

TEXTILE & KNIT DEPARTMENT READY RECKONER

Abrasion Resistance: The ability of a fiber or fabric to withstand surface wear and rubbing.

Air Jet Spinning: A spinning system in which yarn is made by wrapping fibers around a core stream of fibers with compressed air.

Air Permeability: The porosity, or the ease with which air passes through material. Air permeability determines such factors as the wind resistance of sailcloth, the air resistance of parachute cloth, and the efficiency of various types of air filtration media. It is also a measure of warmth or coolness of a fabric.

Alternating Twist: A texturing procedure in which S and Z twist are alternately inserted in the yarn by means of a special heating apparatus.

Aramid Fiber: A manufactured fiber in which the fiber-forming material is a long chain synthetic polyamide having at least 85% of its amide linkages (-NH-CO-) attached directly to two aromatic rings.

Autoclave: An apparatus for the carrying out of certain finishing operations, such as pleating and heat setting, under pressure in a superheated steam atmosphere.

Balanced Cloth: A term describing a woven fabric with the same size yarn and the same number of threads per inch in both the warp and the fill direction .

Bally Ribbon Mills (BRM): A leader in the narrow fabrics industry. In business 90 years, it is known for its high quality goods, excellent customer service, and technical engineering expertise.

Basket Weave: A variation of the plain weave in which two or more warp and filling yarns are woven side to side to resemble a plaited basket.

Beam: A cylinder of wood or metal, usually with a circular flange on each end, on which warp yarns are wound for slashing, weaving, and warp knitting.

Beaming: The operation of winding warp yarns onto a beam usually in preparation for slashing, weaving, or warp knitting. This process is also called warping.

Beating-Up: The last operation of the loom in weaving, in which the last pick inserted in the fabric is “beat” into position against the preceding pick, usually by a “comb-like” device called a reed.

Bicomponent Yarns: Spun or filament yarns of two generic fibers or two variants of the same generic fiber.

Bi-directional Fabric: A fabric having reinforcing fibers in two directions, i.e. in the warp (machine) direction and filling (cross-machine) direction.

Bleeding: Loss of color by a fabric or yarn when immersed in water, a solvent, or similar liquid medium, as a result of improper dyeing or the use of dyes of poor quality.

Blend:

1. A yarn obtained when two or more staple fibers are combined in a textile process for producing spun yarns.
2. A fabric that contains a blended yarn in both the warp and filling direction.

Blending: The combining of staple fibers of different physical characteristics to assure a uniform distribution of these fibers throughout the yarn.

Braid:

1. A narrow textile band, often used as trimming or binding, formed by plaiting several strands of yarn. The fabric is formed by interlacing the yarns diagonally to the production axis of the material.

2. In aerospace textiles, a system of three or more yarns which are interlaced in such a way that no two yarns are twisted around each other.

- Biaxial Braid – Braided structure with two yarn systems running in one direction and the other in the opposite direction.
- Triaxial Braid – a braided structure with axial yarns running in the longitudinal direction.

Braid Angle: The acute angle measured from the axis of the fabric or rope to a braiding yarn.

Braided Fabric: A narrow fabric made by crossing a number of strands diagonally so that each strand passes alternately over or under one or more of the other strands.

Braiding: The inter winding of three or more strands to make a cord or narrow fabric.

Break Factor: A measure of yarn strength calculated as:

1. The product of breaking strength times the indirect yarn number.
2. The product of breaking strength times the reciprocal of the direct yarn number.

Breaking Strength:

1. The maximum resultant internal force that resists rupture in a tension test.

2. The load (or force) required to break, or rupture, a specimen in a tensile test made according to a specified standard procedure.

Breaking Tenacity: The tensile stress at rupture of a specimen expressed as Newtons per Tex (cN/tex).

Broadcloth: A fabric so named because it is woven in widths exceeding 29 inches.

Broad Goods: Woven fabrics 18 inches or more in width.

Broken End: A broken, untied warp yarn in a fabric. Broken ends can result from: slubs, knots, improper shuttle alignment, shuttle hitting the warp shed, excessive warp tension, faulty sizing, and rough reeds, heddles, drop wires, or shuttles.

Broken Pick: A broken filling yarn in a fabric. Broken picks can result from: excessive shuttle tension, weak yarn, or filling coming in contact with a sharp surface.

Cabled Yarn: A yarn formed by twisting together two or more plied yarns.

Cabled Twist: A construction of thread, yarn, cord, or rope in which each successive twist is in the same direction opposite the preceding twists; i.e. an S/Z/S, or Z/S/Z construction.

Calender: A machine used in finishing to impart a variety of surface effects to fabrics. A calender essentially consists of two or more heavy rollers, sometimes heated, through which the fabric is passed under heavy pressure.

Calendering: A mechanical finishing process for fabrics used to produce special effects, such as high luster, glazing, moiré, and embossed effects.

Carbon Fiber: A high-tensile fiber or whisker made by heating rayon or polyacrylonitrile fibers or petroleum residues to appropriate temperatures. Fibers may be 7 to 8 microns in diameter and more than 90% carbonized.

Cloth: A generic term embracing all textile fabrics and felts. Cloth may be formed out of any textile fiber, wire, or material.

Coated Fabric: A fabric to which a substance such as lacquer, plastic, resin, rubber, or varnish has been applied in firmly adhering layers to provide certain properties, such as water impermeability.

Coating: The application of a semi-liquid material such as rubber, polyvinyl chloride, or polyurethane to one or both sides of the textile material. Once the coating has dried (cured) it forms a bond with the fabric.

Color Abrasion: Color changes in localized areas of a garment resulting from differential wear.

Colorfastness: Resistance to fading, i.e. the ability of a dye to retain its color when the dyed or printed textile material is exposed to conditions or agents such as light, perspiration, atmospheric gases, or washing that can remove color.

Composite:

1. An article or substance of two or more constituents, generally, with reinforcing elements dispersed in a matrix or continuous phase.
2. Hard or soft constructions in which the fibers themselves are consolidated to form structures rather than being formed into yarns.

Conditioning: A process of allowing textile materials to reach equilibrium with the surrounding atmosphere.

Cone: A conical package of yarn, usually wound on a disposable paper core.

Coning: The transfer of yarn from skeins or bobbins or other types of packages to cones.

Converter: An individual or organization that buys greige fabrics and sells them as a finished product to cutters, wholesalers, retailers, and others. The converter arranges for the finishing of the fabric.

Core Spinning: The process of making a core-spun yarn. It consists of feeding the core yarn into the front delivery roll of the spinning frame and of covering the core yarn with a sheath of fibers during the spinning operation.

Core-Spun Yarn: A yarn made by twisting fibers around a filament or a previously spun yarn, thus concealing the core.

Creel: A framework arranged to hold slivers, roving, or yarns so that many ends can be withdrawn smoothly and evenly without tangling.

Creeling: The mounting of supply packages in a creel to feed fiber to a process, i.e. beaming, warping, or weaving.

Crimp:

1. The waviness of a fiber expressed as crimps per unit length.
2. The difference in distance between two points on an unstretched fiber and the same two points when the fiber is straightened under tension.
3. The difference in the distance between two points when the yarn has been removed from the fabric and straightened under specific tension expressed as a percentage of the distance between the two points as the yarn lies in the fabric.

Crocking: The rubbing-off of dye from a fabric as a result of insufficient dye penetration or fixation, the use of improper dyes or dyeing methods or insufficient washing and treatment after the dyeing operation. Crocking can occur under either wet or dry conditions.

Density: Mass per unit volume usually expressed as grams per cubic centimeter (g/cc). Also known as specific gravity.

