

## GLOSSARY

**3D body scanning** A body scanner captures information about the surface of an object, creating something called a point cloud. This data can then be used to reconstruct the object as a virtual model, sometimes called an avatar.

**Abrasion** The progressive loss of fabric caused by friction with another surface.

**Absorption** The process of one material (the absorbent) taking in another (the absorbate). An example of absorption is a sponge (the absorbent) soaking up water (the absorbate).

**Acrylic** Polymer that contains the acryloyl group derived from acrylic acid.

**Adsorption** Adhesion of a thin layer of gas, liquid or dissolved solid (the absorbate) to a surface (the absorbent). Adsorption is an important process in a number of applications, for example for the development of non-stick coatings.

**Air-jet spinning** A method in which high-pressure air is used to impart twist to drafted fibre strands.

**Allocated/allocation** The process of distributing garments to individual retail outlets to ensure that stock levels are maintained.

**Amorphous** The physical state of a material where there is a relatively unorganised molecular structure.

**Anionic** Describes a substance that exhibits negatively charged ions. Acid, direct and reactive dyes are examples of anionic dyes.

**Apron** The cloth attached to the front and back beam of the loom, to which the warp is tied.

**Aramid** Synthetic fibre that is extremely strong and heat resistant. The fibre-forming substance is a long-chain synthetic polyamide. Aramids are commonly used to make heat-resistant clothing.

**Art Deco** Style of decorative art popularised in the 1920s and 1930s, exemplified by the use of geometric motifs, sharply defined outlines, bold colours and the use of synthetic materials such as plastics.

**As-spun (partially drawn) yarn** Produced by extrusion of molten polymer filaments that are stretched whilst being cooled.

**Atmospheric gas fading** Also known as fume fading, this is colour change in a fabric caused by acid gases in the atmosphere.

**Augmented reality** Interaction with the real world that is enhanced by the use of technology.

**Avatar** A 3D model or 2D icon that represents a real person on a computer or the Internet.

**Ballets Russes (Russian Ballet)** The 'Ballets Russes' was a travelling ballet company, directed by Sergei Diaghilev, that performed between 1909 and 1929 in a number of countries – including England, France and the United States.

**Barré** A fault in a weft-knitted fabric appearing as a light or dark stripe, and arising from differences in lustre, knitting tension or dye affinity of the yarn.

**Beat up** The pushing of the weft yarns into place with the reed.

**Biaxial fabric** Fabric manufactured using two sets of yarn (warp and weft).

**Bi-component filament yarn** A yarn produced from two different polymer components brought together at the fibre-extrusion stage.

**Binder** An extra warp thread used to tie down weft floats.

**Biotextile** Textile used in specific biological situations to perform a function within the body. Examples of biotextiles include surgical sutures, artificial arteries, artificial skin and parts of artificial hearts.

**Bleaching** The process of improving the whiteness of a textile material by oxidation of the colouring matter.

**Blended/compound yarn** Yarns manufactured through the mixing of different yarns together.

**Blog** A web log or online journal.

**Boat shuttle** Used to pass the weft thread through the shed. Made with or without rollers underneath. The hollow cavity in the shuttle holds a purn of weft yarns that are released whilst the shuttle is passed through the shed. The shuttle without rollers is normally used for intricate work, whilst the shuttle with rollers is used to quickly pass the shuttle across the whole width of the warp.

**Bobbin or purn** Hand made from paper or wood or plastic, it holds wound weft yarns, and the bobbin or purn is then placed into a boat shuttle.

**Bobbin winder** Hand operated or electric, winds weft yarns evenly onto purn.

**Braided structure** Structure constructed from three or more interlacing strands. May be two dimensional or solid.

**Branding tag** Decorative addition to a garment to re-inforce the brand. Can be attached permanently or can be hung with the swing tag – could be made of more permanent material than the swing tag.

