

**Bruck**  
Textiles



# AUSTRALIA'S LEADING INNOVATOR OF TECHNICAL TEXTILES SOLUTIONS

Performance - Protection - Comfort - Breathability - Durability - Integrity



[www.brucktextiles.com.au](http://www.brucktextiles.com.au)



# BRUCK TEXTILES

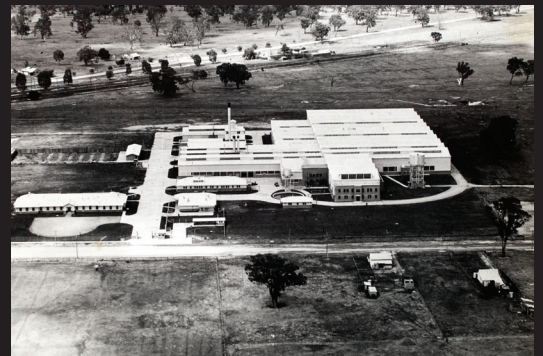
Bruck is a privately owned Australian company and is Australia's leading innovator of technical textile solutions, with over 100 employees. Bruck was established in the city of Wangaratta (North Eastern Victoria, Australia) in 1946.

Bruck is the major manufacturer and marketer in Australia of value added, high performance and protective clothing fabrics, our large range is in end applications such as Military, Mining, Oil and Gas, Structural and Wildland Fire Fighting, Work Wear, Corporate Wear, Metal Smelting and General Industrial.

Considerable expertise has been developed in technical fabrics such as liquid coatings, laminated membranes for cold and wet weather fabrics flame retardant and photo luminescence qualities. With proven design capability, integrated product development processes and sophisticated planning and warehousing systems, Bruck has become a globally recognised, competitive supplier of high performance textiles.

Bruck is fully committed to product innovation and development of new technologies. Bruck works in close partnerships with various Defence and Research bodies like DMTC, DSTG, RMIT, CSIRO, to name a few. Bruck is a market leader in the innovative development of advanced textiles such as XP Merino®, Sentinel®, Enforcer® and Fortress® to name a few. Bruck has introduced solutions in high performance areas exploring new innovative developments in protective and defence fabrics.

Bruck® products are 'world class' and deliver the best in fabric technology and know-how. This is why Bruck is the only Australian weaver that manufactures DuPont™ Nomex® fabric and the proprietary PBI® Gold and PBI® Matrix fabric for firefighters. Bruck is Australia's only licensed manufacturer of PROBAN® flame protective fabrics.



The manufacturing operation is all within the one facility at Australian Textile Mills (ATM), Wangaratta. It is fully vertical with warping (Direct and Sectional), weaving, dyeing, sueding, brushing, Rotary and Digital printing, coating, finishing, lamination and inspection.

ATM has invested regularly in state of the art manufacturing equipment to become a globally competitive and innovative manufacturer of high performance textiles with an ISO 9001 certification.

Bruck is the major manufacturer of fabrics for the Australian Defence Forces and so printing of camouflage designs is a key part of the manufacturing capability. Printing is carried out using a 20 colour rotary print machine which enables production of decorative and very complicated designs. This machine has printed tens of millions of meters of camouflage fabric to clothe Australia's Defence Forces.

ATM has the only automated rotary print screen engraving unit in Australia which enables a customised print design capability. ATM has invested in a state of the art digital printing machine that would drive its innovation capability into 21st century digital age.

ATM's testing laboratory has a wide array of elaborate testing equipment and is able to undertake virtually all of the possible quality assessments required. All fabric manufactured is tested to ensure it will perform to the standard required. The laboratory is independently certified to ISO 17025 by the National Association of Testing Authorities ensuring the utmost accuracy.

BRUCK fabrics for protection from heat & flame, metal splash and electric arc-flash, undergo batch certification for limited flame spread in ATM's accredited flammability laboratory.



# STATION WEAR

SENTINEL® is the standard for comfort and performance in the protective fabrics market. Bruck have taken the durable protection of DuPont™ Nomex® Comfort fibres and combined them with the softness, comfort and absorbency of Lenzing™ FR Viscose. This unique intimate blend delivers inherent and permanent flame retardant performance, anti-static qualities and exceptional moisture wicking - making SENTINEL® fabric the right choice for next-to-skin garments.

