



PERINO

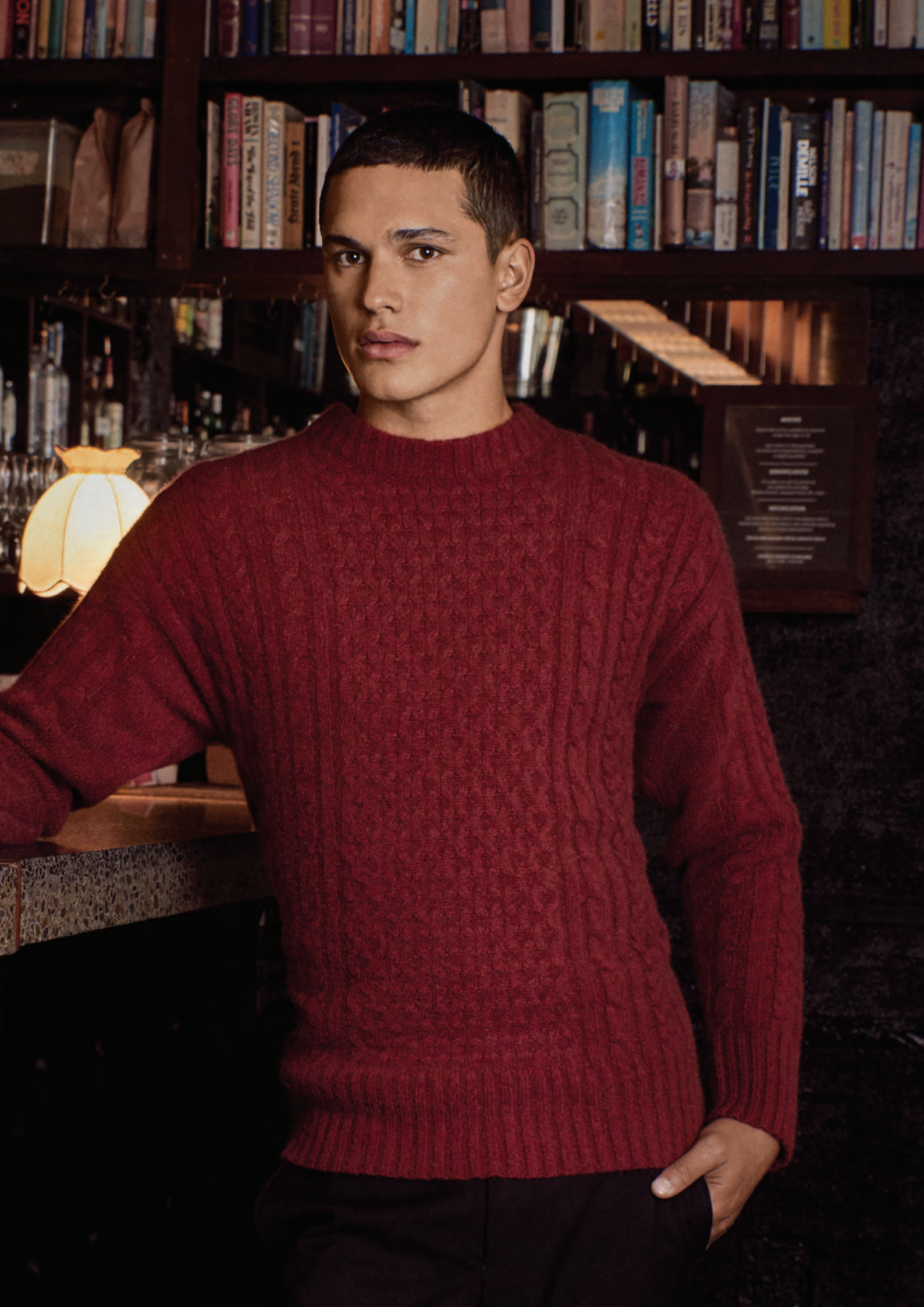
BY WOOLYARNS

INFORMATION BOOKLET

FIRST TO SEE THE LIGHT

**All our yarns are engineered at the edge of the earth in
New Zealand, where the sun is first to rise,
Perino is a first in Cashmere, Merino and Silk yarn blends with
New Zealand Brushtail Possum. Discover this pure downy
undercoat fibre, with a unique hollow core.**

Perino is a series of firsts for the senses. So soft, it floats like mist along the body's horizon. So light, it creates volume without the weight. So warm, you can be minimal with maximum impact. Like a hazy silhouette at sunrise, garments have a distinctive halo-like layer which, with almost no-pilling, leave an impression to last a lifetime. As accepting of colour as the sky and as versatile as any imagination, Perino is a world of firsts, that won't be your last.



