Glossary of Terminology

Angel Hair - Thin strands of film appearing at the cut end of film resulting from sealing.

Ballooning - A pillow effect created when air is trapped within the shrinking bag.

Bead Seal - A thin round weld created when pressure and heat are applied to two layers of film.

Bi-Axial Orientation - Orientated along both X and Y axis.

Blocking - A condition in which two layers of film adhere to one another

Blown Film - A film extruded by air inflation.

Burn Through - The temperature or condition where a film becomes cloudy or burns in the shrink tunnel.

Centerfold Film - A film that has been folded in half lengthwise.

Centerfolder - A mechanical devise used to create centerfold film.

Coextrusion - Two or more polymers extruded and combined in a die, each forming a distinct layer in the final film.

Cold Slip - The amount of force required to slide two surfaces against one another at ambient temperature.

Cold Flex - Ability of a film to perform at low temperatures without failure.

Copolymer - Result of two monomers being combined through polymerization.

Core - A paper tube onto which film is wound.

Cross-Linking - A process which binds the polymer chains into a network. Significantly increasing a films heat stability and strength.

Crow's Feet - A series of wrinkles radiating out from a finished package's corners.

Dog Ears - Triangular projections of unshrunk film at the corners of finished packages.

Drape - The softness of a film characterized by the ability to conform to irregular shapes.

Electron Beam - A device used in the cross-linking process.

Fish Eyes - A scalloped surface on a finished product surface.

Form-Fill-Seal - A type of equipment which produces a tube of film into which packages are introduced.

Gauge - A term used to describe the thickness of a material.

Hole Punch - A mechanical device used to produce an air evacuation hole in a sealed bag.

Hot Slip - The amount of force required to slide two surfaces of heated film against one another.

Impulse Seal - A heat sealing technique where the element is pulsed with voltage on demand.

L-Sealer - A term used to describe equipment where the seal area is in the shape of an "L".

Laminate - A general term used to describe structures comprised of two or more materials.

Lap Seal - A seal made with two layers of film overlapping one another.

Machinability - The ability of a film to form and seal on overwrapping equipment.

Machine Direction - The direction the film is manufactured and moves through the sealing equipment.

Memory - The ability of a film to maintain it's characteristics after shrinking.

Monoaxial - A film which is orientated to shrink in only one direction.

Monolayer Film - A single layer film extruded from one or a blend of raw materials.

Multilayer Film - A film comprised of multiple layers of similar or different polymers.

Opaque - Relatively impervious to light.

Optics - The visual properties of a film.

Orientation - The stretching technique used in the manufacturing of film.

Oriented - The stretching and aligning of a film's molecules at temperatures below its melting points.

Perforations - Air evacuation holes placed in the film by pin perforators.

Pin Perforator - A device used to produce air evacuation holes in film.

Polyethylene - A simple thermoplastic polymer of ethylene.

Polymer - A material made through the process of polymerization.

Polymerization - A gas heated under pressure forms a solid.

Polyolefin - A generic term used to describe ethylene and/or propylene based films.

Polypropylene - A thermoplastic polymer of propylene.

Preferential Shrink - The characteristic of a film to shrink more or less in specific directions.

PVC - Polyvinyl Chloride

Seal Wire - An element made from nichrome wire used to seal film.

Selvage - Another term for trim waste.

Shrink - Defined as the ability to become smaller.

Shrink Tunnel - A type of equipment featuring a chamber producing heat and air flow designed to shrink film.

Singlewound Film - A single layer of film wrapped around a core.

Slip - The quality of a film to move over surfaces with little resistance.

Static - An electrical charge built-up in plastic film.

Static Seal - A type of longitudinal seal used in FFS equipment. Overlapping film edge layers are adhered to one another via a static charge.

Tap Switch - An electrical device used to control the amount of voltage introduced to sealing elements.

Tear Initiation - The amount of force required to initiate a tear.

Tear Resistance - The ability of a film to resist the propagation of a tear.

Transverse Direction - The direction parallel to the film width.

Trim - The amount of excess film severed during the seal process.

Trim Seal - A seal made by use of a sealing wire element.

Unbalanced - Unequal orientation in LD and TD

Wind - The direction in which the film is wound on the core.