Denier: The weight, in grams, of 9000 meters of yarn. The lower the denier number the finer the size of yarn, and the higher the number the larger the size of yarn. In countries other than the USA, Denier is replaced by the Tex system.

Denier per filament (dpf): The denier of an individual continuous filament or an individual staple fiber if it were continuous.

Yarn Denier: The denier of filament yarn. It is the product of the denier per filament and the number of filaments in the yarn.

Total Denier: The product of the denier per filament and the number of filaments in the tow.

Denier Variation: Usually variation in diameter, or other cross-sectional dimension, along the length of a filament or bundle of filaments. Malfunction or lack of process control in fiber manufacturing causes denier variation.

Dent: On a loom, the space between the wires of a reed.

Dimensional Stability: The ability of textile material to maintain or return to its original geometric configuration.

Dobby: A mechanical attachment on a loom that controls the harness to permit the weaving of geometric figures.

Doff: A set of full packages, bobbins, spools, etc. produced by one machine.

Doffing: The operation of removing full packages, bobbins, spools, etc. from a machine and replacing them with empty ones.

Double End: Two ends woven as one in a fabric. It may be intentional or accidental.

Drape: A term to describe the way a fabric falls while it hangs; the suppleness and ability of a fabric to form graceful configurations.

Drawing-in: In weaving the process of threading warp ends through the eyes of the heddles and the dents of the reed.

Drop Wires: A stop-motion device utilizing metal wires suspended from warp or creel yarns. When a yarn breaks, the wire drops, activating a switch that stops the machine.

Dyeing: A process of coloring fibers, yarns, or fabrics with either a natural or synthetic dye. A partial list of dyeing methods follows:

- Pad Dyeing – A form of dyeing whereby a dye solution is applied by means of a pad or mangle.
- Pressure Dyeing – Dyeing by means of forced circulation of dye through packages of fiber, yarn, or fabric under pressure.
- Skein Dyeing – The dyeing of yarn, fiber, or fabric in the form of skeins, or hanks.
- Yarn Dyeing – The dyeing of yarn before the fabric is woven or knit.

Elastomers: Synthetic polymers having properties of natural rubber such as stretchability and recovery.

Electrical Conductivity: A measure of the ease of transporting electric charge from one point to another in an electric field.

Elongation: The deformation in the direction of load caused by a tensile force. Elongation is measured in units of length (inches, millimeters) or calculated as a percentage of the original specimen length. Elongation may be measured at a specific load or at the breaking point.

Elongation at Break: The increase in length when the last component of the specimen breaks. Usually expressed as %.

End: An individual warp yarn. A warp is composed of a number of ends.

End Out: A void caused by a missing warp yarn.

Entering: The process of threading each warp yarn on a loom beam through a separate drop wire, heddle, and reed space in preparation for weaving.

Extractables: The material that can be removed from textiles by means of a solvent (water can often be a solvent).

Extraction: Removal of one substance from another, often accomplished by a solvent.

Fabric: A planar textile structure produced by interlacing yarns, fibers, or filaments

Fabric Construction: The details of structure of fabric. These include such information as style, width, type of weave, or knit, yarns per inch in warp and fill, and weight of goods.

Fabric Crimp: The angulation induced between a yarn and a woven fabric via the weaving or braiding process.

Fibers: A unit of matter, natural or manufactured, that forms the basic element of fabrics and other textile structures.

Fiber Number: The linear density of a fiber expressed in units such as denier or Tex.

Filament: A fiber of an indefinite or extreme length, such as one found in plant or animal structures. Manufactured fibers are extruded into filaments that are converted into filament yarn, staple, or tow.

Filament Count:The number of individual filaments that make up a thread or yarn.

Filament Yarn:A yarn composed of continuous filaments assembled with or without twist.

Filling:In woven fabric, the yarn running from selvage to selvage at right angles to the warp. Each crosswise length is called a pick. In the weaving process, a shuttle, rapier, or other type of yarn carrier carries the filling yarn.

Finish

1. A substance or mixture of substances added to textile materials to impart desired properties.
2. A process, physical, or chemical performed on textile materials to produce a desired effect.
3. A property, such as smoothness, drape, luster, water repellency, flame retardancy, or crease resistance that is produced by 1 and/or 2.

Finished Fabric:Fabric that is ready for the market, having passed through the required finishing process.

Finishing:All the processes through which fabric is passed after bleaching, dyeing, or printing in preparation for the market or use.

Flame Resistant:A term used to describe a material that burns slowly, or is self-extinguishing after removal of an external source of ignition.

Flame Retardant:A chemical compound that can be incorporated into a textile fiber during manufacture, or applied to a fiber, fabric, or other textile item during processing to reduce its flammability.

Flammability Tests:Procedures have been developed to assess the flame resistance of fabrics. Three common tests follow:

- Diagonal Flame Test – In this test for flame resistance, a specimen is mounted at a 45° angle and exposed to an open flame for a specific time. The test measures the ease of ignition and the rate of burning.
- Horizontal Flame Test – A test for flame resistance in which a specimen is mounted in a horizontal holder and exposed to an open flame for a specific time to measure the burning rate and char-hole diameter.
- Vertical Flame Test – A test for flame resistance in which a specimen is mounted in a vertical holder and exposed to an open flame for a specific time. The open flame is then extinguished and continued flaming time and char-length of the sample are measured.

Float:A weaving defect consisting of an end lying, or floating on the fabric surface instead of being properly woven in.

Gauge:A generic term for various measurement instruments such as pressure or thickness gauges, also the thickness of a knitting needle, and the number of wales per inch in a knitted fabric.

Gauge Wire:Used with an extra filling yarn during weaving, this type of standing wire controls the height of fabric pile.

Geo textiles:Manufactured fiber products made into fabrics of various constructions for use in a wide variety of civil engineering applications. Examples include erosion control fabrics, drainage fabrics, and asphalt overlay fabrics.

Glass Fiber:A manufactured fiber in which the fiber-forming substance is glass. These fibers are incombustible and will tolerate heat up to 1000°F. However, the resulting fabric is brittle and fracture points may develop.

Graphite Fiber:Although the terms carbon and graphite are used interchangeably, graphite fibers are more accurately defined as fibers that are 99+% carbonized, while the term carbon is used for any fiber carbonized from 93% to 95% or more.

Greige Fabric (pronounced gray):An unfinished fabric just off the loom or knitting machine.

Grosgrain:A fabric with prominent ribs. Grosgrain has a dressy appearance and is used in ribbons, vestments, and ceremonial cloths.

Hand:The tactile qualities of a fabric, e.g. softness, firmness, elasticity, fineness, resilience, and other qualities perceived by touch.

Heat Resistance:A property of certain fibers or yarns whereby they resist degradation at high temperatures. Heat resistance can be a quality inherent in a yarn, or it may be imparted by additives or treatment of the resulting fabric.

Heat Setting:The process of conferring dimensional stability and other desirable properties (wrinkle resistance and improved heat resistance) by means of either moist or dry heat.

Heat Stabilized:A term to describe fiber or yarn heat-treated to reduce the tendency of the fiber to shrink, elongate under a load, or at elevated temperatures.

Heddle:A cord, round steel wire, or thin flat steel strip with a loop or eye near the center through which one or more warp threads pass on the loom, so that the yarn movement may be controlled in weaving. The heddles are held at both ends by the harness frame. They control the weave pattern and shed as the harnesses are raised and lowered during weaving.

Herringbone:A broken twill weave characterized by a balanced zig-zag effect produced by having the rib run first to the right and then to the left for an equal number of threads.