YARN BLENDS

Everything about Perino conjures opulence: the handle of the yarn; its lightness of touch; the remarkable warmth that Brushtail Possum fibre delivers. Include the touch that is Perino in your apparel lines for a clear and highly valued point of difference that is luxuriously light and seductively soft.

Our dedicated sourcing team at Woolyarns have secured supply of both Australian Cashmere Growers Association (ACGA) Cashmere and ZQ Merino.

For bulk orders, Cirrus blended yarns can be crafted using ACGA Cashmere and Nimbus blended yarns can be crafted using ZQ Merino. Using either ACGA Cashmere or ZQ Merino fibres provides assurance of a fully traceable supply chain and the highest standards in the areas of animal welfare, environmental care, and social sustainability.

Perino Cirrus

The highest floating cloud.

A premium and heavenly yarn for serene high-end garments.

40% Cashmere

or

40% ACGA Cashmere

40% Brushtail Possum Down

20% Mulberry Silk

Available in 28/2Nm, 36/2Nm.

Perino Alto

A reflective cloud.

A responsible yarn for sustainable luxury.

70% ZQ Merino

30% Brushtail Possum Down

Available in 28/2Nm.

Perino Nimbus

A cloud filled with promise.

A diversifiable yarn for top-end

luxury and warmth.

65% Fine Merino

or

65% ZQ Merino

25% Brushtail Possum Down

10% Mulberry Silk

Available in 18/2Nm, 28/2Nm, 36/2Nm.



BRUSHTAIL POSSUM DOWN

Fibre with coarse guard hair removed, leaving only fine downy undercoat fibres and reducing the fibre thickness by an average of 2 microns compared to standard Brushtail Possum fibre.

INSPIRED COLOURS

Inspired by international colour trends and the phenomenon that is nature, the Perino palette is drawn from the first light of dawn, when the world holds most promise.

Revel in vibrant strands of mauve cut by striking scarlet orange, bold blues and sprawling subdued pinks. Traditionally earthy neutrals lap up sunrise hues, with energetic greens, atmospheric-pink greys and rusty hazels. This is a luminous palette that has been softened by the first light of day.

View the full colour range at perinoyarns.com





PERINO YARN ATTRIBUTES

Discover Perino yarns unique attributes. Made possible by the inclusion of Brushtail Possum fibre, these highly-valued points of difference create limitless possibilities for fashion designers.

Lightweight insulation

The hollow structure of Brushtail Possum fibres means they can trap more air. Because air is a poor conductor of heat, the more air trapped within a fibre and the fibre structure, the more warmth it will retain for the wearer.

In independent tests, Perino fabrics were found to be 50% warmer than pure Merino and 35% warmer than pure Cashmere fabrics knit in the same weight and structure.



High performing

The Brushtail Possum fibre is a tapered fibre and is approximately 1 to 2 microns at the tip of the fibre. This is well below the threshold of 30 microns, which CSIRO has shown to cause the 'prickle factor'.

Low pilling

Perino fabrics are less inclined to pill. This is due to the structure of individual Brushtail Possum fibres. Compared with the jagged construction of the other fibres such as Merino & Cashmere, scales on a Brushtail Possum fibre are more rounded. This allows individual fibres to glide over each other rather than catch and cause a pill.

Breathable

Similar to Merino fibres, Brushtail Possum fibres have a complex structure made up of a water holding interior, known as the cortex, and a water repelling exterior known as the cuticle. Sweat takes longer to condense into liquid, keeping the wearer more comfortable, at the same time the fibres are naturally shower-repellent on the outside.

Anti-odour

Merino is seen by many as having a strong natural resistance to the build up of odour.

