CRC for Premium Quality Wool

The Measurement of Hauteur (H) and CVH

Produced for the CRC for Premium Quality Wool undergraduate program by;
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Top Properties

- Diameter
- % fibres >30um
- Hauteur
- CV Hauteur
- Evenness
- Linear Density
- Regain
- Invoice Mass
- Colour
- VM Count
- Nep Count
- Oil Content
- pH

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Standards

- Comb Sorter
  - IWTO-1-59(E): Method of determining ‘Barbe’ and ‘Hauteur’ for wool fibres using a Comb Sorter.
- Fibre Diagram Machine
  - IWTO-16-67(E): Method of test for wool fibre length using WIRA Fibre Diagram Machine.
- Capacitance (Almeter)
  - IWTO-17-85(E): Determination of fibre length distribution parameters by means of the Almeter.

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Definition

- Mean Fibre Length
- MFL = Σ [n(i)L(i)] / Σ n
- estimate n
  - using weights of different fibre length groups
  - using capacitance sensor

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Hauteur and Barbe

- $H = \Sigma [A(i)L(i)] / \Sigma A(i)$
  - A(i) cross-sectional area of each length group
  - linear density bias
  - cross sectional area bias
- $B = \Sigma [W(i)L(i)] / \Sigma W(i)$
  - W(i) weight of each length group
  - weight bias

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WIRA Fibre Diagram Machine

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www.woolwise.com

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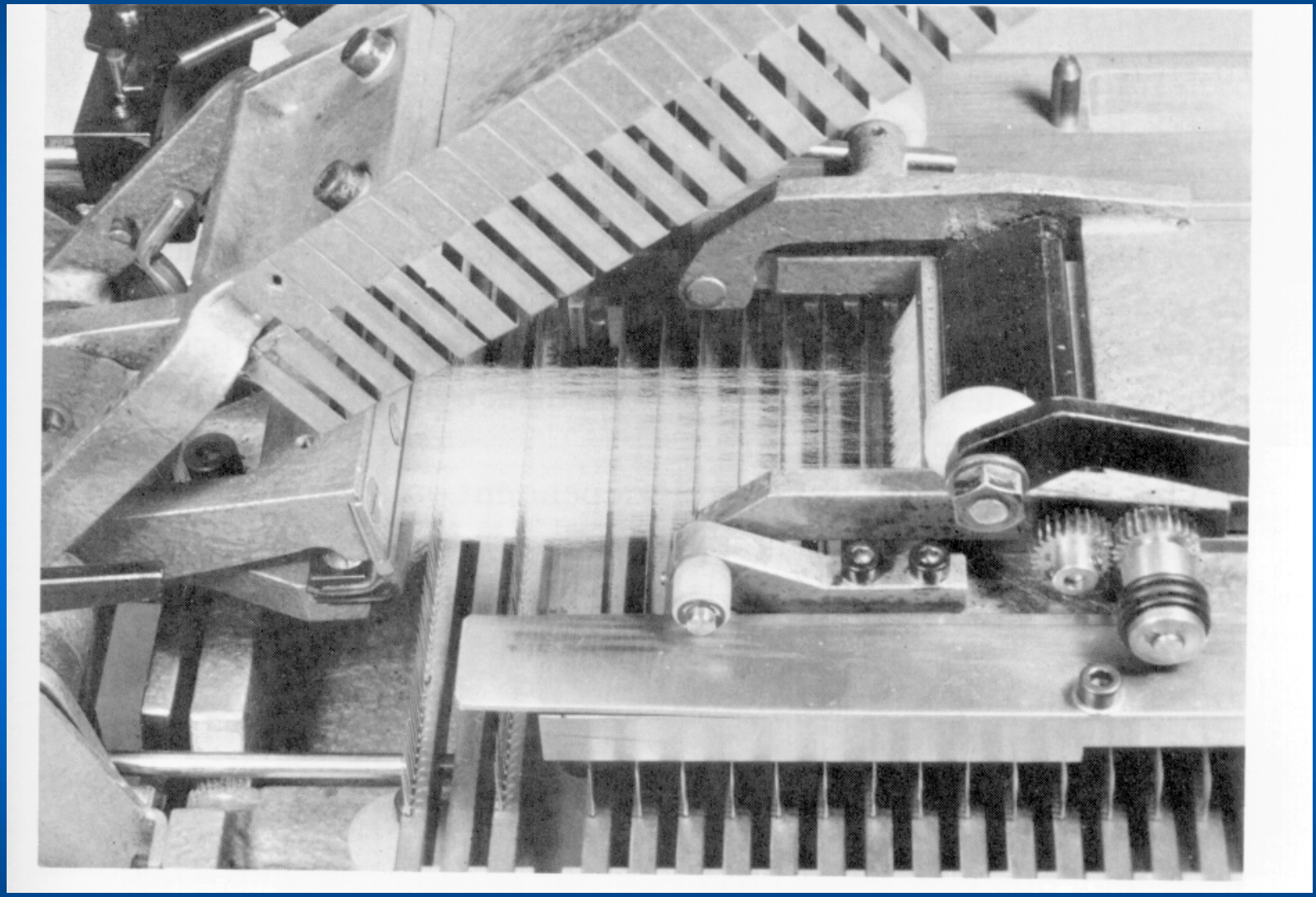
Source: 'The WIRA Directory", 1999