High Modulus:A term that refers to a material with a higher than normal resistance to deformation.

Hollow Filament Fibers:Manufactured, continuous filament fibers, having voids created by introduction of air, or other gas in the polymer solution, or melt spinning through specially designed spinnerets.

Homespun:Course plain-weave fabric of uneven yarns that have a handspun appearance.

Hopsacking:A course, open, basket-weave fabric that gets its name from the plain-weave fabric of jute or hemp used for sacking in which hops are gathered.

Impregnated Fabric:A fabric in which the interstices between the yarns are completely filled, as compared to sized or coated materials where the interstices are not completely filled.

Industrial Fabric:A broad term for fabrics used for non-apparel and non-decorative uses. They fall into the following classes:

- Fabrics employed in industrial processes (e.g. filtration, polishing, and absorption).
- Fabrics combined with other materials to form a different material (e.g. rubberized fabric for hose, belting, tires, timing gears, bearings, and electrical parts).
- Fabrics impregnated with an adhesive and dielectric compounds.
- Fabrics incorporated directly in a finished product (e.g. sails, tarps, tents, awnings, and specialty belts for agricultural machinery, airplanes, and conveyers).

Fabrics developed for industrial use cover a wide variety of widths, weights, and construction. In many cases, they have been painstakingly developed to meet a specific application.

Inspection:The process of examining textiles for defects at any stage of manufacturing and finishing.

Jacquard:A system of weaving that utilizes a highly versatile pattern mechanism to permit the production of large, intricate designs and (at Bally Ribbon Mills) shapes. The weave controls the action of one warp yarn for the passage of one pick. Each card perforation machine may carry a large number of cards, depending upon the design, because there is a separate card for each pick in the pattern.

Jet Loom:A shuttleless loom that employs a jet of water, or air to carry the filling yarn through the shed.

Kink:In fabrics, a place where a short length of yarn has spontaneously doubled back on itself.

Kinking:The doubling back of a yarn on itself to relieve torque imparted by twisting or texturing.

Knit Fabric:A structure produced by interlooping one or more ends of yarn or comparable material.

Knitting:A method of constructing fabric by interlocking series of loops of one or more yarns.
Knitting Types:

- Warp Knitting – A type of knitting in which the yarns generally run lengthwise in the fabric. The yarns are prepared as warps on beams with one or more yarns for each needle. Examples include; Rachel (a plain or lacy knit) and Tricot (run resistant) Knitting.
- Weft Knitting – A common type of knitting, in which one continuous thread runs crosswise in the fabric making all of the loops in one course. An example is Circular Knitting, where the fabric produced on the knitting machine is in the form of a tube, the threads running continuously around the fabric.

Lace:Ornamental openwork fabric, made from a variety of designs by intricate manipulation of the fiber by machine or hand.

Leno Weave:A weave in which the warp yarns are arranged in pairs with one twisted around the other between picks of filling yarn. This type of weave gives firmness and strength to an open-weave fabric and prevents slippage and displacement of warp and filling yarns.

Let-Off Motion:A device for controlling the delivery and tension of the warp during weaving.

Leveling:Migration leading to uniform distribution of dye in a dyed material. Leveling may be a property of the dye or it may require chemical assistance.

L.O.I (Limiting Oxygen Index):An abbreviation for Limiting Oxygen Index. It is a relative measure of flammability. The higher the value, the lower the flammability.

Loom:Machines for weaving fabric by interlacing a series of vertical parallel yarns (the warp) with a series of horizontal parallel yarns (the filling). The warp yarns from a beam pass through the heddles and reed, and the filling is passed through the “shed” of warp threads by means of a shuttle, or other device and is settled into place by the reed and lay. The primary distinction between different types of looms is the manner of filling insertion.

Loom-Finished:A term describing fabric that is sold in the condition in which it comes off the loom (See Greige).

Lot:A unit of production, or group of other units, or packages that is taken for sampling, statistical examination, having one or more common properties and being separable from other similar lots.

Lubricant:An oil or emulsion finish applied to fibers to prevent damage during textile processing, or to knitting yarns to make them more pliable.

Machine Direction:The long direction within the plane of the fabric, i.e. the direction in which the fabric is being produced by the machine.

Manufactured Fiber:A class name for various genera of fibers (including filaments) produced from fiber forming substances which may be polymers synthesized from chemical compounds (acrylic, nylon, polyester, polyethylene), modified, or transformed natural polymers (cellulose-based fibers like acetate and rayon) and minerals, e.g. glasses. The term manufactured usually refers to chemically produced fibers to distinguish them from truly natural fibers such as cotton, wool, silk, and flax.

Melt Index:The weight in grams of a thermoplastic material that can be forced through a standard orifice within a specified period of time.

Melting Point:The temperature at which the solid and liquid states of a substance are in equilibrium; generally the temperature at which a substance changes from a solid to a liquid.

Microdenier:Refers to fibers having less than 1 denier per filament or 0.1 Tex per filament.

Mill Run:A yarn, fabric, or other textile product that has not been inspected, or does not come up to standard quality.

Mis-pick:A weaving defect in which a pick is improperly interlaced, resulting in a break in the weave pattern.

Mock Leno:A combination of weaves having interlacing that tend to form the warp ends into groups in the cloth. This gives the imitation of an open structure that is characteristic of leno fabrics.

Modulus:The ratio of change in stress to change in strain following the removal of crimp from the material being tested, i.e. the ratio of the stress expressed in either force per unit linear density, or force per unit area of the original specimen, and the strain expressed as either a fraction of the original length or percentage elongation.

Moiré:A wavy, or watered effect on a textile fabric. It is produced by passing the fabric between engraved cylinders that press the design into the material, causing the crushed and uncrushed parts to reflect light differently.

Moisture Regain:A measure of the increase in weight due to the adsorption of water by a fiber vs. its initial dry weight. Usually expressed as %.

Monofilament:Any single filament of a manufactured fiber, usually of a denier higher than 14. Rather than a group of filaments being extruded through spinnerets to form a yarn, monofilaments generally are spun individually.

Monomer:The simple, unpolymerized form of a compound from which a polymer can be made.

Mullen Bursting Strength:An instrument test method that measures the ability of a fabric to resist rupture by pressure exerted by an inflated diaphragm.

Multifilament:A yarn consisting of many strands, as opposed to monofilament, which is one strand. Most textile yarns are multifilament.

Narrow Fabric:Any non-elastic woven fabric, 12 inches, or less in width, having a selvage on either side.

Natural Fiber:A class name for various genera of fibers of animal (wool and silk), mineral (asbestos) or vegetable (cotton, flax, and jute).

Needle Loom:A high-speed narrow fabric-weaving machine (loom) that uses a needle to insert filling across a warp. A needle loom uses a catch cord system to make a selvage on one edge of the weave and to return the pick after anchoring it within the selvage.

Nylon Fiber:A manufactured fiber in which the fiber-forming substance is a long chain synthetic polyamide having recurring amide groups (-NH-CO-) as an integral part of the polymer chain.

Olefin Fiber:A manufactured fiber in which the fiber-forming substance is any long chain synthetic polymer composed at least 85% by weight of ethylene, polyethylene, or other olefin unit. Olefin fibers combine lightweight with high strength and abrasion resistance.

Orientation:In linear polymeric structures, the degree of parallelism of the chain molecules.

Orifice:Generally, an opening. Used specifically to refer to the small holes in spinnerets through which the polymer flows in the manufacture of fibers.

Packages:A large selection of forms for winding yarn onto. Examples include a cone, cheese, and pineapple package.