PERINO YARN EVOLUTION

The “next innovative yarn” for designers. New Zealand Brushtail Possum fibre brings an element of new to the international market, possessing properties unparalleled by other fibres. Aside from the surreal softness and lightness, the yarn offers a unique ‘halo effect’ which, after wet finishing, releases an array of tonal hues.

A true point of difference for designers searching for something new.

Perino yarns are produced by Woolyarns whom possess generations of technical expertise that drive continued refinement of products. New Zealand Brushtail Possum fibre was introduced to the company in 1992, after which Woolyarns began commercially spinning Perino yarn on state-of-the-art, electronically-controlled machinery.

As pioneers of blended Brushtail Possum yarns, Woolyarns continually develop and innovate the product bringing you the best quality raw materials they can find.



Brushtail Possum Down

Our exclusive Brushtail Possum fibre is carefully collected from a small number of selected regions across New Zealand. The fibre is then refined nine times using a specially crafted dehairing technique. The resulting ultra-lightweight, downy fibres each measure an average of 16 microns, adding a new level of uniqueness and softness to each and every blend.



Super fine Merino

Merino fibre has excellent moisture management and shape retention making this specialty fibre resilient as well as incredibly sumptuous. Our Merino fibre is sourced from trusted suppliers in New Zealand and Australia and is ultra-fine at 15.5 micron, ensuring our yarns offer superior softness and comfort.



Cashmere

Our dedicated sourcing team at Woolyarns have established long-term relationships securing 15.2 micron Mongolian Cashmere fibre to be used in only our most premium of blends.



ZQ Merino

Our ZQ Merino is supplied by The New Zealand Merino Company, a trusted and internationally recognised supplier known for their fully traceable supply chain. This wonderful premium natural component is a perfect addition to any blend and meets the highest standards in the areas of animal welfare, environmental care, and social sustainability.



ACGA Cashmere

Partnering with the Australian Cashmere Growers Association (ACGA) allows exclusive and rare natural Cashmere fibre from Australia to be added to our most premium blends. This sensuous, light and warm fibre has a unique lustre which offers vitality to our yarns.

Transparency of animal standards, social and environmental practices are important and promoted by the organisation. In addition, breeding and genetics management provide traceability throughout the supply chain and ensures only the finest fleeces are selected.



Mulberry Silk

Our dedicated team source only the most premium grade of 11 micron Mulberry Silk from China, the birthplace of Silk to be sparingly added to our luxury blends of yarns. The distinctive triangular structure of each individual Mulberry Silk fibre provides a lustre second to none.



FINISHING PERINO FABRIC

Perino knitted fabric can be scoured and milled in side-loading or front-loading programmable washing machines. The finish will vary depending on yarn count and twist; colour; percentage of Brushtail Possum fibre in the blend; knit structure; type of washing machinery; and water hardness.

Guidelines

Follow these recommended steps for scouring and milling in fully programmable washing machines.

Please finish a test piece of fabric to check the outcome before you finish bulk quantities.

It is important to knit fabric 20-25% looser in stitch length than normal, thus allowing the Brushtail

Possum fibre to burst to the surface of the fabric. To find out more visit: perinoyarns.com

Step one:	Step two:	Step three:	Step four:	Step five:
Loading	Wash cycle	First rinse cycle	Second rinse cycle	Drying
Half fill the drum with Perino fabric. For example for a 25 kilo machine, fill it with 12.5 kilos of knitted fabric. Use fillers if necessary.	Static fill, high water level, 35-40°C (max) with a small amount of soap. Wash for 2-3 minutes and then drop the water and extract for a further 2-3 minutes. Check fibre burst of fabric, repeat step if necessary.	Static fill, high water level, cold water, wash for 2-3 minutes. Drop water and extract for 2-3 minutes.	Static fill, medium water level, add a small amount of softener. Wash for 1-2 minutes. Drop water and extract for 6-7 minutes on high speed.	Tumble dry on medium heat. Fill drum one third full, do not overload the machine. Allow for plenty of air to help the Perino knitted fabric dry.





SUSTAINABLE PERINO

Perino is a collection of blended yarns produced by Woolyarns using New Zealand Brushtail Possum fibre. The New Zealand Brushtail Possum is a non-native, invasive animal found in the country's wild landscapes. They cause such harm to native life, that conservation programmes are essential.