## The Benefits:

- Excellent comfort levels - soft, light, highly breathable and highly moisture wicking
- Excellent durability - strong and tough - a product that delivers exceptional value for money
- Inherently flame retardant - a feature that can not wash out or wear out
- Superior thermal protection - excellent heat transfer resistance for weight
- Wildland firefighting certified - full test reports available according AS/NZS 4824 and NFPA 1977
- Exceptional colour fastness - colour that's built in by the DuPont™ Nomex® producer colour process



Sentinel®

DuPont™  
**Nomex®**  
NEVER QUIT.™

 **Lenzing FR®**  
THE HEAT PROTECTION FIBER

Fabric	Composition	Weight (g/m²)	Weave
SENTINEL® 165	50% Nomex® 50% Lenzing™ FR	165	Plain
SENTINEL® 200	70% Nomex® 30% Lenzing™ FR	200	Plain
SENTINEL® 220P	70% Nomex® 30% Lenzing™ FR	220	Plain

SENTINEL® is a registered trademark of Bruck Textiles Pty Ltd.

Nomex® is a registered trademark of E. I. Du Pont de Nemours and Company or its affiliates. Lenzing™ FR is a registered trademark of Lenzing AG.



# STRUCTURAL FIREFIGHTING

Bruck engineered solutions for Structural Firefighting are much more than just fabrics - they're systems. The overall performance of your turnout gear is the sum of each individual layer. For this reason, we are continually evolving fabrics whose high performance properties can be synergised from the inner most lining, through the thermal and moisture barriers, to the outer shell.

Tough, durable and dependable systems are extremely important, as is how your gear feels against the skin and moves with your body. Our systems minimise weight and maximise breathability, thereby minimising metabolic heat stress, while you remain protected from flame, radiant heat, and chemical splash.

Bruck partners with the global leaders in inherent flame retardant fibre technology and high quality yarn producers to bring you the ENFORCER® and FORTRESS® collection of outer shells and the INSUL-TEX® range of thermal liners and scrims. Bruck Structural fabrics meet the requirements of AS/NZS 4967.



DuPont™  
**Nomex**®  
NEVER QUIT.™

**FORTRESS**™ 3GPlus

**pbi**

**ENFORCER**® 24K WITH **pbi**

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
ENFORCER® 24K with PBI®	40% PBI® / 60% Kevlar®	205	3-Dimensional
ENFORCER® PBI Gold®	40% PBI® / 60% Kevlar®	220	Twill Rip-resist
ENFORCER® PBI Matrix®	40% PBI® / 60% Kevlar® p-Aramid matrix	205	Plain
FORTRESS® 3G®Plus	78% Nomex® IIIA / 22% Kevlar®	220	3-Dimensional
FORTRESS® 3D	Nomex® IIIA	220	3-Dimensional
FORTRESS® 260	Nomex® IIIA	260	Twill Rip-resist
FORTRESS® 205	Nomex® IIIA	205	Twill Rip-resist

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# WILDLAND FIREFIGHTING

Our fabrics see action in diverse terrains and climates so our range reflects the specific needs of our customers and meet the requirements of AS/NZS 4824.

For over 60 years DuPont™ Nomex® fabric has been synonymous with firefighter protection. Not only does Nomex® bring inherent FR properties to protective clothing, it also delivers lighter, tougher and more breathable fabrics that meet the continually evolving performance needs for safety and comfort. Bruck is the only weaver of Nomex® fabrics in Australia and the exclusive manufacturer of COMFORT ADVANTAGE®, SHIELD® and SENTINEL®.

For comfort and value, Cotton is hard to beat and for the world's most reliable treatment for flame retardant performance Bruck chooses to work exclusively with PROBAN® solutions. Produced in Australia, the Bruck fabric range of 100% Cotton and Cotton rich blends give you the assurance of lasting performance and ease of wear that only Proban® treated fabric can offer.



Fabric	Composition	Weight (g/m²)	Weave
PBI TRIGUARD™	50% Micro Twaron® / 30% Lenzing™ FR 20% PBI®	200	2/1 Twill
COMFORT ADVANTAGE® 150	Nomex® Comfort	150	Plain
COMFORT ADVANTAGE® 175	Nomex® Comfort	175	Twill Rip-resist
COMFORT ADVANTAGE® 200	Nomex® Comfort	200	Twill Rip-resist
COMFORT ADVANTAGE® 220	Nomex® Comfort	260	2/1 Twill
SHIELD® 165	Nomex® Comfort	165	Plain
SHIELD® 175	Nomex® Comfort	175	Plain Rip-resist
SHIELD® 200	Nomex® Comfort	200	Twill Rip-resist
SENTINEL® 165	50% Nomex® / 50% Lenzing™ FR	165	Plain
SENTINEL® 200	70% Nomex® / 30% Lenzing™ FR	200	Plain
SENTINEL® 220P	70% Nomex® / 30% Lenzing™ FR	220	Plain
XMPLAR PRO®	70% Nomex® / 30% Lenzing™ FR	240	Twill Rip-resist
BRUCK RIGGER™ Proban®	100% Proban® Cotton	340	3/1 Twill
BRUCK CRUISER™ Proban®	100% Proban® Cotton	300	3/1 Twill

PBI TRIGUARD™ is a trademark of PBI Performance Products, Inc. Nomex® is a registered trademark of E. I. du Pont de Nemours and Company or its affiliates. Lenzing™ FR is a registered trademark of Lenzing AG. PROBAN® is a registered trademark of Solvay Operations.