Pattern

1. An arrangement of form or weaving designs; a decoration such as the design of woven or printed fabrics.

2. A model, or guide, or plan used in making things, such as a garment pattern.

Pick:A single filling yarn carried by one trip of the weft-insertion device across the loom. The picks interface with the warp ends to form a woven fabric.

Pick Count:The number of filling picks per inch, or per centimeter of fabric. Pick and end counts are two fabric specifications needed to design a fabric.

Pick Counter

1. A mechanical device that counts the picks as they are inserted during weaving.
2. A mechanical device equipped with a magnifying glass used for counting picks (and/or ends) in finished fabrics.

Pirn

1. A wood, paper, or plastic support, cylindrical, or slightly tapered, with or without a conical base, on which yarn is wound.
2. The double-tapered take-up yarn package from draw twisting of nylon, polyester, and other melt spun yarns.

Plain Weave: One of the three fundamental weaves: plain, satin and twill. Each filling yarn passes successfully over and under each warp yarn, alternating each row.

Ply

1. The number of single yarns twisted together to form a plied yarn, or the number of plied yarns twisted together to form a cord.
2. One of a number of layers of fabric.

Polyester Fiber: A manufactured fiber in which the fiber forming substance is any long chain synthetic polymer composed of at least 85% by weight of an ester of a substituted aromatic carboxylic acid, including but not restricted to substituted terephthalic units and parasubstituted hydroxy-benzoate units. They are high in strength and are resistant to shrinking and stretching.

Polyethylene Fiber: A manufactured fiber made of polymerized polyethylene units, often in monofilament form as well as in filament form. The fibers have low specific gravity, very low retention of moisture, the same tensile weight wet or dry, are resistant to mildew and insects.

Polyamide Fiber: Fully imidized, manufactured fiber formed from the condensation polymer of an aromatic anhydride and an aromatic diisocyanate. A polyamide fiber is a high shrinkage fiber.

Polypropylene Fiber: A manufactured olefin fiber made from polymers or copolymers of polypropylene. This is a tough fiber with a tenacity of 3.5 to 4.5 grams/denier and a melting point of 165° C. It is so light in weight that it floats and is highly resistant to mechanical abuse and chemical attack.

Polytetrafluoroethylene (PTFE) Fiber: A fluoride containing manufactured fiber characterized by high chemical stability, relative inertness and high melting point. The fiber has moderate tensile strength, resistance to chemicals and high temperature. It has very low frictional

characteristics and has a slippery hand. It works well in filtration, packaging, and in combination with other fibers in self lubricating bearings.

Prepreg: A ready to mold, reinforcing material, either fiber, fabric, or mat that is fully impregnated with resin and in some cases partially cured. Prepregs are then used by fabricators in laying-up and molding composites after which curing is completed.

Primary Colors: Magenta, yellow, and cyan (red, yellow, blue). These are the subtractive primaries used when mixing dyes and paints to make other colors.

Projectile Loom: A shuttleless loom that uses small, bullet like projectiles to carry the filling yarn through the warp shed. Fill is inserted on the same side of the loom and a tucked selvage is formed.

Put-Up: A term used to describe how a fabric is supplied. Put-Up is usually described in terms of length, on rolls, or bulk supplied and may have standards as to how many “cuts” are allowed per roll or box.

Quartz Fiber: Pure silica that has been melted and drawn into glass-like fibers. Used for heat resistance and high dielectric strength.

Quill: A light, tapered tube of wood, metal, paper, or plastic on which the filling yarn is wound for use in the shuttle during weaving.

Quilling: The process of winding filling yarns onto filling bobbins, or quills, in preparation for use in the shuttle for weaving.

Rapier Looms: Looms in which either a double or single rapier (thin metallic shaft with a yarn-gripping device) carries filament through the shed. In a single rapier machine, the yarn is carried across the fabric by the rapier. In a double rapier machine, the yarn is passed from one rapier to the other in the middle of the fabric.

Raw Fiber: A textile fiber in its natural state, such as silk or cotton as it comes from the bale.

Rayon Fiber: A manufactured fiber composed of regenerated cellulose as well as manufactured fibers composed of regenerated cellulose in which the substituents have replaced not more than 15% of the hydrogens of the hydroxyl group. Rayon yarns may be white or solution dyed. The process itself and the structure of the yarn regulate their strength.

Reed: A comb like device on a loom that separates the warp yarns and also beats each succeeding filling yarn against those already woven. The space between two adjacent wires of the reed is called a dent. The fineness of the reed is calculated by the number of dents to the inch. The more dents to the inch, the finer the reed.

Roll Goods: Fabric rolled up on a core after it has been produced. It is describes in terms of weight and width of the roll and length of the material on the roll.

Sailcloth: Any heavy, strongly made woven canvas, linen, jute, polyester, nylon, aramid, etc. that is used for sails.

Satin Weave: One of the basic weaves, plain, satin, and twill. The face of the fabric consists almost completely of warp, or filling floats produced in the repeat of the weave. Satin weave fabric has a characteristic smooth, luxurious surface and has a considerably greater number of yarns in the set of threads (either the warp or filling) that forms the face than in the other set.

Scouring: An operation to remove the sizing and tint used on the warp yarn in weaving and, in general, to clean the fabric prior to dyeing.

Scrim

1. A lightweight, open weave, course fabric.
2. Fabric with open construction used as base fabric in the production of coated or laminated fabrics.

Seamless: A term that describes a tubular knit, or woven fabric without seams, e.g. seamless hosiery, or seamless woven tube.

Section Beam

1. A large flanged roll upon which warp yarn is wound at the beam warper in preparation for slashing.
2. Small flanged or unflanged beams placed side by side on the shaft of a warp beam for further processing.

Selvage: The narrow edge of woven fabric that runs parallel to the warp. It is made with stronger yarns in a tighter construction than the body of the fabric to prevent unraveling. A fast selvage encloses all, or part of the picks, and a selvage is not fast when the filling threads are cut at the fabric edge after each pick.

Served Yarn: In aerospace textiles, a reinforcing yarn such as graphite or glass around which two different yarns are wound. The intent is to protect, or compress the yarn bundle.

Shot: The number of filling yarns per row of tufts.

Shuttle: A boat-shaped device usually made of wood with a metal tip that carries filling yarns through the shed in the weaving process.

Shuttless Loom: A loom in which a device other than a shuttle is used for weft insertion.

Sinker: In weaving design, a blank square indicating a filling yarn over a warp yarn at the point of insertion.

Sizing

1. A generic term for compounds that are applied to warp yarn to bind the fiber together and to stiffen the yarn to provide better abrasion resistance.

2. The process of applying sizing compounds.

Skein: A continuous strand of yarn, fabric, or cord in the form of a collapsed coil. It may be any specified length and is usually obtained by winding a definite number of turns on a reel under prescribed conditions.

Slasher: A machine used to apply size to the warp ends, while transferring the warp yarns from section beams to the loom beam.

Slit Tape: A fabric, 12 inches, or less in width made by cutting wider fabric to the desired width.

Slub: A yarn defect consisting of a lump, or thick place on the yarn caused by lint, or small lengths of yarn adhering to it.

Slug: A thick place in a yarn, or a piece of lint entangled in yarn, cord, or fabric.

Spinneret: A metal disc containing numerous minute holes used in manufactured fiber extrusion. The spinning solution or melted polymer is forced through the holes to form fiber filaments.

Splicing: The joining together of two ends of yarn or cordage.

Staple: Natural fibers or cut lengths from filaments. The staple lengths of natural fibers vary from less than 1-inch, as with some cotton fibers, to several feet for some hard fibers. Manufactured staple fibers are cut to definite length, from 8 inches down to 1.5 inches. The term staple (fiber) is used in the textile industry to distinguish natural, or cut length manufactured fibers from filament.