Product

Woolyarns sources only the highest quality raw materials to produce exclusive Perino yarns. New Zealand Brushtail Possum fibre is sourced from a small number of carefully selected regions and only at certain times of the year. These luxurious yarns are durable and high performing, thus allowing garments made from Perino to last between 10- 20 years. All Perino yarns are crafted with human and environmental protection in mind, with no harmful chemical substances present, ensuring that they meet European Union REACH standards.

Preservation of nature

Supporting environmental protection programmes and preserving land and native wildlife harmed by the Brushtail Possum is important to Woolyarns. Brushtail Possums are an introduced species to New Zealand, the non-native population has reached staggering proportions largely due to the lack of natural predators that would otherwise maintain an ecological balance.

A close association between New Zealand's Department of Conservation (DOC) and the New Zealand Fur council (A member of the International Fur Trade Federation) ensures the number of New Zealand Brushtail Possums are ethically, humanely and responsibly managed. A Memorandum of Understanding gives accredited hunters access to defined areas of the Department of Conservation's estate for fur recovery, which is one of the solutions for the control of Brushtail Possum numbers for natural heritage protection such as regeneration of native wildlife and protection of New Zealand's endangered bird species.

Procurement of Brushtail Possum fibre

Woolyarns and the New Zealand Fur council is committed to constant improvement of New Zealand trapping standards used in regulating Brushtail Possum fur recovery. New Zealand trapping standards adhere to those outlined in the Agreement on International Humane Trapping Standards (AIHTS). Furthermore, all hunters and trappers must obey all New Zealand statutory and government regulations including the Animal Welfare Act 1999.

THE MILL BEHIND PERINO

Woolyarns is an innovative New Zealand yarn company. As yarn engineers, we bring precision, passion and creativity to our work. We love to discover. We apply what we know to address what we don't. We relentlessly test the boundaries and push our thinking to consistently deliver products that will excite and inspire you.

History

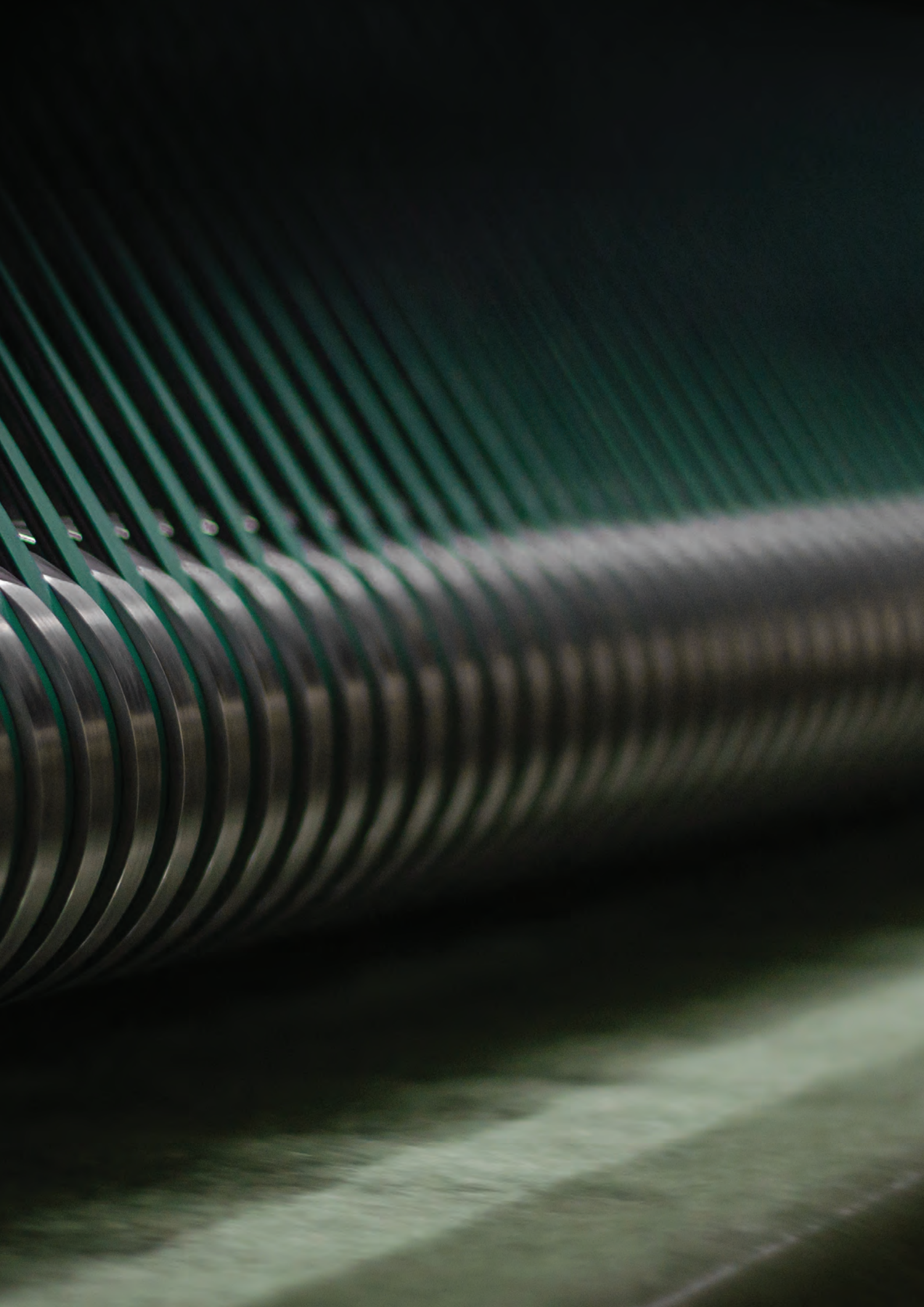
Woolyarns yarn manufacturing spans over half a century. Born into the woollen industry in Yorkshire, Colin Wood began an apprenticeship in 1920, and moved to New Zealand in 1939. Five years later he began his own wool-spinning factory that would later become Woolyarns.

