

A background image of a paper mill, showing various pieces of machinery, including rollers, pipes, and structural frames. The image is slightly faded to allow the text to stand out.

GLOSSARY GUIDE

Top Misunderstood Terms in the Paper Industry

Coated Paper

Coated paper has become synonymous with treated printing paper. In actuality, these two paper types are quite distinct (see Treated Paper definition). Coated paper is typically perceived as printing grade paper created using a paper machine; to avoid confusion, a more accurate way to refer to coated paper would be to preface the term with the modifiers “paper machine coated printing paper” or “printing grade coated paper.”

As opposed to relying on chemical treatments, coated papers receive their attributes from various blends of polymers or compounds added to the surface. One can easily distinguish coated paper from other paper varieties due to its smoothness and luster (either high gloss or matte). Coated paper products are ideal for high-quality printing applications, such as in magazines and photography or art books.

In the United States, the American Forest and Paper Association (AF&PA) classifies coated papers into five different grades based on brightness, with Grade #1 being the brightest.

Types of coated paper include:

- **Machine-Finished Coated:** Also known as MFC, this type of paper has notable surface properties, adequate sheet stiffness, and a high print gloss. MFC paper is commonly used in paperback books.
- **Standard Coated:** Usually consisting of over 90% chemical pulp material, standard coated paper is often used for high-quality advertising and promotional materials and product catalogs.
- **Food-Grade Coated:** This particular coating complies with regulations set by the U.S. Food and Drug Administration (FDA) pertaining to safe storage of consumer meats and produce. Like treated paper, food-grade coated paper can also be oil-resistant.
- **Gloss Coated:** This type of paper is created when paper material is run through a stack of polished steel rollers, which condenses the paper, and helps to even out inconsistencies in the surface. One example of gloss coated paper is photographic-quality printing paper.

Contract Manufacturing

Contract manufacturing is similar to toll manufacturing, but has distinct differences. Also called private label manufacturing, contract manufacturing is the production of goods by one company, which is under the brand or label of different companies. Like toll manufacturing, contract manufacturing involves outsourcing of production processes to a third-party, outside company.

However, contract manufacturers provide services to various companies—based on their customers’ designs and specifications as well as their own—and in some instances, the contract company works with competing companies.

With the use of this low-risk process, marketing companies save substantial amounts of capital expenditure, employee labor and other related production expenses while maintaining consistent quality and expanding their product lines and business.

Laminated Paper

Laminated paper is a type of specialty paper used in the creation of high-quality printing papers, signage, posters, and packaging papers or building materials. With laminated paper, manufacturers adhere two or more paper grades together to achieve certain thickness, stiffness, and print characteristics that can create a desired product appearance.

Laminated printing papers is easily distinguishable from traditional paper products by its higher caliper thickness. Most high grade paper machines making printing grade have a maximum caliper thickness of 12 to 14 point. When high grade printing is needed over 12 to 14 point then lamination becomes the preferred option.

By laminating two thinner types of printing paper, the higher caliper laminated paper maintains the paper uniform surface finish and is ideal for book and brochure covers, as well as mailers.

Laminating Services

The process of lamination is used by companies to apply several layers to a composite material. Lamination can enhance many characteristics of composite materials, such as resilience, strength, and aesthetic appeal. Lamination is a custom service that varies from company to company.

Laminating services consist of various specialized hot and cold processes, which include:

- **Wet Laminating:** A water-based or solvent based adhesive is applied between lamination layers and then dried (often in long ovens). This process allows for selecting from hundreds of different adhesive to create the correct bond and product characteristics.
- **Dry laminating:** When an adhesive is applied, dried, and pressed onto the top lamination material. This is the most common process in manufacturing pressure sensitive label material.
- **Thermal Laminating:** Thermal laminating is often used process for over laminating printing materials. It is also the most common form of film to film lamination. In this process, an adhesive is applied to one side of each
- **Cold Lamination:** This process uses pressure-activated adhesives to enhance product characteristics. Cold lamination is a safe process that is often used for non-woven materials, technical textiles, and fabric laminations.

Packaging Paper

Packaging paper is a general term for highly versatile and flexible paper products. This type of paper is the most widely used packaging material in the world, more so than metal, glass or even plastic. Common packaging papers include corrugated cardboard, Kraft paper (which is the classic brown packaging paper), multi-wall paper bags and lighter weight coated papers for food wraps.

Packaging paper is manufactured using any combination of special coating, chemical treating, or lamination; these processes instill the paper with enhanced strength and durability or other desired characteristics. Due to this fact, packaging papers are utilized in brand enhancement and storage/transport applications.

For example: Lighter weight papers that are approved for food usage can be coated with various coatings to create barriers to oxygen or moisture that would cause food spoilage.



Specialty Paper

Specialty paper is a blanket term for any specialized, unusual types of paper used throughout various industries—even though they constitute a very small percentage of global paper machine production output. Common applications of specialty paper include business cards, decorative products, cigarette papers, store receipts, and product labels.

Specialty papers are primarily manufactured in relatively smaller production runs than commodity grades, and the requirements for specialty paper machines are extremely stringent.

Specialty papers also cover many treated, coated, and laminated papers and paperboards. These products are produced by many in process packaging, printing and converting facilities.

The market is so dispersed that quantifying its size and scope is not fully complete.

Specialty paper defined by paper machine output is smaller segment of the paper manufacturing industry. However, paper as a commodity is converted to specialty paper by many of the coaters and laminators that create niche specialty papers after leaving the paper manufacturer.

Toll Manufacturing

Toll manufacturing, also called toll processing, is an arrangement that involves a company providing raw materials (or semi-finished goods) to a third-party service provider. The outside company usually has particular equipment and organizational models in place, and they supply subclasses of manufacturing processes on behalf of the first company for a specific fee—or a toll.

Toll manufacturing is a made-to-order process; it is a fast and cost-effective solution for extending the product capabilities and services of your company. Utilizing toll manufacturing can be an advantageous proposition, as many toll companies have a wide range of materials and capabilities that can suit several industrial applications.

Also, with their materials, toll manufacturers create exclusivity in a product's design and attributes. This creates a product line that has better margins and market position in a category—thus allowing the marketing company and provider of raw materials a well-defined market advantage.

Treated Paper

Treated paper is any kind of paper product that has received a functional characteristic by the addition of chemicals. They can also be added on the wet end, or as coatings on the back end of the paper machine. These functional characteristics can be added through a non-paper, offline coating machine. Though these treatments are applied using a coating machine, it's important to understand that treated paper is not the same as coated paper. The addition of chemical treatments are most often made with on or off machine coating and are technically coated papers, however, the paper industry generally refer to coated paper as “coated printing grades” and all others at treated papers.

There are many classes of treated paper—which are coated—but many paper companies have coopted the term “coating” for all printing grades of paper. Today, “coating” has become more like a brand name, and its use has caused confusion among industry professionals and consumers alike.

Several chemicals—solventless, water-based, wax, hot melt, or extruded poly-ethylene—can be added to paper products to augment specific desired characteristics.

Examples of treated paper include:

- Oil and Grease Resistant: Commonly used in direct food applications (baking pan lining, butter or margarine wrapping, meat interleaving)
- Fire-Retardant: Helps products resist catching fire, and is not the same as fireproof
- Rust Inhibiting: Protects against corrosion caused by metal materials
- Silicone Release: Used to ensure adhesive substances don't become stuck to the paper