

# Glossary of Terms

**ABSORBENCY**

Ability of paper or board to take up or retain aqueous solutions; printing inks, varnishes and the like.

**ABSORBENT PAPERS**

Duplicator, blotting and filter papers are the best known; drying royal, matrix paper and towelling are other examples.

**ACCEPTED STOCK**

That part of the stock which is not rejected by cleaning and/or screening.

**ACID FREE**

A term describing paper and board that can be used with anything that may be tarnished or otherwise harmed by acid.

**AIR DRY**

Describing

- (1) the moisture content of a substance when in equilibrium with the surrounding atmosphere;
- (2) woodpulp contains approximately 10% of moisture, paper 8% of moisture.

**BEATING OR REFINING**

The mechanical treatment of the fibres in water to increase surface area, flexibility and promote bonding when dried.

**BIODEGRADABLE**

A substance that will decompose as the result of action by bacteria and other living organisms.

**BLOTTING PAPER**

Very absorbent and bulky, woodfree, sometimes made from a pulp of cotton or wool fibres 1 20-300gsm.

**BIODIVERSITY**

Biological diversity in nature - influenced by man through construction, cultivation and raw material supply. Modern silviculture tries to preserve the biodiversity of nature.

**BOARD**

Papers of 220 gsm and over are generally called boards. They are most often of more than one ply.

**BULK**

The number obtained by dividing the thickness, in micrometers of paper or board, by its grammage. i.e. mass per unit volume.

**CALENDER**

A machine intended to smooth or otherwise finish the paper and consisting essentially of a certain number of superimposed rolls of which only one is power driven.

**CALIPER**

The thickness of a sheet of paper measured under standard test conditions.

**CARTON BOARD**

A material of defined thickness and weight made from one or more layers of fibrous cellulose material to form a rigid or semi-rigid construction.

**CARTRIDGE PAPER**

Paper made from chemical woodpulp having good strength and a rough surface.

**CENTRE OR CORE**

A steel, wood or cardboard tube on which paper is reeled, or re-reeled.

**CHEMICAL PULP**

Pulp made by cooking the wood in the presence of chemical agents (acids or alkali) which eliminates most of the non fibrous material.

**CHIP BOARD**

A board made from waste paper used mainly in packaging, especially with a white liner and coating.

**CLOSED SYSTEM**

The system of operating a paper or board making machine whereby the water drained from the sheet during formation is collected and returned for re-use instead of being discharged to waste.

**CLOTHING**

The felts, wires and fabrics used on a papermaking machine.

**COATED PAPERS**

Paper to which a coating has been applied on one or both sides, using a mix of clay or carbonates and latex to create a high quality printing surface.

**CONSISTENCY**

Bone dry concentration of fibre in grammes per 100 ml of suspension. Ratio for solid to liquid expressed as a percentage.

**CONTRARIES**

Materials unsuitable for papermaking, present in some raw materials and waste paper.

**CONVERTING**

A manufacturing plant which uses paper to make paper-based products, such as packaging or consumer products.

**CORRUGATED or CONTAINER BOARD**

Consists of one or more sheets of fluted paper stuck between flat sheets of paper or board.

**CORRUGATOR**

The machine that actually makes the corrugated board from fluting and liner papers.

**CHEMI-THERMO MECHANICAL PULP (CTMP)**

Same as TMP only chips are also sprayed with chemicals.

**FIBREBOARD BOX**

A container made of either corrugated or solid fibreboard.

**FIBRIL**

Fine thread-like structure that fibres are composed of. They are often of more than one ply.

**FIBRILLATION**

Freeing of the fibrils from within the fibre during the beating/refining process.

**FORMATION**

The manner in which the fibres of a sheet of paper or board are distributed, disposed and intermixed to constitute the sheet.

**FREENESS**

The rate of water drainage from a fibre/water mixture. Decreased by beating to produce a wet' stock, i.e. drainage is slow.

**GLASSINE**

A woodfree paper. Transparent, glazed and polished on both sides.

**GREASEPROOF**

Paper free of mechanical pulp, highly resistant to grease. Mainly used for the wrapping of greasy products.

**HANDMADE**

The original manner in which all paper was made. So called from the fact that the sheet is formed by a workman dipping a mould into the pulp vat and taking up sufficient 'stuff' to form a sheet of paper of the required substances. A peculiar movement is required to felt the fibres together, and this is the only acquired after long practice and experience.

**INTEGRATED MILLS**

Mills which produce paper from pulp on site e.g. timber in one end, paper out at the other.