From 1965 Colin and sons Peter and Jim became known for producing yarns to customer specifications. Since then the company has expanded internationally, introducing new blends and product offerings.

To find out more about Woolyarns visit:

woolyarns.co.nz/about/history





SOCIAL RESPONSIBILITY

Sustainability is an integral element of Woolyarns corporate strategy. Being sustainable means using resources efficiently, respecting nature and the environment, not compromising the needs of future generations all while creating value for stakeholders. Woolyarns continually works to strengthen their current commitment to sustainability. The overall objective is to maintain a solid and profitable business model that will enable sustainable growth. Sustainable growth allows reinvestment into machinery, technology and the community.

Operational efficiency

Woolyarns strive to continually improve manufacturing processes throughout the production of Perino yarns.

Energy and water consumption are high priority areas for improvement and are analysed on a monthly basis with the intention of reducing usage. The Hutt Aquifer, which is a natural underground reservoir beneath the city, supplies our on-site dyeing facility water requirements. Local council evaluations for chemical pollution in waste water are carried out and Woolyarns complies with all statutory and governmental regulations such as the Resource Management Act. Woolyarns consistently achieves a low risk category for trade waste consent.

The mill is dedicated to re-purposed yarn programmes which utilise surplus fibre generated during the production of Perino yarns. By reusing materials within the manufacturing process the impact on the planet is reduced illustrating a real commitment to sustainable textile manufacturing.

