



Australia's climate, system of research and development, infrastructure, regulatory framework and the competence of our farmers makes it an ideal place to grow cotton, right on the doorstep of the world's fibre market. Australia's cotton industry is efficient, modern, responsible and sustainable.



GROWING AND HARVESTING

Australian cotton growers select cotton varieties that are bred to optimise yield and fibre quality based on different climate conditions in each region. Throughout the 180-day cotton plant growing cycle, growers make decisions to optimise fibre quality – from planting to harvesting. Seed varieties, weather, water, pest and weed management and harvest conditions are all factors that affect fibre quality.



SEED COTTON

Seed cotton is picked from the plant, pressed into modules and transported to a cotton gin where the cotton lint is separated from the fuzzy seed, the cotton is classed for its quality, and then it is sold usually by a cotton merchant to a spinner located overseas.



GINNING

Australian cotton is valued for its low contamination, staple length, strength and micronaire – a measure of fibre fineness and maturity.



BUYING

Bales are selected to satisfy the requirements of a particular end use. They are then laid down, opened and loosened so the fibres can relax.



BLENDING

The chosen bales (sometimes from multiple countries) are blended to ensure a consistent and homogenous blend of fibres.



OPENING

Blended fibre is passed through machines which use a number of different beaters to remove any contaminants from the lint (e.g. plant and non-plant material).



CLEANING



CARDING

Carding individualises, aligns and further cleans the fibres, condensing them into a single continuous strand called a 'sliver'.



DRAWING AND COMBING

Drawing and combing straightens the sliver to improve uniformity and evenness, eliminating short fibres.



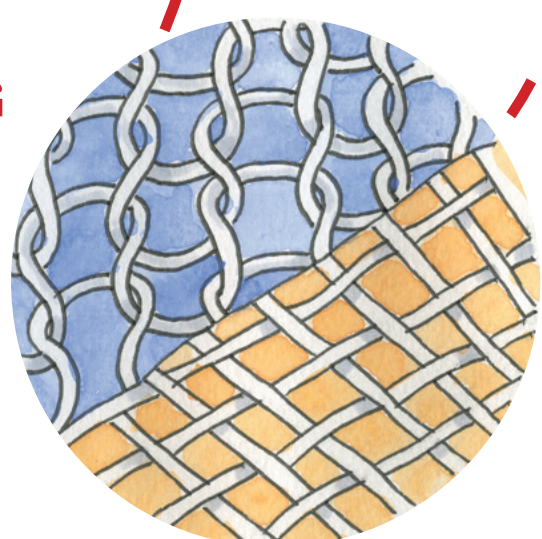
SPINNING

Spinning is the process of twisting the fibres to a yarn of a certain weight. There are three types of spinning. Australian cotton is mainly spun on ring spinning machines.



DYEING

Cotton can be dyed many different colours at various stages of processing.



KNITTING & WEAVING

Knitting machines join yarn together with interlocking loops to form knitted fabric. Weaving machines interlace yarns usually at right angles to each other to form woven fabric, generally either plain weave or twill weave fabric.

Finishing is the process that gives the fabric its final appearance, feel and practical attributes. Finishing can include softening, water repellence or permanent press.



FINISHING

MAKING UP

Woven fabrics are cut and sewn together to form garments, while knitwear pieces are 'linked' together to produce a final garment.

After processing, the garments are labelled so consumers know how to care for their new cotton clothing, where it is made and sometimes even how it is grown.



TO MARKET

Brand owners who specify Australian cotton in their supply chains have confidence that their raw cotton is responsibly produced and traceable.

COTTON CLASSROOM

Cotton Australia's Cotton Classroom site has information, lessons, units, education kits, classroom videos, presentations and much more.

<http://cottonaustralia.com.au/cotton-classroom>

Photographs courtesy: Heath McWhirter, Annette Coward, Joanne Campbell, Julie Reardon, Pete Johnson, Cotton Inc. Illustrations: Liz Grant

FROM FIELD TO FASHION