**Brand value** Quality that a brand is trying to communicate to its customers.

**Breaking tenacity** See Tenacity.

**Brightness** In terms of describing colour, the converse of dullness.

**Bulkiness** A measure of size.

**Cabled/corded yarn** Yarn made by twisting ply yarns together, with the final twist usually in the opposite direction of the ply twist. Where the corded yarn is twisted in the opposite direction to the S-twist of the single-ply yarns, the corded yarn is said to have an SZS form. Otherwise, the corded yarn has an ZSZ form. Corded yarns are commonly used for rope or twine.

**Calico** A plain-woven cotton fabric, usually unbleached, used for making toiles.

**Carbonisation** The process of removing cellulosic impurities from wool by treatment with mineral acid.

**Carding** The conversion of cleaned and blended tufts into individual fibres.

**Care label** Carries care instructions for cleaning and effective care of a textile product.

**Cationic** Describes a substance that exhibits positively charged ions. Basic dyes are cationic.

**Cationic retarding agent** A product used to retard the strike rate of basic (cationic) dyes on acrylic fibres by competing with the dye for access to the fibre.

**Chiffon** Lightweight sheer fabric with a plain weave.

**Chinoiserie** Chinoiserie is a decorative style, where art and objects are designed in imitation of traditional Chinese motifs. This style began in the late seventeenth century and was particularly popular in eighteenth-century Europe.

**Colour fastness** The property of a dyed material in terms of colour loss, change of shade and the staining of other fibres when subjected to various tests designed to simulate appropriate use and aftercare conditions.

**Colour match prediction** The process of predicting a best available dye recipe from an historical database using either visual or instrumental methods.

**Combing** The process of arranging filaments into a strict parallel form.

**Competitive analysis** Attempting to understand what a competitor is developing in terms of product and how they are reacting to change.

**Concession** A space in a store allocated to a run by a specific brand. The store will take a percentage of the turnover of the concession in return for use of the space.

**Continuous-filament yarn** Consists of one or more filaments of specified and equal length.

**Copyright** Laws that protect the rights of the creator of an original work.

**Core consumer** The target customer that a brand is trying to attract and sell to. All brands will have a core consumer even though there will be other people who will buy their product.

**Core-spun yarn** Yarn which is made by twisting a fibre around a central filament core, which is often polyester. Core-spun yarn is stronger than normal yarn.

**Costing sheet** A statement that calculates the final cost of a garment by generally taking into account the following: fabric, trimmings, labour, hangers/package and mark-up.

**Count** The size of yarn (a ratio between the length and the weight of the yarn).

**Counter-culture (counterculture)** A sociological term used to describe a cultural group, or subculture, whose values and behaviour are in opposition (run 'counter') to those of the social mainstream.