Static: The accumulation of negative or positive electricity on the surface of fibers or fabrics because of inadequate electrical dissipation during processing.

Stiffness: The property of a fiber or fabric to resist bending, or to carry a load without deformation.

Stop Motion: Any device that automatically stops a textile machine's operation on the occurrence of a yarn break, high defect count, etc.

Strand: A single fiber, filament, or monofilament.

Stuffors: Extra yarns running in the warp direction through a woven fabric to increase the fabric's strength and weight.

Surfactant:A surface-active agent, i.e. a product that acts by modifying the surface or boundary between two phases.

Swelling:In textile usage, expanding of a fiber caused by the influence of a chemical, solvent, or agent. A property often used to facilitate dyeing.

Taffeta:A plain-weave fabric with a fine, smooth, crisp hand with a lustrous appearance. Taffeta fabric usually has a fine cross rib made by using a heavier filling yarn than warp yarn.

Take-up (Twist):The change in length of a filament, yarn, or cord caused by twisting, expressed as a percentage of the original (untwisted) length.

Take-up (Yarn in Fabric):The difference in distance between two points in a yarn as it lies in a fabric and the same two points after the yarn has been removed from the fabric and straightened under specified tension, expressed as a percentage of the straightened length.

Tape:A narrow woven fabric not over 8 inches in width.

Tear Strength:The force required beginning, or continuing a tear in a fabric under specified conditions.

Tensile Strength:In general, the strength shown by a specimen subjected to tension as distinct from torsion, compression, or shear.

Tensile Test:A method of measuring the resistance of yarn or fabric to a force tending to stretch the specimen in one direction.

Tenter Frame:A machine that dries fabric to a specified width under tension. The machine consists essentially of a pair of endless chains on horizontal tracks. The fabric is held firmly at the edges by pins, or clips on the two chains that diverge as they advance through the heated chamber, adjusting the fabric to the desired width.

Tex

1. A unit for expressing linear density, equal to the weight in grams of one kilometer of yarn, filament, fiber or other textile strand.
2. The system of yarn numbering based on the use of Tex units.

Textile:Originally, woven fabric; now applied generally to any one of the following; staple fibers and filaments able to be converted into woven, knit, or braided fabrics, or yarns made from natural or manufactured fibers.

Textile Materials:A general term for fibers, yarn intermediates, yarn, fabrics, and products made from fibers.

Textile Processing: Any mechanical operation used to translate a textile fiber or yarn to a fabric or other textile material. This includes such operations as opening, carding, spinning, plying, twisting, texturing, coning, quilling, beaming, slashing, weaving, braiding, and knitting.

Texture: A term describing the surface effect of a fabric such as dull, lustrous, woolly, stiff, soft, fine, course, etc.

Textured Yarns: Yarns that develop stretch and bulk on subsequent processing.

Thermal Shrinkage: The amount shrinkage of a fiber measured in dry air vs. that measured in its saturated state. Usually expressed as a %.

Thermoplastic: A term used to describe a plastic material that is permanently fusible, i.e. manufactured fibers that will soften at higher temperatures.

Thermoset: A term used to describe a plastic that, once formed, will not melt.

Thread

1. A slender, strong strand, or cord, especially one designed for sewing, or other needlework.
2. A general term for yarns used in weaving and knitting, i.e. Thread Count and Warp Count.

Thread Count: The number of ends (wales) and picks (courses) per inch in a woven or knitted fabric.

Three-dimensional Weaving (3-D): To produce three-dimensional textiles, yarns are simultaneously woven in three directions (length, width and thickness), rather than in the conventional two.

Throwing: The operation of doubling or twisting silk or manufactured filament yarn.

Throwster: A company that specializes in putting additional twist in yarn.

Transition Temperature: A temperature at which some radical change, usually a phase change, in the appearance or structure of a substance occurs, i.e. melting point, boiling point.

Traveler: A C-shaped, metal clip that revolves around the ring on a ring spinning frame. It guides the yarn onto the bobbin as twist is inserted into the yarn.

Twill Weave: A fundamental weave characterized by diagonal lines produced by a series of floats staggered in the warp direction.

Twist: The number of turns about its axis per unit of length of a yarn, or textile strand. Twist is expressed as turns per inch (tpi), turns per meter (tpm) or turns per centimeter (tpc).

Twist, Direction of:The direction of twist in yarns and other textile strands is indicated by the capital letters S and Z. Yarn is S-twisted if when it is held vertically, the spirals around its central axis slope in the same direction as in the middle portion of the letter S (i.e. to the right) and Z twisted if they slope to the left, i.e. middle section of the Z.

Twist Multiplier:The ratio of turns per inch to the square root of the yarn count.

Twist Setting:A process for fixing the twist in yarns to deaden torque and to eliminate kinking during further processing. This process usually involves using steam.

Two-For-One Twister:A twister that inserts twist at a rate of twice the spindle speed.

Ultraviolet Degradation:Weakening or deterioration caused by exposure to ultraviolet rays of sunlight or artificial light.

Ultraviolet Resistance:Ability to retain strength and resist deterioration on exposure to sunlight.

Undrawn Yarn:Extruded yarn (filaments), the component molecules of which are substantially unorientated. An undrawn yarn exhibits predominantly plastic flow in the initial stages of stretching and represents an intermediate stage in the production of a manufactured yarn.

Uneven dyeing:A fabric dyeing that shows variations in shade resulting from incorrect processing, or dyeing methods, or from the use of faulty materials.

UV Absorbers:polymer additives that absorb light in the UV region, or that trap radicals produced in fiber during photo-oxidation

Vectran® Fiber:Manufactured fiber spun from a liquid crystal polymer. These fibers have high-temperature resistance, high strength and modulus, and a high resistance to moisture and chemicals, with good property retention in hostile environments.

Warp:The set of yarn in all woven fabrics, that runs lengthwise and parallel to the selvage and is interwoven with the filling.

Warp Beam:A large spool or flanged cylinder around which the warp yarn, or ends, are wound in a uniform and parallel arrangement.

Warp Drawing:A process in which a number of threadlines, are orientated under essentially equal mechanical and thermal conditions by a stretching stage using variable speed rolls, then directly wound onto the beam. This process gives uniform end to end properties.

Waterproof:A term applied to materials that are impermeable to water; waterproof fabrics have all of their pores closed and are also impermeable to air making them uncomfortable to wear.

Water-Repellent:A term applied to fabrics that can shed water, but are permeable to air and comfortable to wear.

Wear Test:A test for fabric wear, abrasion, flexibility, washing, crushing, creasing, etc., in which the fabric is made into a garment, worn for a specific length of time and then assessed for performance.

Weather-Ometer:An instrument used in measuring the weather resistance of textiles. It can simulate various weather conditions such as sunlight, rain, dew, and thermal-shock.

Weave:A system, or pattern of intersecting warp and filling yarns. There are three basic two-dimensional weaves: plain, satin and twill.

Weaving:The method, or process of interlacing two yarns of similar materials so that they cross each other at right angles to produce woven fabric.

Webbing:Strong, narrow fabric, closely woven in a variety of weaves and principally used for belts and straps that can withstand strain.

Weft Insertion:Any one of various methods, shuttle, rapier, water jet, etc. for making a pick during weaving.

Width:A horizontal measurement of a material. In woven fabric, it is the distance from selvage to selvage, and in knitted fabric, from edge to edge.

Winding:Winding is the process of transferring yarn or thread from one type of package to another.