**JUMBO REEL**

First reel of paper produced after the papermaking process, before it is either slit into smaller reels or transferred for further processing.

**KLS (KRAFT LINER SHAVINGS)**

An important grade of recovered paper for making recycled corrugated cases

**KRAFT PAPER**

Solid pulp board produced by the sulphate process with or without bleaching.

**LIGNIN**

A non cellulose material found in vegetable plants that may be considered as a binding agent or cement between the fibres of the plant.

**LOADING OR FILLER**

Fine white pigment in the form of powder or slurry used to improve smoothness, opacity, brightness and dimensional stability of paper and board.

**MACHINE DIRECTION**

The direction of a sheet or web of paper corresponding with the direction of the flow of 'stuff' on the papermachine.

**MACHINE STACK**

A set of steel rollers at the end of a paper machine between which the paper is passed to give it a smooth surface.

**MECHANICAL PULP**

Pulp made by the grinding of steamed or boiled groundwood (without the addition of chemical agents).

**MOULD**

The Implement with which hand made paper is made.

**OCC (OLD CORRUGATED CONTAINERS)**

An important grade of recovered paper for making recycled corrugated cases

**OFFCUT**

Paper of usable size obtained as a by-product when larger sheets or reels are cut down to the size of the order.

**PAMS**

A grade of waste paper, mostly used or unused magazines.

**PAPER**

A compressed matted vegetable substance in thin flexible sheet form, being the precipitate of a fibrous pulp in water.

**PAPER GRADES**

Paper is classified into different grades according to the end use, the pulp used and the treatment of the paper.

**pH VALUE**

A measure of the active acidity or alkalinity of a solution. A value of 7.0 is neutral.

**RAG**

The two main rag fibres used in paper making are cotton and linen, rag paper consists of 25-60% rag fibre and the rest is chemical wood pulp.

**REAM**

A term denoting a number of sheets of paper ranging from 480 to 516, most commonly 500.

**RECOVERED PAPER**

Paper extracted from the waste stream of a sufficient quality to be recycled.

**RELATIVE HUMIDITY**

The mass of water vapour actually contained in a given volume of air expressed as a percentage of the maximum mass of water vapour that could be contained in that same volume at the same temperature.

**RETENTION**

The percentage of the amount of a loading or additive added to the stock that is retained in the final sheet of paper.

**SALLE**

The department of the paper mill, sometimes called the Finishing House, where paper is sorted and counted.

**SECONDARY FIBRE**

Fibre that has been used before, e.g. recovered paper.

**SIZING**

Addition of size and chemicals during manufacturing process or by coating to control absorbency.

**STOCK, STUFF, PORRIDGE**

Terms used to describe the papermaking material in all stages, but usually referring to the wet pulp before it is fed onto the paper machine.

**SUPERCALENDER**

Machine for giving paper a very smooth surface by passing it through a series of alternate metal and composition rolls, revolving with high speed and pressure.

**THERMO-MECHANICAL PULP (TMP)**

Involves the grinding of chips under pressure and at a high temperature.

**TISSUE PAPER**

Absorbent paper used for a variety of hygienic purposes.

**UNBLEACHED**

Any type of paper made from pulp that was not treated in any bleaching process.

**VEGETABLE PARCHMENT**

Paper made from pure bleached chemical pulp, which goes through a treatment of sulphuric acid giving it a lasting resistance to grease penetration. This paper is used for wrapping of moist or greasy foodstuffs.

**VIRGIN PULP**

Pulp manufactured and used for the first time.

**WET STRENGTH**

Papers to which this term applies retain an appreciable percentage of their mechanical strength after soaking in water, and are made by the addition of a resin to the stock during paper manufacture. This resin cements the fibres together and the bond tends to improve with age. The advantages of printing maps on, or making certain wrappings from, wet strength paper are obvious.

**WOODFREE OR FINE PAPER**

Papers and boards containing no fibres other than those derived from chemical wood pulping processes i.e. contains no lignin.

**WOODPULP**

Wood reduced to a pulp for subsequent papermaking processes; can be either mechanical, chemical or combination; TMP and CTMP.

**XYLEM**

Part of a tree between the bark and the pith which forms the mechanical structure that constitutes the wood from which the fibre is obtained for use in pulp and papermaking.

**YIELD**

Ratio of total amount of raw material entering a pulp and papermaking operation to the equivalent product output.

**Z-DIRECTIONAL STRENGTH**

The strength of paper and board as related to the force and measured by means of tension applied to the surfaces of the test sample.