**Cover** The cover factor is the ratio of the fabric surface occupied by the yarns to the total fabric surface.

- Covered yarn** A combined yarn consisting of a central fibre with a second fibre wrapped around it.
- Craftivism/craftism** A dynamic and politicised twenty-first century crafts movement that aims to reclaim hand crafts – knitting, sewing and other crafts traditionally viewed as ‘women’s work’ – using them to make political statements (mostly anti-war, anti-capitalist or pro-freedom) and by giving them significant meaning.
- Crimp** The crimp of a fibre describes its wavy physical structure. The crimp of a yarn describes the wavy configuration of a yarn interlaced in woven fabric.
- Critical path** The plan of action that helps to achieve the objectives of ‘from concept to realisation and promotion’.
- Croissure** A technique of twisting silk over itself during reeling in order to consolidate the filaments and remove extra moisture.
- Cross-sticks** Two sticks tied together at each end, which are placed through the cross of the warp to hold it secure.
- Crystalline** The physical state of a material where there is a relatively organised molecular structure.
- Cubism** Defined by its use of geometric forms in highly abstracted works, Cubism was an avant-garde art movement pioneered by Pablo Picasso (1881–1973) and Georges Braque (1882–1963) in Paris between 1907 and 1914. Cubism was one of the most influential visual art styles of the early twentieth century.
- Culture** A term describing the particular characteristics of a specific geographical region (e.g. British culture), civilisation (e.g. Mayan culture) or group (e.g. youth culture, drug culture), in a specific period of time. It can include the habits, attitudes, belief systems, values, artefacts and politics of a particular group of people at a particular point in time.
- Customer profile** An analysis of a hypothetical customer where age, salary, socio-economic class, disposable income after bills and lifestyle become the focus with a view to developing relevant products.
- Cuticle** Skin of the cotton fibre.
- Degumming** Removal of the gums from bast fibres and silk.
- Demographics** The statistical data of a population such as the average age or income.
- Denier** The weight in grams of 9000 m of fibre or yarn.
- Dent** The space between two wires in the reed.
- Desizing** The removal of the sizing material from warp yarns after a fabric is constructed.
- Detergent** A chemical composition that removes soiling and is produced by chemical synthesis.
- Digital immigrant** An individual born before digital technology existed but who has adopted it in his or her life.
- Digital native** Refers to someone who grew up with twenty-first century new technology, or was born during or after the introduction of digital technology, so that it became second nature to them.
- Directoire style** In fashion, a style that mixed ancient classical features with modern elements. For men, trousers and high boots, vests, long, open coats, and top hats; while women dressed in light, long-sleeved chemises with V-shaped necklines and ruffled caps.
- Dispersion** In dyeing terms, this refers to a state where a relatively insoluble dye is held in an aqueous suspension to facilitate its transfer to the fibre.
- Disruptive pattern material** Camouflage print, variations used by the armed forces worldwide depending upon the terrain in which they are serving.
- Distribution channel** The retail environment: online or bricks and mortar.
- Doup** A long loop above and below the eye of a heddle.
- Drape** This describes the arrangement of a loosely wrapped cloth.
- Draw-down ratio** The relation between the rate at which filaments are pulled from the spinneret and their molten flow speed into the spinneret.
- Drawing** The attenuation of extruded polymer fibres during the spinning process.
- Dry spinning** Differs from wet spinning in that solidification takes place through evaporation of the solvent.
- Dystopia** A depressing imagined society where everything is as bad as it can be, characterised by human misery, oppression, disease, squalor and overcrowding.

**Edo period (Tokugawa period)** Also known as the *sakoku jidai* – the period of isolation. A period in Japanese history established by the shogun Tokugawa Ieyasu. The Tokugawa shogunate ruled over Japan for over 250 years from 1608 to 1868. During this peaceful time in Japanese history, Japan became almost completely isolated from the West, and its culture developed without Western influence.

**Elasticity** The ability of a material to recover its original shape after deformation.

**Elastomer** Amorphous polymer existing above its glass transition temperature so that considerable flexibility of motion exists. Elastomers usually display a higher failure strain and lower Young's modulus than other materials.

**Elongation** The ratio of the extension of a material to its length before stretching.

**End** Each warp thread is called an end. Multiples are ends.

**Epi or epcm** The number of warp threads, or ends per inch or cm in a cloth is written as ends per inch/cm (epi or epcm).

**Extension** A material added to an already existing material in order to enlarge it.

**Fabric** A cloth produced by knitting, weaving or felting fibres.

**Fancy yarn** A yarn that has deliberately introduced irregularities in its construction.

**Fashion (design)** Commonly used to refer to clothing that follows contemporary trends.

**Fashion forecasting** Forecasts 18 months to 2 years ahead of a season. This is done by gathering intelligence material from the latest stores, designers, brands, trends and business innovations in leading fashion capitals of the world.

**Fibre** A natural or synthetic filament that may be spun into yarn.

**Fibrillation** The process of splitting filament, tape or textile film longitudinally into a network of interconnected fibres.

**Filament** A continuous fibre of long length.

**Fineness** A relative measure of size, diameter, linear density or mass per unit length expressed in a number of different units.

**Flat or untextured yarn** Yarn that is straight along its length with little bulkiness.

**Flat stick** Used when winding on the warp to the back beam. Prevents warp yarns from sticking together and provides even tension across the warp.

