



CRC

for

Premium

Quality

Wool

Wool Metrology & Technology in Context

Produced for the CRC for Premium Quality Wool undergraduate program by;
Dr. Peter Auer, The University of New South Wales.



Wool Technology Overview

- Growing
- Shearing
- Lotting
- Blending
- Scouring
- Carbonising
- Carding
- Gilling
- Combing
- Finishing
- Drafting
- Spinning
- Folding
- Weaving / Knitting
- Dyeing / Finishing
- Garment Manufacture
- Retailing
- Recycling

CRC

for

Premium

Quality

Wool



Worsted or Woollen?

Scouring

Scouring

CLEANING PROCESS

Carbonising

Carding

Carding

Gilling

INTERMEDIATE PROCESS

Combing

TOP

Slubbing

Condensing

Drawing

YARN MANUFACTURE

Spinning

Spinning

Twisting

YARN

Twisting

CRC
for
Premium
Quality
Wool



WORSTED

- Yarns - fine, smooth & strong
- Fabrics - expensive, smooth & strong
- Garments - suits, garments worn close to skin

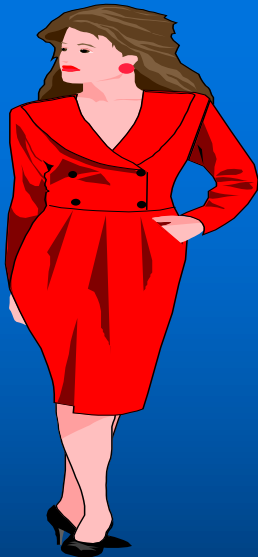
CRC

for

Premium

Quality

Wool





WOOLLEN

- Yarns - thicker and relatively weak
- Fabrics - often harsher handling
- Garments - outer garments, blankets

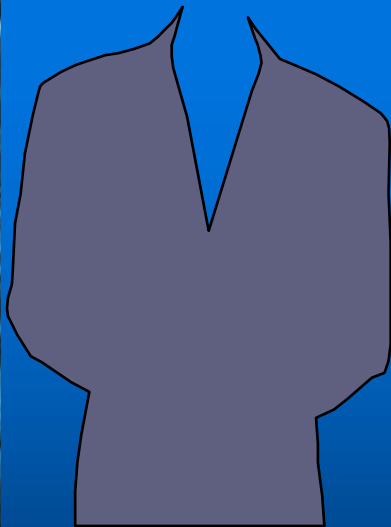
CRC

for

Premium

Quality

Wool





Wool Metrology

- **sale lots (baled fleeces)**
 - greasy colour, style, length, strength
 - **SUBJECTIVE APPRAISAL**
- **staples**
 - length, strength, style
 - **OBJECTIVE MEASUREMENT**
- **fibres**
 - diameter, yield, VM content, curvature, scoured colour, processed length
 - **OBJECTIVE MEASUREMENT**

CRC

for

Premium

Quality

Wool



Context of Metrology

- **Marketing**
 - specifications for sale
 - marketing advantage
- **Process Control**
 - QA (certainty)
 - Efficiency (\$\$)
 - Optimisation (\$\$)

CRC

for

Premium

Quality

Wool