# XP MERINO®

XP Merino® garments provide inherent and permanent FR protection for use in a range of hazards while performing to high standards of protection, comfort and easy care. The fabrics are produced from sustainable renewable fibres.

The Bruck range of XP Merino® fabrics are ideal for garments that are designed to be worn all day everyday. Ideal for situations where there is potential exposure to hazards such as flash fire, radiant heat, electric arc and molten metal splash. In many instances, the required protection against these hazards can be provided by just one XP Merino® garment, eliminating the need for changing or adding garments for extra protection.

## The Advantage:

- Inherent and Permanent (FR) protection.
- Multi-protective with next-to-body protection against threats of fire, radiant heat, metal splash and electric arc.
- No thermoplastic melting fibres to stick to the skin.
- Maximum comfort due to flexible knit constructions and fine micron fibres that are smooth, breathable and temperature regulating.
- Naturally anti-static, with UV protection and odour reducing properties.



Fabric	Weight (g/m <sup>2</sup> )	Knit Construction	Composition
XP Merino® 165	165	Single Jersey	50% Merino Wool 50% Lenzing FR®
XP Merino® 200	200	Single Jersey	
XP Merino® 230	230	Interlock	
XP Merino® 270	270	Interlock	

Lenzing™ FR is a registered trademark of Lenzing AG.



# PR97®

PR97® is the leading range of protective fabrics available for the hot metals industry where secondary or everyday protection from molten metal splash, flame, ignition, radiant and convective heat and electric arc hazards is required.

PR97® is a blend of natural fibres - Merino wool and Lenzing™ FR. The FR properties of PR97® are manufactured or 'built-in' to the FR viscose fibre, which means the fabrics protection cannot diminish over time through washing or laundering. All fabrics are tested to the Performance Standard ISO 11612.

The main benefit of PR97® is it's superior molten metal splash protection against a variety of metals including aluminium, cryolite, iron, steel, copper, magnesium and nickel.

PR97 Ultra™ is a lightweight woven shirting fabric which achieves a D1/E1 molten metal splash rating without an undergarment. PR97 Comfortknit™ is a lightweight knitted fabric for use as a FR undergarment.



# PR97®

NATURALLY, SUPERIOR PROTECTION

Fabric	Composition	Weight (g/m <sup>2</sup> )	Metal Splash ISO 9185		
			Molten Aluminium	Molten Cryolite	Molten Iron
PR97 Comfortknit™ 165	Wool / Lenzing FR®	165	-	-	-
PR97 Ultra™ 220	Wool / Lenzing FR®	220	D1	-	E1
PR97 Comfortknit™ 230	Wool / Lenzing FR®	230	D1	-	E1
PR97 Ultra™ 250	Wool / Lenzing FR®	250	D2	85g	E1
PR97® 265	Wool / Lenzing FR®	265	D1	75g	E1
PR97 Ultra™ 290	Wool / Lenzing FR®	290	D3	> 100g	E3
PR97® 320	Wool / Lenzing FR®	320	D3	85g	E3
PR97® 380	Wool / Lenzing FR®	380	D3	> 100g	E3

PR97 Ultra™ and PR97 Comfortknit™ are trademarks of Bruck Textiles Pty Ltd. Lenzing™ FR is a registered trademark of Lenzing AG.



# MILITARY FABRICS

Bruck is the major supplier of combat and non-combat (parade and general service duties) uniform fabrics for the Australian Defence Force. Bruck's range of fabrics have been developed specifically for and in collaboration with the Australian Army, Royal Australian Navy and the Royal Australian Air Force.

Bruck has invested in research and development to deliver innovative solutions in high performance areas including ballistic and fragment protection, NIR Signature Management, waterproof and breathable wet weather outerwear, flame retardant cold weather outerwear and extreme cold weather outer and underwear.

Bruck is fully committed to product innovation and development of new technologies. Bruck works in close partnerships with various Defence and Research bodies like DMTC, DSTG, RMIT, CSIRO, to name a few.

One of our recent successes has been the development of a high strength combat uniform fabric. This new and stronger fabric solution for the Australian Defence Forces delivers the same level of comfort and breathability as the normal uniform fabric and at the same time is inherently flame retardant and provides additional protection against fragments from Improvised Explosive Devices.