**Float** When a warp or weft yarn crosses more than one other yarn at a time, then floats are formed.

**Fluorescent brightening agent** A product that has the ability to convert ultraviolet radiation into visible light, thereby increasing the apparent whiteness of a material to which it is applied.

**Gel spinning** A process in which partially liquid polymer filaments are cooled in a liquid bath. It produces highly oriented and therefore very strong fibres.

**Geotextile** A permeable textile material used in ground engineering for applications such as stabilisation, reinforcement or drainage.

**Gilling** The straightening and blending of fibres to improve evenness.

**Ginning** A process for separating cotton fibres from the seed in order that the fibres may be spun into yarns. Machines used for ginning may be either saw gins or roller gins.

**Globalisation** Refers to the breaking down of inter-cultural barriers (e.g. language, geographical distance, differences in behaviour) and has brought about a closer integration of the countries and people of the world.

**Greige** Fabrics that have not received any finishing treatments after being produced by any textile process.

**Guerilla Art** Unauthorised art that appears surreptitiously (and often suddenly) in a public place, particularly when its intention is to make a political statement. It is a form of street art with a political message, often of dissent, and often created by anonymous artists.

**Hand/handle** The quality of a textile as perceived by touching or feeling.

**Handwriting** The visual identity of the brand in the form of a logo and its application.

**Harajuku** An area of Japan, renowned for its distinctive street fashions.

- Haute couture** A French term, meaning 'high sewing', or 'high dressmaking'. Refers to fashion that is created specifically for a single individual, at great expense – traditionally fashion for a very wealthy elite.
- Heat setting** The treatment of thermoplastic fibres or fabrics with heat to set them into a specific shape or form.
- Heddle** A thin wire loop that is attached to the shaft.
- Heterogeneous** Dissimilar, composed of widely varying elements.
- Homogenised** To make uniform or similar, with no diversification.
- Hue** The attribute of colour whereby it is recognised as being red, green, blue, yellow, violet, brown, etc.
- Hydrophilic** Materials that have an affinity for water.
- Hydrophobic** Materials that do not have an affinity for water.
- Hygroscopic** Tendency of a material to absorb water.
- Illuminant** A source of light. In dyeing terms, this may include natural daylight and sources such as artificial daylight, tungsten-filament and retailers' specified store lights.
- Incentive** Reward given to encourage custom, such as reductions in price or giveaways.
- Instrumental match prediction system** A system for predicting the best available dye recipe using a spectrophotometer to measure the reflectance value of a standard, and comparing this with a database of the reflectance values of proposed dyes.
- Isotropy** Having identical properties in all directions.
- Japonism, Japonisme, Japonesque** Describes the influence of Japanese artistic principles on those of the West. Works that arise from the transfer of Japanese artistic principles onto Western artefacts, particularly those by French artists, are called *japonesque*.
- Kimono** A loose, wide-sleeved robe, fastened by a wide sash (*obi*) at the waist, characteristic of traditional Japanese costume. The word 'kimono' literally means 'thing to wear'.
- Levelness** The state of a dyed material in terms of evenness of dye application.
- Linear density** Mass per unit length expressed as grams per centimetre.
- Lumen** The central core.
- Lustre** The amount of light that is reflected off a textile material.
- Marketing mix** The four P's – product, price, place and promotion; the extended mix adds people, process and physical evidence.
- Market research** Research that can encompass the latest fashion designs, relevant current designers, new digital technologies, new technologies in terms of materials, methods and production techniques, influences, inspiration, questionnaires with significant consumers, focus groups and feedback on findings.
- Mass market** An overwhelming group of consumers using, for example, the same household product.
- Meiji period** The Meiji (meaning 'enlightened rule') era (1868–1912) was a period in Japanese history that followed the Edo period of isolation. During the Meiji era, Japanese society underwent fundamental modernisation to establish Japan as a modern nation-state.
- Melt spinning** A process in which the polymer is melted, extruded and cooled before the filaments are collected. It enables the production of filaments in a variety of cross-sectional shapes.
- Mercerisation** The treatment of cellulosic fibres with a strong basic solution to swell the fibres and produce permanent changes.
- Metallic yarn** Yarn made of monofilament fibres or ply yarns, laminated with a layer of aluminium.
- Microfibre** Manufactured fibres with a denier of less than 0.5, or weight less than 50 µg per metre.
- Microfibril** A very fine fibril (fine element bundles of which constitute a fibre).
- Micronaire** An indicator of the maturity and fineness of cotton fibre.
- Migration** The movement of a dye or pigment from one part of a material to another.
- Modulus** The resistance to stretching of a textile.
- Moisture regain** The amount of moisture measured in material under prescribed conditions and expressed as a percentage of the weight of the moisture-free specimen.

