

OFDA4000

A Rapid Automatic Measurement of Diameter, Hauteur and Length of Wool and Other Fibres in Sliver Form



Developed from the commercial success of the OFDA100 and OFDA2000 instruments, the OFDA4000 is the culmination of 6 years of research and development. Harnessing the most advanced digital image technology to determine fibre length and distribution plus fibre diameter and distribution. It is the first instrument to measure length as well as hauteur of fibres in tops. The previous generation of instruments only measured hauteur, which is cross section biased length.

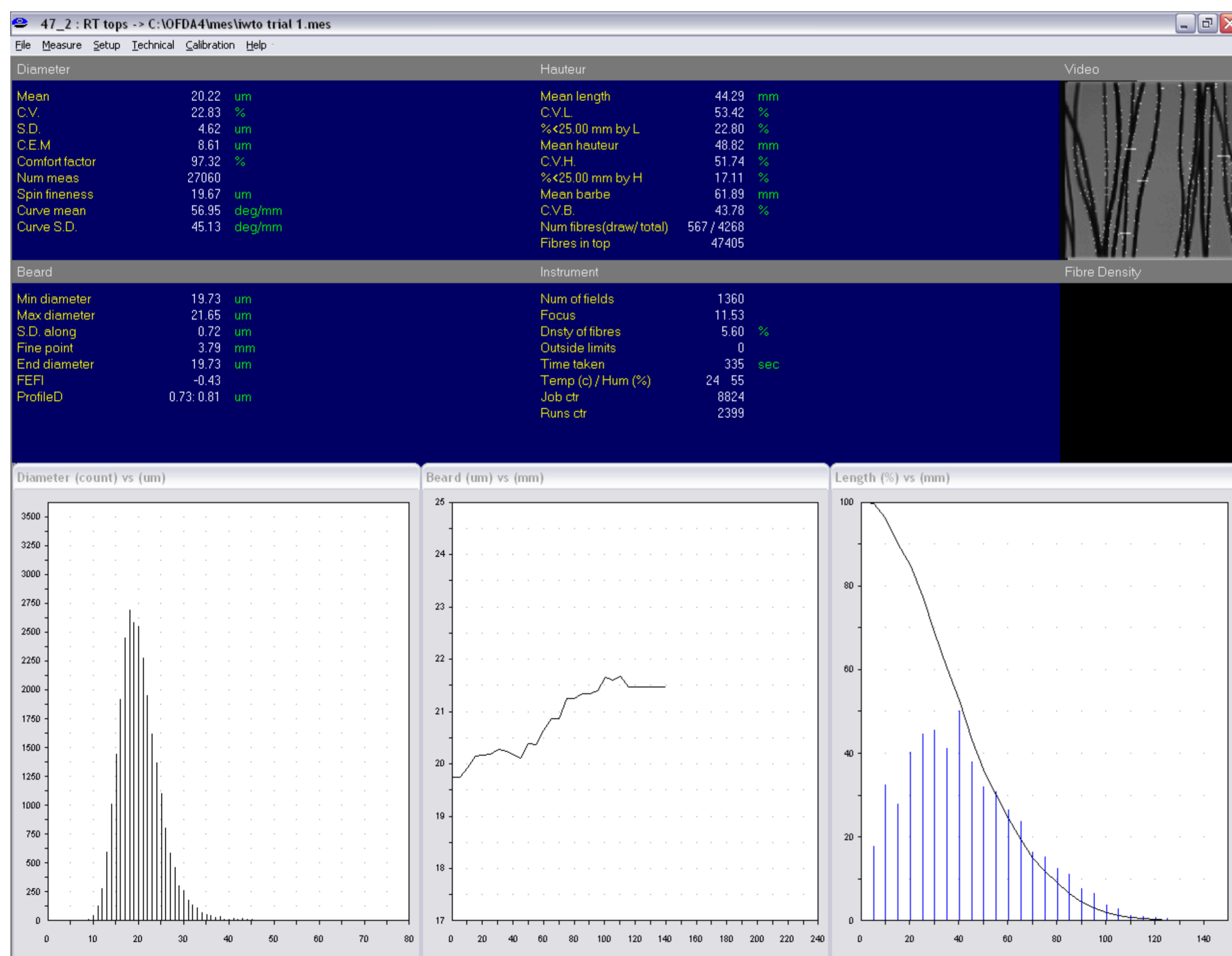
Raw materials are the largest single cost item in spinning mills. Precise fibre measurements are required to improve quality and monitor processes in the modern high-performance spinning mill.

Benefits of the new OFDA4000

- Major wool fibre characteristics in one measurement, with greatly reduced operator involvement
- Length and short fibre content by length, measured automatically as well as hauteur
- Diameter vs. length can be automatically obtained
- International recognition through peer reviewed round trials leading to the acceptance of test method IWTO TM62
- Size and weight of the system is much lower than the 3 instruments (Fibroliner, Almeter, OFDA100 or Laserscan) that it replaces
- Measure fibre diameter from samples in web form using snippet mode, compatible with OFDA100 / OFDA2000
- Determination of the blend to optimize the combing process and content of coarse fibres (comfort factor).
- History: in 19 years over 300 OFDA instruments have been sold across 30 countries

OFDA4000 provides the following test results

- Length, Hauteur and Barbe cumulative frequency curves (staple diagram)
- Length and Hauteur histogram, unbiased for technical use
- Barbe histogram, length biased by weight for commercial use
- Short-fibre content measured by Length and by Hauteur for the calculation of combing losses
- Long fibre content for the determination of spinning parameter
- Fibre diameter mean, SD and histogram of the distribution
- Fibre curvature as well as the distribution of curvature
- Comfort factor (percentage of fibres (>30µm))
- Coarse fibres (difference of the upper 5% coarse fibres to the mean fibre diameter)
- Along beard diameter profile showing diameter variation caused by blending or by use of animal fibres with uneven diameter along their length (eg Spring or Autumn shorn wool)
- Results of virtual fibre blends



References and Research Papers

Contact your agent or visit www.hornik.cc to receive the latest papers in electronic form

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Included Components

- PC with Windows XP
- OFDA4000 instrument
- Fibre waste collection box
- Vacuum cleaner
- Meswin software for viewing, sorting and printing of results
- Accessories pack

Technical Data

- Weight: 45 kg
- Dimension Instrument only (L x W x H): 94 x 56 x 40 cm

Measurement Ranges

- Diameter: 4-300 µm
- Length: 5-280 mm
- Accuracy: see IWTO TM 62
- Fibre sliver types: wool tops, most animal and synthetic fibre sliver, some plant fibres

Requirements

- Environment conditioned room for certified wool measurement
- Voltage: 110VAC or 240VAC (specify on order), 80W