Wind Ratio:The number of wraps that an end or ends make in traversing from one side of a wound package to the other side and back to the first side.

Woven Fabric:Generally used to refer to a fabric composed of two sets of yarns, warp and filling, that is formed by weaving, which is the interlacing of these sets of yarns.

Yardage:The amount, or length of a fabric expressed in yards.

Yard Goods:Fabric sold on a retail basis by the running yard.

Yarn:A generic term for a continuous strand of textile fibers, filaments, or material in a form suitable for knitting, weaving, braiding, or otherwise intertwining to form a textile fabric.

Yarn Construction:A term used to indicate the number of single yarns and the number of strands combined to form each successive unit of plied yarn or cord.

Yarn Number:A relative measure of the fineness of yarns.

Yarn Quality: Various grades of yarn designated by the producer with respect to performance characteristics.

Yield

1. Number of linear or square yards of fabric per pound of fiber or yarn.
2. The number of finished square yards per pound of greige fabric.

Young's Modulus:

A property of perfectly elastic materials, it is the ratio of change in stress to change in strain within the elastic limits of the material. The ratio is calculated from the stress expressed in force per unit cross-sectional area, and the strain expressed as a fraction of the original length.

Knit Design

Attached I Cord- A thick, cord-like knitted tubing for hems, borders, and edging using double sided needles.

Backstitch- A straight line stitch along a selvage, often used to seam two pieces together. This stitch creates a fluid, circular motion as the needle is inserted under two rows, and then backwards one row, and so on.

Backstitch Seam- A seam stitch used to attach two pieces of a knitting project together by placing both with right sides facing each other, selvedge edges lined up, and working the needles in two rows forward and one row backward.

Backward Loop Cast-On A common and simple form of casting on that includes a slip knot and a chain of half stitches.

Bind Off Knit- Used to complete the finishing edge of a knitting project, it requires one to first knit each loop before passing it over the next loop.

Bind Off Purl- Used to complete the finishing edge of a knitting project, it requires one to first purl each loop before passing it over the next loop.

Blocking- Used to complete the finishing edge of a knitting project, it requires one to first purl each loop before passing it over the next loop.

Blanket Stitch- Commonly used as an ornamental edge finish, it is a basic stitch of broadly spaced, interlocking loops or purls.

Bobble- The bobble stitch is a series of stitches in one specific spot that create a bump or ball-like decoration.

Brioche- A combination of tucked stitches (such as a yarn over or a slipped stitch) which form a ribbed pattern in knitting through a particular repetition of the stitches.

Cable Cast-On- A technique of casting on where a new loop is drawn through the two previous loops and added to the needle creating a denser, corded edge.

Cables- A knitting pattern that involves crossing one group of stitches over another to create many different decorative patterns that resemble cables or cords.

Cast On- This is the groundwork that forms the base for your whole project. It establishes the first row of loops on the needle from which you will perform various stitches required for the chosen pattern.

Centerd Double Decrease- A decorative stitch that results in a symmetrical pattern and requires three stitches where the center stitch is concealed by the stitch on either side of it.

Chain Stitch- A decorative stitch that resembles chain links in which each stitch forms a loop through the end of the next stitch.

Continental Knitting- A style of knitting in which the yarn is held in the left hand, instead of the right.

Couching Stitch- Sometimes used as an outline to a design for greater dimension. It's a method in which a piece of yarn is placed on top of the knitted piece, and fastened down with tiny stitches.

Cross-Stitch- A stitching technique in which pairs of diagonal knitting stitches of the same length cross each other in the middle to form a "cross" or "x" shaped pattern.

Daisy Stitch- A stitching technique used to make the petals of a flower. By bringing the needle up from the bottom of the project and back down in the same spot (which will become the center of the flower) leaving a tiny loop in the length of the desired petal, and finally securing the edge of the petal with a small stitch at the outer edge.

Double Cross-Stitch- Following the method of the cross-stitch, this stitch adds an additional two crossing stitches which result in an 8 pointed design.

Double Point Needles- Knitting needles with points on either end of needle instead of just on one end, these needles make circular knitting easier for projects such as socks.

Drop Stitch- This technique gives the knitting project a light and airy illusion by utilizing additional loops around the working needle. These elongated stitches create an appealing ribbed effect.

Duplicate Stitch- Process by which a stitch is duplicated on top of an existing stitch to add dimension or to emphasize a particular aspect of the knitting project.

English Knitting- As the opposite of Continental knitting, with English knitting, the yarn is held in the right hand and wrapped around the right needle before pulling the stitch through.

Couching Stitch- Sometimes used as an outline to a design for greater dimension. It's a method in which a piece of yarn is placed on top of the knitted piece, and fastened down with tiny stitches.

Frogging- The process of unraveling, or pulling out stitches, to redo after a mistake.

Garter Stitch- An effect that is created when every row of the pattern is knitted. The result is a ridged piece that looks identical on both front and back.

Gauge- A unit of measurement counting the rows and stitches one needs in a square of the knitting project to be sure of the accurate size of the finished product.

I Cord- A thick, cord-like knitted tubing used for hat straps, purse handles or even closures, using double sided needles.

I Cord Bind-Off- The process of creating an attached i-cord as one is binding off, creating an appealing cording finished edge.

I Cord Cast-On- Giving the same corded finished edge as the I Cord Bind-Off, this process is created during the beginning of the project as one is casting on.

Intarsia- An artistic technique in which colored yarns are used to illustrate pictures and designs within the knitting project.

Jogless Join- The process of changing colors in one's knitting process seamlessly.

Kitchener Stitch (Graft)- This stitch, also referred to as grafting, is a means to join two separate knitting pieces that have not yet been completely cast off, creating an invisible seam at the two edges.

Knit 2 Together- Method by which the right needle is inserted simultaneously into two stitches and treated as one single stitch. Used to decrease stitches.

Knit Stitch- The most basic stitch in the craft of knitting.

Knitted Cast-On- A simple method of casting on using the actual knit stitch to do so.

Lifted Increases- A method of subtly adding stitches, one stitch at a time, so the finished technique is nearly invisible.

Live Stitch- A stitch that has not yet been cast off.

Long-Tail Cast-On- A method of casting on in which one starts with a long tail of yarn and forms stitches that include the tail as well as the other side of the yarn.

Loop Cast-On- A method of casting on by forming loops and sliding them onto your needle. Often used when finishing buttonholes to cast on new stitches.

Magic Loop- The magic loop method is ideal for knitting socks or other knitting projects in the round with small circumferences. It is accomplished with a circular needle.

Make 1- A technique for increasing stitches, carried out between two existing knitted stitches.

Mattress Stitch Seam- A stitch used in the joining of two knitted pieces right along their edges in such a way that the seam is nearly invisible to the eye.

Overhand Seam- A very simple way to seam two knitted pieces together by placing them together with edges lined up and taking the threaded needle through both pieces close to the edge creating a winding seam down the outer edge of the joined sections.

Pick Up and Knit- A process of picking up stitches on a finished knitted project to add edging, ribbing, and extended pieces, taking the needle and literally picking up a stitch at the edge to begin knitting new addition.

Provisional Cast-On- A manner of casting on in which the waste yarn used can then be pulled out permitting one to continue knitting in the opposite direction. This method creates a continual with no boundaries.

Purl 2 Together- A method to decrease stitches in which one purls two loops on the left needle resulting in the two stitches becoming one.

Purl Stitch- Along with the knit stitch, this is the most basic stitch in the craft of knitting and is essentially the exact opposite stitch of the knit stitch.

Reverse I Cord- Uses the same technique as the regular I-Cord, the difference being that the thread will be pulled up towards the front of the piece.