**Multicultural** A multicultural society is one that represents, or is made up of, several different cultures or cultural elements.

**Nanotechnology** Nanotechnology refers to the science and technology of manipulating the structure of matter at the molecular level and to the manufacture of objects with dimensions of less than 100 nm. (A nanometre is 1000 millionth part of a metre.)

**Nap/nep** A small knot of entangled fibres that will not straighten to a parallel position during carding or drafting.

**New technology media channel** The Internet, Facebook, Twitter, instant messaging, virals, blogs, YouTube, podcasts, webcasts, and e-mail.

**Niche market** Where there is market demand for a very specialised product. The four C's were devised with 'niche' in mind – consumer, cost, convenience and communication.

**Nonionic** Describes a substance with neutral ionicity. Some detergents are nonionic.

**Non-sanforised** Fabric that has not been subject to a process of stretching, shrinking and fixing in length and width before cutting and garment production.

**Nonwoven fabric** A fabric produced by bonding or interlocking of fibres (as distinct from yarns) into webs. The web structure is stabilised by mechanical, chemical or thermal means, or by treatment with a solvent.

**Novelty yarn** Used for decorative purposes and seldom used to make an entire fabric. It is usually of the fancy or metallic type.

**Number average molecular weight** The average molecular weight of a polymer chain in a sample.

**Olefin** Synthetic fibre manufactured from polyolefins. It has low weight, good strength, colourfastness and comfort. Olefins also have low moisture absorption and good resistance to abrasion, mildew and sunlight.

**Op Art** An art movement of the 1960s typified by the use of optical illusion, often in black and white.

**Opening** Breaking down a cotton bale into clumps of fibres.

**Orientalism (Orientalist Movement)** Imitation or depiction of aspects of the East (or Orient) by Western writers, designers and artists.

**Paisley (shawl)** A design pattern that originated in India, Pakistan and Persia (now Iran). The Scottish town of Paisley produced shawls for the longest period of time and with the greatest level of economic efficiency. The name of the design therefore became synonymous with the place of manufacture.

**Pick** Each weft thread is called a pick. Multiples are picks.

**Pile fabric** Fabric with tufts or loops of fibres standing up from the base fabric.

**Pilling** The tendency of a synthetic fabric to form small balls of entangled fibre during abrasion or use.

**Ply yarn** A yarn formed by twisting together two or more single yarns.

**Polyamide** A polymer in which the short chain (monomer) units are linked together by the amide group – CONH–. An example of a naturally occurring polyamide is silk, and a synthetic polyamide is nylon.

**Polycondensation** A reaction during which polymers are formed from smaller (monomer) units and that involves removal of simple compounds such as water.

**Polyester** A polymer in which the monomer units are linked together by the group –COO–.

**Polynosic** A modified viscose with high tensile strength even when wet.

**Pop Art** An art movement that emerged in Britain in the 1950s as a response to the mass-consumerism of the post-war period and as a rejection of traditional views of art (particularly abstract art) that Pop Artists considered pretentious and elitist. Pop Art used commonplace images from popular culture for inspiration, for example comic books, supermarket products, billboards and magazine advertisements.

**Popular culture (pop culture)** Can be described as culture for mass-consumption. The sum of ideas (e.g. political, or religious), attitudes, values, lifestyle (e.g. music, film and fashion) and items (including art) that surround the everyday lives of people in a particular society, are well known and generally accepted and considered mainstream by informal consensus.

