



# how does Merino fibre get from the sheep's back to mine?

The process from farm-gate to retail-store involves several steps generally taking up to about nine months.

## Shearing

Merino fibre is harvested by shearing. Merino sheep are usually shorn once a year, between August and November to ensure they still have their woolly coats for the cold winter months.

Shearers also leave a good covering of wool on the sheep to keep them warm – just like a number four haircut! Machine shears are the most popular because they are fast and efficient. Some properties still blade shear, which ensures good wool cover but can be time-consuming.

Hundreds of years of breeding have gone into producing Merino bearing the perfect fibre for clothing and textiles. However shearing is not just about harvesting the wool – it is also about keeping the animals comfortable, relieving them from having to endure the hot summer months with a heavy fleece.

Using machine shears a professional shearer can remove a fleece in two to three minutes (depending on the sheep's size); however in top shearing competitions some shearers can remove a fleece in less than two minutes!  
Shearers usually average about 200 sheep a day.

## Classing

Once the fleece has been shorn from the sheep, the fibre is sorted by a wool classer, based on its attributes and intended use.

After classing, the wool is pressed into nylon wool bales. Each bale contains fibre from between 30 - 60 sheep and weighs around 180kg, which is about the equivalent weight of two All Blacks!



## The New Zealand Merino Company Ltd (NZM) or Alternative Wool Broker

The bales are then transported to broker stores. Here, samples from each bale are tested in a laboratory for fibre quality factors such as whiteness, brightness and fibre diameter.

The broker acts as the selling agent for the grower (farmer), offering a range of services including preparation of the fibre for sale at auction. In the traditional auction system, buyers compete by bidding against each other. Price is determined by consumer demand and international supply (among other variables), which can fluctuate significantly.

NZM has diversified from the traditional role of broker and the traditional auction system by focusing on establishing relationships along the processing chain, including offering marketing and R&D support to brand partners.

Unlike at auction, forward contracts between retail brands and growers provide price stability at a level that is sustainable long term for both parties – the buyer and the farming business. They also provide consistent quality and the continued supply of 'fit for purpose' Merino – in other words, Merino fibre that is grown to meet the specifications of the brand partner. This ensures that fibre quality is controlled, and product and system integrity is not compromised.



## Scouring, Carding & Combing

Unprocessed fleece is referred to as 'greasy' wool. A sheep's fleece naturally contains oils that help to protect the sheep and the fibre from infection, moisture and bacteria. Before the fibre can be processed into yarn it needs to be scoured (washed).



## fact sheet



# merino inc.

Scouring removes natural grease as well as dirt and other contaminants. The grease, or lanolin, is collected and used to make products such as hand cream.

After scouring, the fibre is carded. The carding machine 'opens' and blends the fibre, at the same time removing contaminants (such as grass seeds) that may have escaped the scouring process. Next, a series of rotating rollers covered with pointed wire, pins or teeth gradually separate the tufts into individual fibres. An additional process for the preparation of fibre for some types of yarn is to straighten and align the fibres in a neat, parallel arrangement through a process called gilling. Finally, the fibre is combed to remove short fibres before it is transformed into 'top', a long white sliver of combed, clean fibre that is very soft to the touch.



### Spinning

The fine white and bright Merino fibre is spun into specialised yarn, engineered for different purposes. The combed tops are stretched and twisted to produce high quality yarns that can then be used for knitting or weaving. There are different types of yarn; woollen, semi-worsted and worsted, which go into different end uses. Woollen yarn typically goes into chunkier knitwear, while worsted is best suited for next-to-skin apparel, such as active outdoor wear or for fine fabrics to be used in suiting.

### Knitting/Weaving

High quality knitting and weaving companies construct innovative and luxurious fabrics for sale to leading brands nationally and internationally. Knitted fabrics go into products like jerseys and woven fabrics are often made into suits.



### Design & Product Development

Like the South Island landscape where the Merino sheep thrive, the fibre itself results in garments ranging from practical and rugged, to the exquisitely beautiful. New Zealand Merino is used internationally in a variety of market segments: luxury suiting, fashion knitwear, active outdoor and lifestyle products, not to mention children's clothing - a true test of softness next to skin.

As Merino is so fine (low micron) when compared to other sheep breeds, it is typically used in clothing, whereas other types of wool (which are higher in micron and thus thicker and more prickly) are traditionally used in upholstery and carpet.