Reverse Shaping- The process of knitting a mirror image of another part of a knitting pattern as when you are making a cardigan sweater and the two front panels are the exact opposite shape of one another.

Reverse Single Crochet- Often referred to as the "crab stitch," this process requires one to crochet single stitches in the opposite direction of the common method. It produces a sturdier edging to projects and provides a decorative ridge along afghans and blankets, sweater necklines, and other pieces.

Ribbing- The intended outcome when one combines knit and purl stitches in the same row to create a stretch fabric ideal for sleeves and neck holes.

Running Stitch- A straight, over-and-under stitch which can run diagonally or horizontally and vertically over a knitted piece.

Satin Stitch- A series of flat stitches embroidered close together on top of a knitted project, used to make decorative designs and embellishments.

Selvage (Selvedge)- A practice in which a reinforced edge is formed on a knitted project by alternating the stitch pattern at the start and finish of each row, creating a finished edge or one prepared for seaming.

Sewn Bind Off- A good bind off to pair with the long tail cast-on and ideal for toe up socks and neck edges. The sewn bind off is a loose knitting bind off that requires one to leave a tail of yarn that is then sewn through the stitches as they are dropped creating a clean, finished edge.

Single Crochet- This stitch is the most common and basic crochet stitch on which all other crochet stitch variations are built.

Slip Knot- This functions as the first stitch in your knitting project, the starting point.

Slip, Slip, Knit- A method of decreasing stitches by slipping, this slants to the left.

Slip, Slip, Purl- A method of decreasing stitches by purling, this slants to the right.

Slip Stitch- A practice in which a stitch is moved from one needle to the other and eliminating the knit or purl stitch.

Stem Stitch- This delicate and decorative stitch emerges as a thin line and is ideal for outlining shapes in curved or straight lines.

Straight Stitch- Sometimes referred to as the stockinette stitch, it is created by alternating between a row of knit stitches and a row of purl stitches. The knit side emerges as smooth, while the purl side is ridged and bumpy.

Stocking Stitch- A decorative embroidery stitch in long, straight lines for outlining or grouped together for form patterns and shapes.

Suspended Bind-Off- While this technique of binding off is very similar to the standard method, the suspended bind off leaves a more loose and flexible edge.

Tink- A term used to fix a mistake by unknitting back to the incorrect stitch and fixing it. This is typically recommended only for short distances, not entire rows. Tink is knit spelled backwards.

Three Needle Bind-Off- This method of binding off uses a third needle to remove two pieces of knitting at the same time. The result is that they are automatically stitched together in a nice, neat seam.

Twisted Cord- Another type of cord used for drawstrings, ties, purse straps or handles, it is a process of tightly twisting several strands of thread and allowing them to naturally form a decorative, twisted patterned cord.

Twisted Knit Stitch- A decorative way of stitching that creates cables and ribbed looking designs; it is the result of a regular knitting stitch but performed from the back of the loop instead of the front.

Twisted Purl Stitch- A decorative way of stitching that creates twisted and winding cable patterns and ribbed looking designs. This look is the result of having the yarn in front and inserting right needle through the back loop to completing as a purl stitch.

Whipstitch- This is a visible seamed stitch created by working the threaded needle from back to front down the entire length of the knitted piece.

Work Even- This is the process of working the pattern straight without any increases or decreases, with no shaping.

Wrap and Turn- A technique ideal for short row knitting, in place of turning around the piece and knitting back the in the other direction, one wraps the yarn around an adjoining stitch.

Yarn Over drop stitch- A yarn over creates a hole, either for decoration or as a functioning buttonhole. The yarn over drop stitch is accomplished by knitting one stitch, yarning over twice to create an extended stitch.

Yarn Over Knit- A yarn over creates a hole, either for decoration or as a functioning buttonhole. The yarn over knit is accomplished by bringing the yarn around the right-hand needle from back to front, wrapping yarn counter-clockwise around needle, and taking the yarn around to the back, then knitting the next stitch.

Yarn Over Purl- A yarn over creates a hole, either for decoration or as a functioning buttonhole. The yarn over purl is achieved by taking yarn from front to back over the right-hand needle, wrapping counter-clockwise until the yarn is in front, then purling the next stitch.

Knitting Abbreviations

Alt. - alternate (verb)

Beg. - beginning

Cont. - continue

Dec. - decrease

Foll. - following

Folls. - follows

G. St. - garter stitch
Inc. - increase
Incl. - inclusive
K - knit
m1 - make one
M.St. - moss stitch
P - purl
Patt. - pattern
p.s.s.o. - pass slipped stitch over
Rep. - repeat
Sl. - slip
St. - stitch
St. St. - stocking stitch
Tbl. - through the back of the loop
Tog. - together
yb - yarn back
yfwd - yarn forward
yf - yarn front
yrn - yarn 'round needle

Embroidery- A Ready Reckoner

Appliqué.

A smaller piece of embroidery sewn or attached to another material. An appliqué is usually one piece applied for the purpose of decoration. The term is borrowed from French and, in this context, means 'applied'. Appliqué is a surface pattern that is used to decorate an aspect of a garment or product.

Arrowhead Stitch.

Two straight stitches are connected in the middle to form a 'V' shape. This stitch can be used as a decorative design if a series of arrowhead stitches are sewn.

Bump.

Soft String or felt can be used to create a raised surface for embroidery. Used in Goldwork to lift the metallic threads off the surface of the material. The raised area is referred to as Bump

Basting Stitch.

A longer version of a running stitch, used for keeping fabrics together temporarily and able to be removed easily.

Back Stitch.

The Back stitch is formed by starting off with one straight stitch and then coming up from the front of the line and connecting back to the previous stitch. Just like its name, it is a stitch that is worked backwards.

Blanket Stitch.

A blanket stitch is mostly used to finish off the hems of thick fabrics and it is a bigger version of a buttonhole stitch. The thread is brought from inside the edge of the fabric and worked along down the hem. It creates a strong barrier at the hemline helping to keep fabric from fraying.

Bullion Stitch.

Working on a back stitch, thread is wrapped around the needle before it is passed through the wraps and stitched into the fabric. It creates a stitch that has thread wrapped around it making it look similar to Bullions. Shorter versions of the Bullion stitch is also known as a Bullion knot.

Chain Stitch.

The chain stitch is a series of loops that is connected by stitches forming a chain like effect. It is also the stitch that is created when doing Tambour embroidery.

Chenille.

Meaning fuzzy or caterpillar in French, Chenille comes in silk threads which can be used in embroidery to create a fluffy effect.

Couching.

In embroidery, couching and 'laid work' are techniques in which yarn or other materials are laid across the surface of the ground fabric and fastened in place with small stitches of the same or a different yarn. This is often used in goldwork where 'passing' is couched down. The couching threads may be either the same colour as the laid threads or a contrasting colour. When couching threads contrast with laid threads, patterns may be worked in the couching stitches.

Dégradé.

The French word for 'shading' in embroidery it describes the effect when a dense colour or pattern graduates away to nothing over the length of a material. A sleeve with a dégradé effect may be densely beaded at the shoulder before gradually becoming less beaded at the cuff.

Knotted Diamond Stitch.

Worked along two parallel lines, the Knotted Diamond stitch creates a cross stitch effect with knots in all intersections. This stitch can also connect two different fabrics together as it is worked along two different lines.

Epaulettes.

From the French word meaning 'Little Shoulder'. An Epaulette is an ornamental shoulder decoration used as insignia of rank by armed forces and other organisations. In several European armies epaulettes are also worn by all ranks of elite or ceremonial units when on parade.

Frogging.