**Ppi (ppcm)** The number of weft threads, or picks per inch or cm, in a cloth is written as picks per inch/cm (ppi or ppcm).

**Qualitative research** Involves analysis of data, from interviews, video, or artefacts.

**Quantitative research** Involves the analysis of numerical data often acquired by filling in questionnaires.

**Raddle** Used for spacing the warp yarns onto the warp beam before winding the warp on to the loom. It consists of wooden pegs set into a heavy base, with a removable top. The raddle usually has two spaces (dents) to 1 inch (2.5 cm).

**Rayon** A manufactured fibre composed of regenerated cellulose derived from wood pulp, cotton linters or other vegetable matter.

**Reduction clearing** An after-treatment to improve the colour fastness of polyester dyed with disperse dyes, using sodium hydroxide and a reducing agent, sodium hydrosulphite.

**Reed** Spaces the warp yarns after the warp has been wound onto the warp beam and threaded through heddles. The reed is also used to beat up the weft yarn after it has been passed through the shed. Its length varies depending upon the width of the loom, and its size is defined by the number of spaces (dents) between each fine piece of wire to one inch, i.e., 30 dents to one inch (2.5 cm). Two, three or four warp yarns are normally placed in each dent.

**Reflectance curve** A graphic representation of the percentage of light reflected from a substrate at 16 points at wavelengths between 400 and 700 nm.

**Resiliency** The ability of a textile to recover its original shape after a distortion, such as stretching.

**Retting** Immersion in water in order to aid separation of the fibres from a woody tissue.

**Ring spinning** The most widely used method of staple fibre yarn production, in which fibres are twisted around each other to give strength to the yarn.

**Roving** A process of lengthening and twisting fibres.

**RSS feed** Really Simple Syndication feed – used to publish frequently updated work such as news headlines and blog entries on websites.

**Scouring** A wet process for removing dirt or impurities from textiles by application of chemicals or surfactants.

**Segmentation** The sub-division of the mass market for more accurate market targeting.

**Selvedge** Runs lengthwise in the warp direction of all fabrics. Formed when the weft yarn turns to go back across the warp.

**Sett** A series of woven threads crossing at right angles.

**Shed** The opening formed by lifting the warp threads, or ends, on the loom, through which the weaver passes the next weft thread, or pick. The depth of the shed should be a little more than the depth of the shuttle used. The deeper the shed, the easier it is to weave.

**Showa period** A period (1926–1989) in Japanese history comprising the reign of the emperor Hirohito. The name Showa means ‘bright peace’ in Japanese.

**Single yarn** Single strand composed of fibres held together by at least a small amount of twist.

**Sliver** A rope of disentangled fibres held together by inter-fibre friction rather than twist.

**Slubbing** Similar to roving, but without twist.

**Snagging** The pulling out of warp or weft threads in a woven fabric or of the course or wale threads in a knitted fabric that leads to the formation of a loop.

**Soap** Metallic salt of fatty acids that is soluble in water.

**Social networking** Individuals and organisations connecting to each other through interdependency such as friendship, common interest, likes and dislikes, beliefs or knowledge; e.g. Facebook.

**Socio-economic classifications** A/upper class, B/middle class, C1/lower middle class, C2/skilled working class, D/working class, E/subsistence level-low fixed income.

**Softener** Creates a lubricating film that allows fibres to move more readily against each other, thus making the fabric softer and fluffier.

**Spectral data** The values of the percentage of light reflected from a coloured substrate, with the values normally recorded at 20 nm (nm) intervals between 400 and 700 nm.

**Spectrophotometer** An instrument used to measure the intensity of wavelengths in a spectrum of light.

**Staple fibres** Short fibres of differing length. Short staple fibres are less than 60 mm long. Long staple fibres are more than 60 mm long.

**Staple length** The average length of a staple-fibre sample.

**Stick shuttle** A thin rectangular piece of soft wood with a deep notch at either end, used mainly for rigid heddle and table looms, or for carrying thick weft yarns through the shed.