AMCU



AMP



DPCU



MMPU



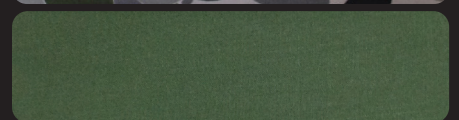
GPU



DPNU



Flying Suits



# COMBAT UNIFORM FABRICS

## Australian Multicam Camouflage Uniform (AMCU)

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
AMCU Oxford	75/25 Cotton Polyester	165 - 185	Oxford
AMCU Twill	75/25 Cotton Polyester	245 - 265	3/1 Twill
AMCU FR	Multifibre blend	190 - 220	Plain



## Disruptive Pattern Camouflage Uniform (DPCU)

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
DPCU Oxford	75/25 Cotton Polyester	155 - 175	Oxford
DPCU Twill	75/25 Cotton Polyester	230 - 255	Twill



## Australian Multicam Pattern (AMP)

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
AMP Twill	75/25 Cotton Polyester	230 - 255	3/1 Twill
AMP MW Twill	75/25 Cotton Polyester	185 - 205	3/1 Twill



## Maritime Multicam Pattern Uniform (MMPU)

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
MMPU Oxford	75/25 Cotton Polyester	165 - 155	Oxford
MMPU Twill	75/25 Cotton Polyester	245 - 265	3/1 Twill
MMPU FR	Multifibre blend	190 - 220	Plain



## Disruptive Pattern Naval Uniform (DPNU)

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
DPNU Oxford	75/25 Cotton Polyester	238 - 262	Oxford
DPNU Twill	75/25 Cotton Polyester	285 - 315	Twill



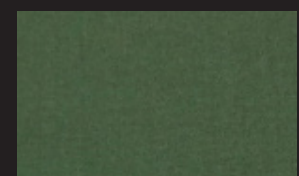
## Air Force General Purpose Uniform (GPU)

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
GPU Oxford	75/25 Cotton Polyester	155 - 175	Oxford
GPU Twill	75/25 Cotton Polyester	230 - 255	3/1 Twill



## Flyers Clothing

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
Flyers Twill	Aramid Anti-static blend	190 ± 5%	Twill
Flyers Plain	Aramid Anti-static blend	150 ± 5%	Plain
Flyers Trilaminate	Aramid, PTFE Trilaminate	242	Plain Face / Knit Back

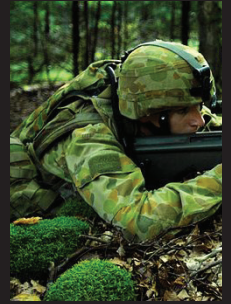




# WET & COLD WEATHER FABRICS

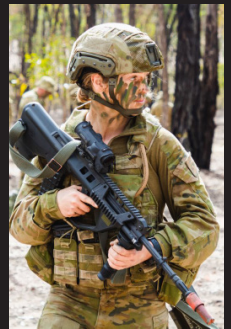
## WET WEATHER LAMINATES

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
Benbruckula WTR	100% Polyester	170	Plain
Trilaminate Dropliner	100% Polyester	115	Warp Knit
Benbruckula Trilaminate	100% Polyester	370	Plain
1714 Trilaminate	100% Polyester PTFE Membrane	190	Plain



## FR COLD WEATHER OUTERWEAR

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
FR Trilaminate	98% Aramid PTFE Membrane / 2% Carbon Face	242	Plain



## COLD WEATHER UNDERGARMENTS

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
XP Merino Interlock	50/50 Wool FR Viscose	252 - 278	Plain
XP Merino Knit	50/50 Wool FR Viscose	165 - 175	Plain

# PROTECTIVE CLOTHING

## FRAGMENT PROTECTION

Fabric	Density (g/m <sup>2</sup> )	Weave
9917-24	265	High Strength Twill
9917-25	275	High Strength Twill



## BALLISTIC PROTECTION

Fabric	Density (g/m <sup>2</sup> )	Description
BPS-A-1001	205	Plain Weave & Light-weight
BPS-A-CT709	200	TWARON® 930 D Tex microfilament yarn & light-weight.
BPS-A-CT707	160	TWARON® microfilament 930 D Tex yarn, low-weight for a specific ammunition application.

# NON-COMBAT FABRICS

Fabric	Composition	Weight (g/m <sup>2</sup> )	Weave
Legacy	65% Polyester / 35% Cotton	135	Plain
Rapier	65% Polyester / 35% Viscose	160	Plain
Underground	65% Polyester / 35% Cotton	190	Plain
Prestalene	65% Polyester / 35% Viscose	200	Plain
Orion	65% Polyester / 35% Viscose	220	Plain
Navy Gaberdine	65% Polyester / 35% Viscose	270	Twill



# SUPPORT INFORMATION

## BRUCK TEXTILES

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