Almeter: Grip



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Almeter: Sensor Apparatus

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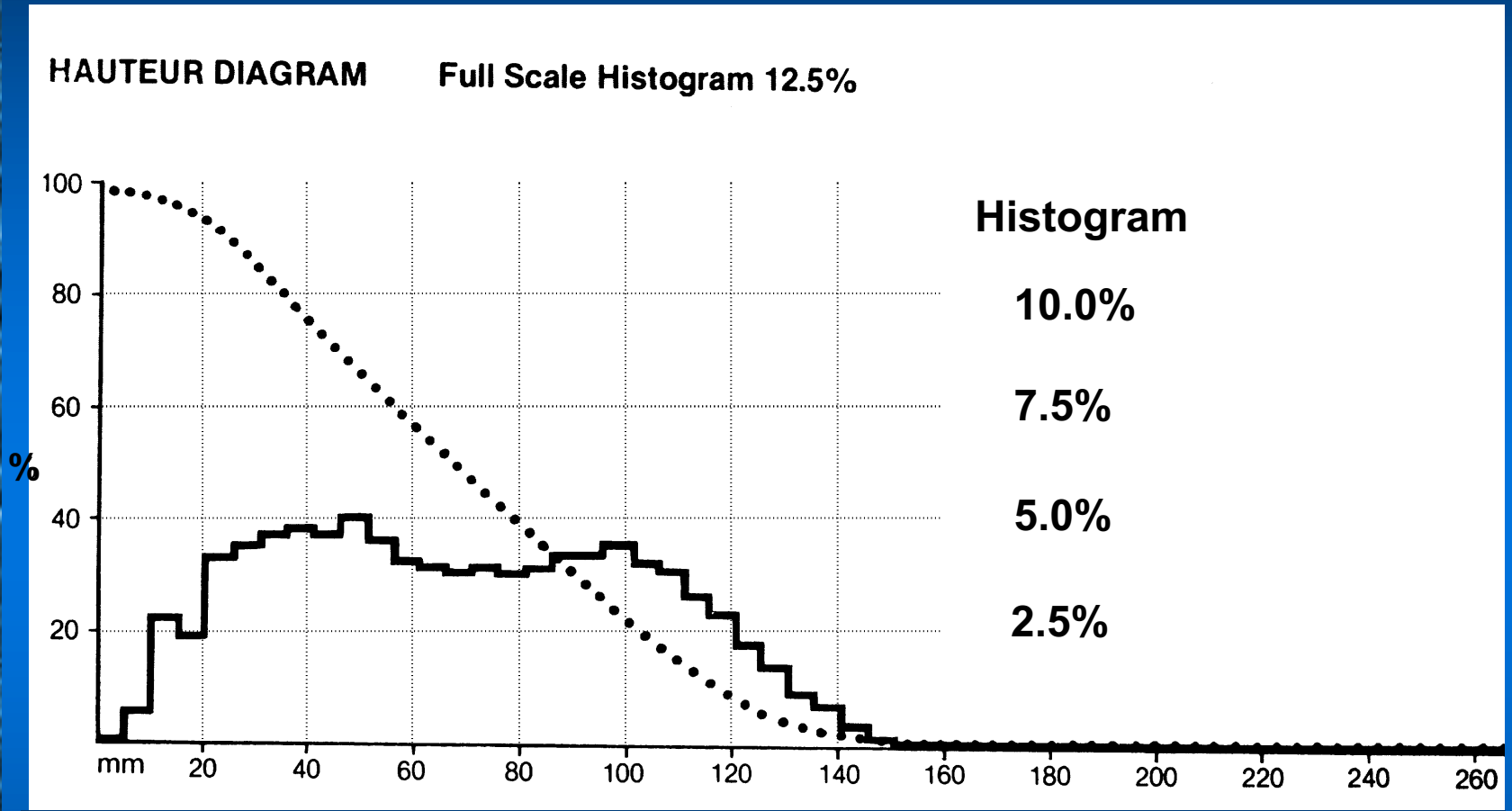
Hauteur Diagram



H: 69.8 mm	%<15mm: 3.7	L 50%: 67.8
CvH: 50.2%	%<25mm: 10.5	L 5%: 126.3
	%<40mm: 24.9	L 1%: 144.5

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Practical Aspects of H and B

- Hauteur (H)
- CVH
- %<40mm
- %<25mm
- %<15mm
- L 5%
- L 1%
- CV Barbe

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