**Strain** A measure of material extensibility, expressed as a ratio of elongation to original length.

**Strike rate** The rate at which a dye is transferred from the application medium to the substrate, the control of which is necessary for the even application of the dye throughout the substrate.

**Stress** Force per unit area.

**Striation** Lengthwise marking on the surface of manufactured fibres visible through a microscope.

**Sub-culture (subculture)** A group with distinctive characteristics that exists within a larger culture. For example, the 'mods' and 'rockers' were sub-cultures existing within the wider context of 1960s youth culture.

**Substantivity** The attraction between a substrate and a dye whereby the latter is selectively attracted from the application medium by the substrate.

**Suint** A natural grease formed from dried perspiration found in the fleece of sheep.

**Surfactant (surface active agent)** An organic compound that can reduce the surface tension of water when used in low concentrations.

**Surrealism** An art movement depicting imagery from the unconscious mind without making any attempt to rationalise the outcome. Founded in 1924 by André Breton (1896–1966), Surrealism was influenced by the psychoanalytical work of Freud and Jung. The most famous exponent of Surrealism was Salvador Dali (1904–1989).

**Sustainability** Protection of the environment to support long-term ecological balance and to ensure that the needs of current and future generations are provided for.

**Suture** A thread used to close a wound by sewing.

**Swing tag** Attached to garments, showing the brand message, and holding information such as size, price and any special laundering instructions.

**Syndet** Synthetic detergent.

**Taisho period** The Taisho period (period of 'great righteousness') in Japan was one of the shortest periods in Japanese history, and corresponded to the reign of the Taishō emperor, Yoshihito (1879–1926). It followed the Meiji period and represented a continuation of Japan's modernisation and rise in international status. During this period, traditional Japanese and Western dress became blended, giving rise to surprising combinations of East and West.

**Take up** Winding woven fabric onto front beam.

**Techno-textiles** A term used to define textiles that make use of technological advances.

**Tenacity** The tensile force a fibre can sustain before rupture. Expressed as the force relative to the fibre density.

**Tensile strength** The resistance of fibres, yarns or fabrics to a pulling force.

**Tension** Whilst weaving, both warp and weft threads must be held taught at tension; this tension is held by the use of a loom.

**Tenter** To dry wet fabrics on a frame on which the fabric is stretched taut and flat.

**Tex** The weight in grams of 1000 m of continuous-filament yarn. 1000 tex = 1 kilotex (ktex), 0.1 tex = 1 decitex (dtex) and 0.001 tex = 1 millitex (mtex).

**Textured yarn** Yarn that is processed to impart varied degrees of bulkiness.

**Threading hook** Device made of metal with a small curved hook on the end, used for threading the warp yarns through the heddles.

**Three-dimensional structure** Refers to fabrics that are manufactured in 3D form rather than being adapted from two-dimensional sheets.

- Tow** In bast fibres, the short fibres removed by hackling, or in manufactured fibres, a twistless multifilament strand suitable for conversion in staple fibres or sliver, or direct spinning into yarn.
- Traditional media channels** Television, advertising, ambient media, magazine advertising, celebrity endorsement, radio advertising, sales promotion, public relations, personal selling and direct marketing.
- Trend forecaster** Company that analyses marketing information and forecasts long- and short-term changes in consumer patterns.
- Triaxial fabric** Consists of three sets of yarns, typically intersecting at 60°.
- Twist** Turns per metre of yarn. Used to hold filaments together.
- Vascular graft** Materials used to repair infected or damaged sections of arteries, or to replace the entire length of the artery.
- Vortex spinning** A development of air-jet spinning in which carded cotton yarns can be spun at high speeds.
- Wear** The result of a number of agencies that reduce the serviceability of an article.
- Weathering** Damage caused by environmental conditions.
- Wet spinning** A process in which polymer is dissolved in a solvent before spinning.
- Yarn** A linear collection of fibres or filaments twisted together or braided by other means.
- Yarn count** The mass of a standardised length of continuous-filament yarn, expressed in grams per kilometre.
- Zeitgeist** Spirit of the times.