A Frog or Chinese Frog is an ornamental braiding for fastening the front of a garment that consists of a button and a loop through which it passes. Frogs are usually meant to be a design detail. Where many frogs are repeated beyond practical needs, this purely decorative form is termed 'frogging'.

Fly Stitch.

The fly stitch is sewn on with three points which creates a 'V' or a 'Y' shape depending on the length of the holding stitch.

Gilt.

In embroidery term Gilt refers to the the bullion thread used to embroider Goldwork. ‘Gold bullion’ is 2% Gold whereas Gilt is plated in Gold. Gilt is considered the more affordable option.

Goldwork.

Using metal threads, Goldwork embroidery is often used in military and ceremonial garments. It is a technique prized for the material’s ability to catch and reflect light.

Goldwork Royal Order of the Garter

Hardanger.

Hardanger is an ancient Persian form of embroidery traditionally worked with white thread on white even-weave cloth, using counted thread and drawn thread work techniques. It is sometimes called whitework embroidery.

Herringbone Stitch.

Used as a decorative stitch or a finishing for hemming, the Herringbone stitch works across two parallel lines connecting them together.

Ikat.

A dyeing technique used to pattern textiles that employs a resist dyeing process similar to tie-dye on either the warp or weft fibres prior to weaving. The word ikat derives from the Indonesian word meaning ‘to tie’

Interlaced Stitch.

With straight stitches used as a base, another thread is run under the straight stitches to create an interlaced effect. It can be used on single, double or triple lines of straight stitches to connect them together without doing through the fabric.

Jacobean.

A form of crewel embroidery used for furnishing characterised by fanciful plant and animal shapes worked in a variety of stitches with two-ply wool yarn on linen. Popular motifs in Jacobean embroidery, especially curtains for bed hangings, are the Tree of Life and stylised forests, usually rendered as exotic plants arising from a landscape with birds, stags, squirrels, and other familiar animals.

French Knots.

A knotted stitch is any embroidery technique in which the yarn, bullion or thread is knotted around itself.

Lunéville.

Lunéville or Crochet de Lunéville is a French term for drum and tambour work. The embroidery done with a hook working through a fabric stretched tight as a drum. A tambour hook makes one stitch, the chain stitch. The hook is held on top of the frame with the threaded beads or sequins underneath.

Monogramming.

Typically, a motif of two or more interwoven letters, such as a person's initials, used to personalise a possession or garment.

Moorish Stitch.

The Moorish stitch is a series of diagonal stitches with a pattern that runs along the design. With smaller stitches filling up spaces in between, it can be used to fill up larger areas with embroidery.

Needles.

Different embroidery needles do different jobs. There are several commonly used embroidery needles. Embroidery (or 'crewel') needles have sharp points and slightly elongated eyes. They're used for crewel work and most surface embroidery where piercing through the fabric threads is necessary to the stitching. Tapestry needles have long eyes and blunt points. They're used for counted work, drawn thread work, canvas work, or other types of needlework in which the point of the needle is not meant to pierce the fabric threads. Chenille needles have a long eye like the eye on tapestry needles, but a sharp point, and can be used effectively in crewel work and other wool embroidery, or any surface work where a longer eye and a sharp point is desired. Straw or milliner needles have an eye and shaft that are equal in thickness, which makes them ideal for French knots and bullion knots, or any stitch where the needle must pass through multiple wraps of thread.

Or Nué.

Or Nue (or shaded gold) is a form of goldwork embroidery using couching where different coloured silk threads are stitched over the metallic base of gold threads to form patterns or designs, often figures or narrative scenes.

Pouncing.

A method for transferring designs onto fabrics. A fine powder (Pounce), made from ground charcoal, chalk dust or powdered crayfish shell is dusted over a stencil to transfer a design to an underlying surface.

Patches.

Patches are ready made embroidery designs with an iron on back allowing consumers to attach them to any garment they wish to.

Quilting.

The word 'quilt' comes from the Latin culcita meaning a stuffed sack. Quilting is the process of sewing of two or more layers of material together to make a thicker padded material.

Queen Stitch.

This stitch consists of four straight stitches that starts and ends on the same point. A straight stitch is the horizontally stitches in the middle forming an orb like shape. It can be used to cover entire fabrics with embroidery.

Rough Purl.

Rough Purls are very fine wire threads in a tubular shape with a smooth surface and has a matte appearance (in contrast to the smooth purl which has a shiny appearance).The thread typically comes in two or three lengths to make up one yard. All of the purl threads are a hollow soft and flexible metal tube. The tube is cut up into pieces and sewn down like a bead.

Running Stitch.

A basic straight stitch with even stitches. Just like its name, the thread runs through in and out of the fabric.

Rice Grain Stitch.

Similar to a straight stitch, it is a series of small stitches but with shorter stitches on the top of the fabric compared to the bottom. It is also known as the seed stitch.

R is for Raised Chain Band.

With rows of straight stitches as a base, chain stitches are used to create a raised effect. Just like its name, the final result looks like a row of braids.

Spangles.

Small, thin, often circular piece of glittering metal or other material, used especially for decorating garments.

Su Embroidery.

Originating from the province of Suzhou in China, these works of art are made from fine silk thread on silk fabrics. They split high quality silk thread into thinner strands which allows them to produce more details and depth to their work.

Satin Stitch.

A common stitch used in embroidery for covering larger areas, the satin stitch is a simple straight stitch that is sewn closely together and can be shaped into any space that needs to be filled.

Stem Stitch.

A stem stitch is similar to a Back stitch. However the thread is put under the middle of the previous stitch connecting the stitches together.

Twill.

A type of fabric which has a distinct pattern of parallel ribbing usually made of cotton or polyester. Because of the structure of the ribbing, it is a durable fabric.

Unpicking.

Confusingly sometimes called Frogging in the US. Unpicking is removing threads when a mistake is made or when you are de-constructing an outfit.

Underlay.

A layer of underlay stitches are used to stabilise an area of embroidery before the actual stitches are sewn onto it. It prevents fabric from pulling the fabric when stitching.

Underside Couching

A popular technique in 'Opus Anglicanum', underside couching is a technique where a thread is placed on the surface of the material while a second thread is brought up from the backside of the material and then used to encircle the laid thread. The tying thread is returned through the same hole and pulled with a gentle 'pop' to create a hinge.

Vermicelli.

A chain stitch design accomplished by tambour or Cornelli Machine usually described colloquially as a 'squiggly' line. The technique is named vermicelli after the pasta because of its appearance. It is also sometimes referred to as 'cornelli couching'.

Velvet Stitch.

It is a special stitch used to create a fuzzy ‘velvet’ effect by keeping the stitches loose while securing down each loop. After an area is filled, the loops can be cut to create the fur like fuzzy effect.

Wheat Ear Stitch.

Two straight stitches are met in the middle creating a ‘V’ and a loop stitch is used to connect to it. A series of these stitches will create a result that portrays a sheaf of wheat.

Woven Wheel Stitch.

Five straight stitches are met in the middle and is used to create a base for this stitch. Then another thread is used to wrap around these straight stitches in different lengths. The spiral shape in the end looks like a flower and often used in embroideries portraying nature.

Extra Pearl Purl.

A type of Pearl Purl used in Gold work. Pearl Purl is available in three different sizes – very fine, Extra and Super. Extra would be ideal to use in a larger area of work, whereas very fine is suitable for smaller areas.

Zig Zag Stitch.

A back-and-forth stitch used where a straight stitch isn’t suitable, such as in reinforcing buttonholes, in stitching stretchable fabrics, or when temporarily joining two work pieces edge-to-edge.