



Innovation at Coats

COATS Armoren uses a pioneering J Spun engineered yarn technology that extends the frontiers of safety awareness in cut protection. New generation stretch fibres and high quality of core yarn coverage creates laser-fine gloves that are comfortable, and have ultimate tactile dexterity. The best in class, proprietary helical J Spun core construction provides the power of extreme cut resistance even at fine knitting gauges.

The Coats Armoren product range of cut protect yarns is engineered for Ultralight comfort and Ultracut protection in gloves, and offers game-changing solutions to the hand safety industry.

Coats Armoren can also be designed to protect against multi-risk hazards like electric arc flash, extreme contact heat, microbial infection, molten splash, chemical exposure, clean room electrostatic, and other dangers. It is brought to you by Coats, which is a global company with the engineering expertise and the innovation capability to meet increasingly stringent industry trends of safety and sustainability.





To protect against electric arc flash hazards, Coats has the technology to develop new blends that stop heat propagation and prevents char decomposition to meet F2675M-13 Hazard Category Level 2 (8 cal/cm2). Solutions are available even for HRC Level 3 (25 cal/cm2) or higher.

EXTREME CUT RESISTANCE

The power of Armoren J Spun technology delivers extremely high cut resistance that goes above and beyond. The J Spun helical core and cover construction increases cut resistance by 100-250% (A2 to A3-A4) in standard range and achieves high Ultracut levels of A5 to A9 even at fine knitting gauges.



DEXTERITY

Fine count Coats yarns enable laser thin fabrics to be knit on fine gauges like 18 gg for agile freedom of movement, tactile nimbleness, and excellent fingertip sensitivity.

HIGH CONTACT HEAT RESISTANCE

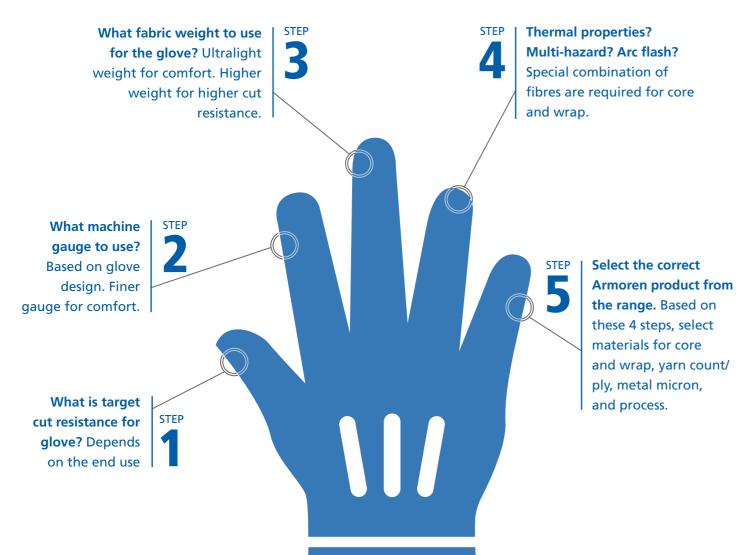
Standard Armoren aramid blends withstand >250°C flame heat EN 407 contact heat Level 2. To achieve even higher contact heat level > 350°C(Level 3), Coats can develop, on special request, innovative fabric-based solutions that meet special end user design needs.

Use of stretch component and soft yarns for great elastic recovery and ultra-flex grip.





5 STEPS TO SELECT THE APPROPRIATE ARMOREN YARN FOR YOUR SAFETY PRODUCT





COATS ARMOREN: COMPLETE PRODUCT RANGE

Ultralight & Ultracut: fastest growing sectors in Hand Safety and require innovative engineered yarns

Comfort Category	Fabric Weight	Cut Level ANSI - (EN388)	A1 - (A)	A2 - (B)	A3 - (C)	A4 - (D)	A5 - (E)	A6 - (F)	A7 - (F)	A8 - (F)	A9 - (F)
		Gauge									
Ultra-light weight	150-300 gsm	18gg	Ultralight					Ultracut		Ultracut Gold	
Medium Duty	300-700 gsm	15gg	X14	X13							
		13gg	APS								
Heavy Duty	> 700 gsm	10gg									
		7gg									

X14
X13
Ultralight
Ultracut
Ultracut Gold

Extensions: FLX
Orbit
Protect+

*features can be combined

HOW TO DECIDE WHICH COATS ARMOREN PRODUCT TO USE FOR WHAT APPLICATION?

The gold standard of cut protection. Extreme high cut for fine gauge knitting

For ultimate dexterity and laser-fine protection in 18 gg ultralight-weight gloves

The power of extreme cut protection. High cut A5-A9 in medium duty gloves

Best suited to replace spun para-aramid or para-steel in medium duty gloves

Great value to replace HPPE or HPPE Glass in medium duty gloves

General purpose yarns made with spun para-aramid and HPPE fibres

Note: Please refer to separate product sheets of each sub-brand of Armoren family in order to get detailed specifications of each engineered yarn.

Each sub-brand uses uniquely special yarn spinning techniques and different combination of fibres and new generation materials. Selection of type of core, metal micron, wrap blend content %, etc will depend on the specific functional needs of the type of glove being designed.

Multiple counts and ply constructions are available within each sub-brand to meet the needs of the full range of gauge-cut resistance product quadrants. Use Armoren Protect+ for anti-microbial and Armoren Orbit for vortex spun applications.

COATS ARMOREN: MULTI-RISK PROTECTION

Coats is a global innovation leader pioneering the textile industry with disruptive technology platforms like J Spun that meets safety industry's challenges. We have invested in advanced research of next generation material and with 3 Innovation Hubs globally can design special fibre/yarn blends and fabric solutions that provide Multi-Risk Protection and other functional attributes on as-needed basis to meet emerging and future industry needs.

- Electric arc flash resistance to meet
 F2675M-13 HRC level 2 (8 cal/cm2), HRC
 Level 3 (25 cal/cm2) and above
- High contact heat properties at 350°C EN 407 Level 3
- Anti-microbial and anti-bacterial protection under Armoren Protect+ brand
- Molten Metal Splash hazard protection
- Hypodermic needle resistance under ANSI 105 (150 Newtons)'
- High mechanical impact ANSI ISEA 138
- Electrostatic (EN 1151/ANSI 16350), silicone- free, modular clean room ambience
- FDA food handling requirements 2002/72 EC
 - Chemical exposure; Oekotex, ReacH certifications



