ICF MERCANTILE
TECHNICAL TEXTILE SOLUTIONS

Comprehensive **Glossary** of Technical Textile Terms

Ablative Materials: Heat-resistant materials used in aerospace applications to protect surfaces from high temperatures.

Acrylic Fiber: A synthetic fiber known for its lightweight properties, durability, and resistance to environmental factors.

Antimicrobial: An additive added to the yarn to inhibit the growth of bacteria, fungi, or other microorganisms.

Biodegradable Fibers: Fibers designed to break down naturally in the environment without leaving harmful residues.

Crimp: The waviness or curls in yarn, often introduced during texturing to enhance elasticity or bulk.

Denier (den): A unit of measure representing the weight in grams of 9,000 meters of yarn; used to indicate the fineness of the yarn.

dTex (Decitex): A unit of measure representing the weight in grams of 10,000 meters of yarn; used to indicate the fineness of the yarn.

Drawing: The process of stretching partially oriented yarn (POY), converting it into fully drawn yarn (FDY).

FDY (Fully Drawn Yarn): Yarn that is fully stretched and ready for end-use applications.

Fiber: A basic element of textiles, formed into yarns for further processing.

Filament: A continuous strand of yarn with virtually unlimited length.

High Tenacity (HT): Yarn or fiber with enhanced strength and durability, suitable for demanding applications.

HOY (Highly Oriented Yarn): Yarn that has undergone additional stretching to achieve high orientation, creating special properties.

Inherent Flame Retardant: A property of fibers and fabrics to resist ignition or slow the spread of flames.

ISO Certification: International standards for quality, safety, and efficiency, including ISO 9001 (general quality) and ISO 13485 (medical devices).

Luster: The sheen or glossiness of a fiber or yarn, influenced by its surface structure and light reflection.

Monofilament: A single continuous filament of yarn, typically thicker.

Multifilament: Yarn consisting of multiple continuous filaments twisted or bundled together.

PA 6 – PA6.6 (Nylon): A type of polymer used in suture and technical applications.

PET (Polyethylene Terephthalate - Polyester): A type of polymer used in medical and technical applications.

POY (Partially Oriented Yarn): Yarn that is partially stretched during manufacturing and requires further processing to achieve desired properties.

Rayon: A semi-synthetic (artificial) fiber made from cellulose.

Shrinkage: The reduction in length of fabric or yarn when exposed to heat during processing.

Spinning (Extrusion): A manufacturing process where raw materials are melted and forced through a spinneret to form continuous filaments.

Tenacity: The strength of yarn measured as the force in grams required to break it, expressed in grams per denier.

Texturing: The process of modifying yarn to give it bulk or stretch properties.

Twisting: The insertion of turns in yarn for functional improvement for subsequent process properties.

UV Resistance: The ability of a fiber or fabric to withstand degradation caused by ultraviolet radiation from sunlight.

Winding: The process of preparing yarn into a final package.

Contact us for expertise and guidance with your technical or textile needs.