setting of the Intensity of Light.
Lamps	: 2 Lamps for Powerful Light.
Over all Dimension of the Main Unit	: 280 (L) x 255 (W) x 255 (H)mm. 11” (L) x 10” (W) x 10” (H) Inch.
Net Weight of the Unit	: 9 Kg (19.8lbs)

7. RELATED STANDARDS

ISO 7211
BSEN 1049
ASTM D3775 - 98
IWTO 39-87

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



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