Caring for people

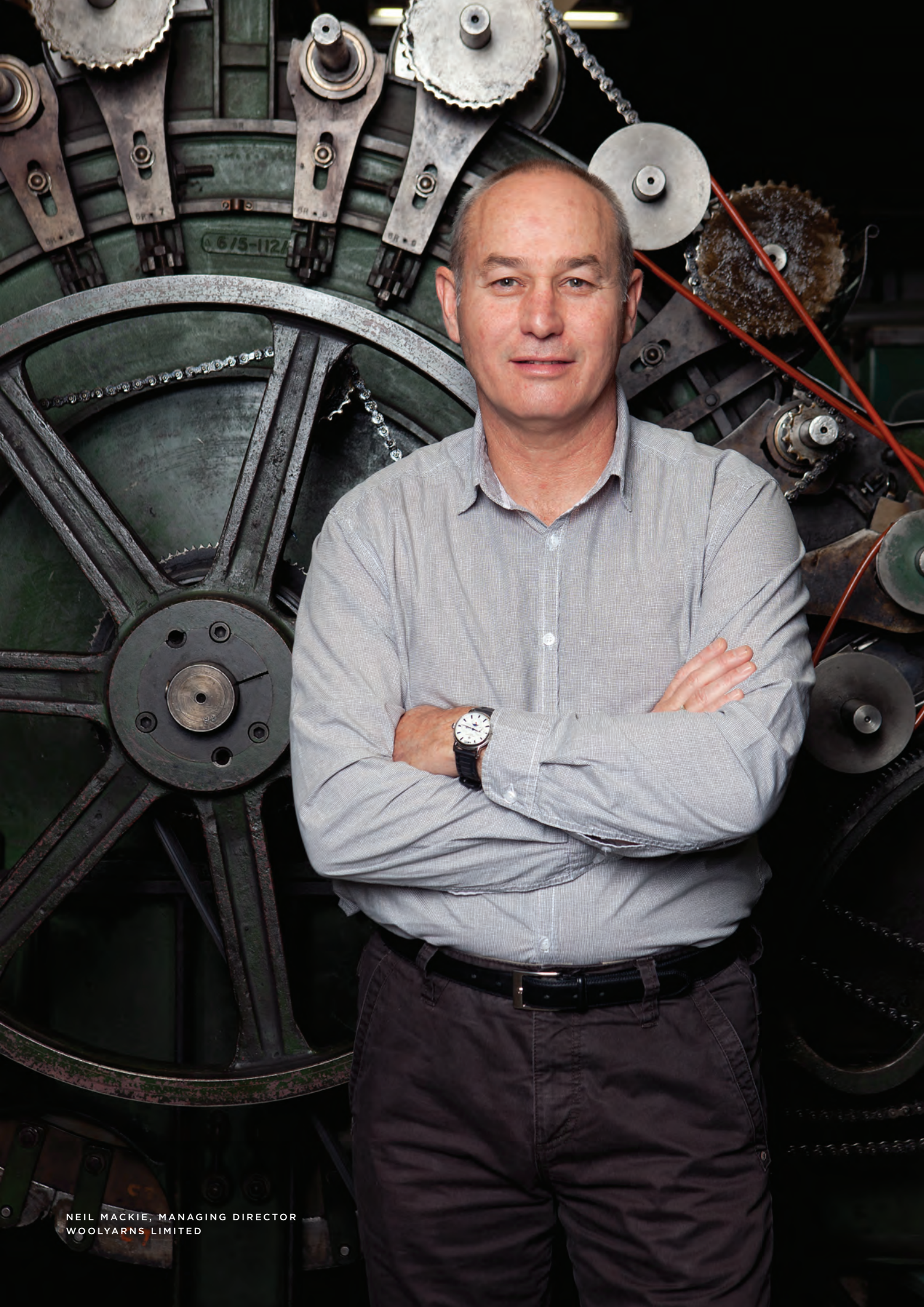
Every individual at Woolyarns contributes to creating high-end luxury yarns. To sustain this culture, employee feedback is encouraged. Woolyarns is committed to open and constructive communication channels as well as providing surveys which engage with employees at every level. Woolyarns are proud to attract a very

diverse workforce that adds a multiplicity of thought. The relentless and innovative team help Woolyarns produce custom made yarns that no-one else can.

Retention and continual training of this workforce is critical to offering consistent supply of the highest quality yarns. Maintaining employees for 10, 20, 30 and even 40 years regularly is testament to the positive culture Woolyarns has developed and the opportunities offered for career progression. New Zealand has an internationally recognised and robust legal framework that covers employment relations, labour management, and health and safety. Woolyarns goes beyond any of these legal requirements ensuring employee well-being is a priority. Regular hearing tests, flu vaccinations, and sick pay benefits are provided. Additionally, compensation is above minimum requirements and the workplace exceeds minimum health and safety standards.

Society

Throughout Woolyarns history local families and community have been supported by Woolyarns. Numerous individual contributions are made and a Massey University of New Zealand textile design award recognises a student each year for their contribution to innovation in textiles with the Woolyarns Limited Jim Wood Memorial Scholarship.



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WOOLYARNS LIMITED

PERINO

BY WOOLYARNS

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