

WOOL COMFORTMETER FACT SHEET

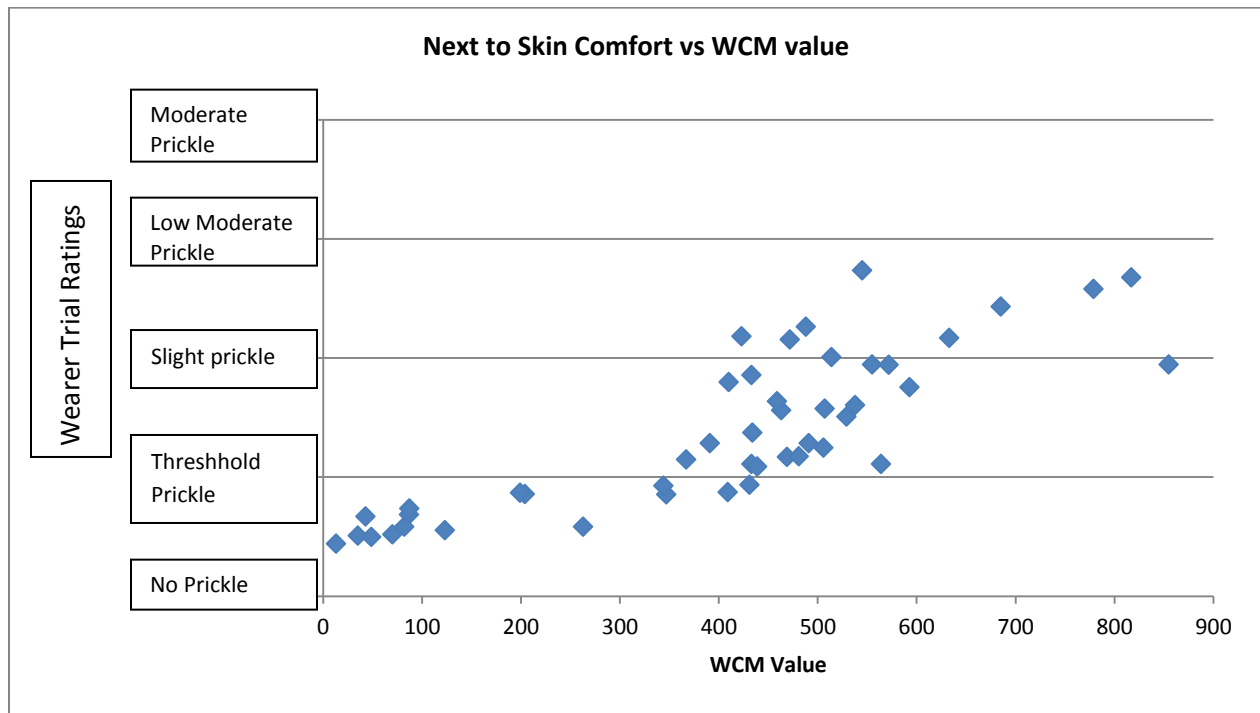
The Instrument

The Wool ComfortMeter™ was developed for the Sheep CRC by CSIRO and essentially counts the number of fibres protruding from a fabric that can cause discomfort. As the number of these fibres increases, so too does the level of discomfort.

To relate the Wool Comfortmeter values to the human sensation of comfort, a series of wearer trials were developed and run over 4 years in “The Garment Laboratory” by a team of experts in the WA Department of Agriculture and Food. Their protocol enabled the accurate measurement of consumer responses to garments when worn in different conditions and for various activities. This information has been used to calibrate the Wool ComfortMeter.

The measurement

Information is everything in a supply-chain and the next to skin comfort of knitwear is critical for the retailer in knowing the garments fitness for purpose and to the consumer as a basis for their decision to repurchase. Much of the industry currently uses perceived softness as an indicator of next to skin comfort, however, this has been shown by our research to be highly unreliable. The Wool ComfortMeter is a non-destructive test that can be performed on fabric or garments. It is recommended that 5 fabric samples (each sample about 30cm X 30cm) are used to test a fabric. Each fabric sample is placed on the testing bed and the measuring head makes 4 passes over the sample. The WCM value is the average of the results of 5 samples. The instrument gives a single value for the fabric.



The results

There is already a very good predictive relationship between the Wool ComfortMeter values and the results of the large scale wearer trials as can be seen in the above graph. .

The above figure shows the strong relationship between the Wool ComfortMeter value and the average response from wearers in a cool passive environment. The lower the Wool ComfortMeter value the more comfortable the garment.

Interpreting results

The results are displayed as a single number where the lower the value the better the garment is for next to skin applications. Values below 400 are associated with the average wearer not perceiving any discomfort when wearing the garment. Values above 400 are associated with greater levels of perceived discomfort.

For further information on the Wool ComfortMeter go to :

<http://www.sheepcrc.org.au/wool/wool-measurement-pilot-project.php>