REGULATORY

UNE-EN ISO 12947-2 &
UNE-EN ISO 13937-2

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IBQ®
TEXTILES PROTECTING LIVES

REGULATORY REQUIREMENTS FOR MULTI NORM GARMENTS

Multi-norm garments are designed to protect workers who face more than one hazard at the same time — for example heat and flame, high visibility risks, or electrostatic discharge. Because of this, they must meet multiple international standards simultaneously. Certification is not based on appearance alone; each garment must pass specific laboratory tests that measure how the fabric and finished garment perform under controlled conditions. Only after meeting the minimum performance levels in each category can the garment be labeled as compliant.

FLAME AND HEAT PROTECTION
(EN ISO 11612)

For protection against heat and flame, garments are tested under standards such as EN ISO 11612. The fabric is exposed to small flames, radiant heat, and sometimes molten metal splash. To pass, the material must not continue to burn after the flame source is removed, must limit heat transfer to the skin side, and must not drip or form dangerous holes. The goal is to ensure that, in the event of flash fire or heat exposure, the garment reduces burn injury risk and gives the wearer valuable escape time.

HIGH VISIBILITY
(EN ISO 20471)

For workers exposed to traffic or moving machinery, high visibility standards such as EN ISO 20471 apply. Garments must include a minimum surface area of fluorescent background fabric and retroreflective tape. Testing checks color brightness, reflectivity, durability after washing, and tear strength. There are three performance classes, with Class 3 providing the highest visibility. The requirement ensures the wearer remains clearly visible in both daylight and low-light conditions.

ANTI-STATIC PROTECTION
(EN 1149 SERIES)

In environments where flammable gases, vapors, or dust may be present, garments must prevent static build-up. The EN 1149 series tests how quickly electrical charges dissipate from the fabric surface. To pass, the material must allow static electricity to discharge safely, reducing the risk of sparks that could trigger explosions. Proper garment design — including grounding through footwear — is also part of compliance.

MECHANICAL STRENGTH AND DURABILITY

Beyond hazard-specific testing, multi-norm garments must also meet minimum mechanical performance requirements. These include tensile strength, tear resistance, seam strength, and dimensional stability after washing. The garment must maintain its protective qualities throughout its service life. Labels must clearly state the standards met, performance levels achieved, and care instructions to ensure continued compliance.

In simple terms, multi-norm certification ensures that a garment does not just look protective — it has been scientifically tested to perform under real workplace risks. Every approved garment represents a combination of laboratory verification, minimum safety thresholds, and strict quality control designed to protect the wearer across multiple hazard categories at once.

In this demanding regulatory landscape, the IBQ-MEC-007 reinforcement fabric is engineered to support compliance across multiple protection areas at once. By combining the cut and abrasion resistance of Cordura and Kevlar, the inherent flame resistance of modacrylic, and the charge-dissipating properties of anti-static yarns, it delivers a balanced performance aligned with the core testing requirements of multi-norm garments. The result is a reinforcement solution that not only strengthens high-wear areas, but also contributes to flame protection, arc-related performance, and electrostatic control — helping manufacturers achieve the optimal combination of durability, safety, and long-term compliance required in modern multi-risk workwear.