CONVERTING SERVICES 101:

TYPES OF SERVICES, APPLICATIONS, AND HOW TO SELECT A PROVIDER





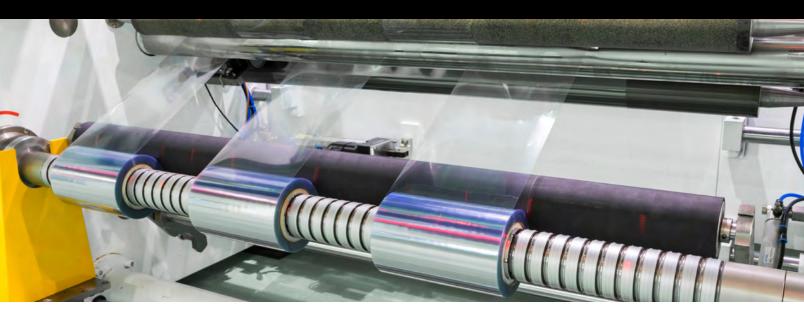


Converting is an important packaging process used to transform raw materials into functional components or products for end users. Materials employed in the process typically start out as bulk rolls direct from the manufacturer, and they can include tapes, fabrics, films, foams, and papers. Converting provides an efficient way to customize these materials, cutting them to shape and adding coatings, laminates, and prints.

In this guide, you will discover the various types of converting services available, their compatible applications and industries, and how you can ensure that you will make a solid converting service provider choice.

TYPES OF CONVERTING SERVICES

Converting involves a broad range of processes that are often combined to achieve the final product. These processes include precision cutting and slitting, as well as printing, coating, and other finishing options.





DIE CUTTING

Die cutting is a technique that uses specialized tooling to cut material to shape and achieve precise and consistent results. Rotary die cutting and flatbed die cutting are two core branches of this service. In rotary die cutting, cylinders feed material through the machine, which uses rotary dies to cut many shapes at once. Ideal for stiff materials up to 1/8 inch in thickness, rotary cutting can create precise, complex cuts quickly and with minimal waste. For thicker or softer materials, flatbed cutting is typically employed - it uses a vertical hydraulic press to stamp shapes. Flatbed cutting is slower, but it cuts foams, rubbers, and similar materials without deformation.

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TYPES OF CONVERTING SERVICES

PRECISION CUTTING

Precision cutting techniques are used in applications requiring tight tolerances or intricate designs. Some precision cutting techniques include laser cutting and high-speed plotting, both of which use CNC to quickly and precisely slice through converted materials. Often precision cutting machines are used in the prototyping phase of the design process.

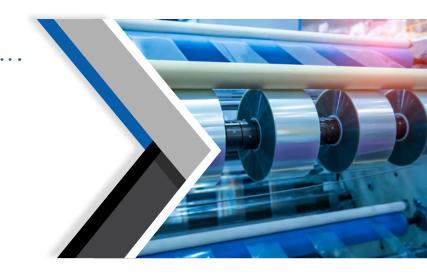


LATHE SLITTING

Slitting processes take a master log roll of material and divides it into multiple rolls of narrower widths. The slitting process does not change the length of the roll. Slitting machines can be configured to create standard or non-standard sizes for tape, fabric, film, paper, and composite materials.

SLIT-REWINDING

Slit-rewind processes on the other hand, takes a Jumbo roll of material and divides it into multiple rolls of narrower widths while also changing the length of the material. Slit-rewind machines can also be configured to create standard or non-standard sizes for tape, fabric, film, paper, and composite materials.



TYPES OF CONVERTING SERVICES

PRINTING

As part of the converting process, customers may require added markings or labels to raw materials in order to add branding or key information. Adding these elements requires specialized printing services, which are chosen based on the material and the design complexity. Three-color flexographic printing and large-scale, single-color inkjet printing can accommodate most projects, but a provider that can also offer thermal printing and foil stamping capabilities will suit more unique needs.



LAMINATING AND COATING

A key step in creating adhesive products is applying the adhesive to the material backing. Through adhesive lamination, adhesive products can be created from nearly any substrate, achieving varied application patterns on one or both sides of the material. Lamination can also include adding a liner to a product that already has an adhesive coating, thus making it easier for the end user to handle the product.

SPOOLING AND REWIND FINISHING

Many clients use converted products as raw material for automated packaging processes. In these cases, the final product must be provided in the right spool size and with the desired unwind direction. Spooling materials, fabrics, and even pressure-sensitive tapes provide the ability to have more material at hand on one spool for reduction in roll changes.



COMPATIBLE MATERIALS



CONVERTING SERVICES ARE MOST COMMONLY USED TO ALTER PACKAGING MATERIALS, INCLUDING:

- FILMS
- FOAMS
- LAMINATES
- PAPERS
- FOILS
- PLASTIC SHEETS AND

LINERS

- TAPES AND ADHESIVES
 - RUBBER SHEETS
- WOVEN AND NON-WOVEN FABRICS

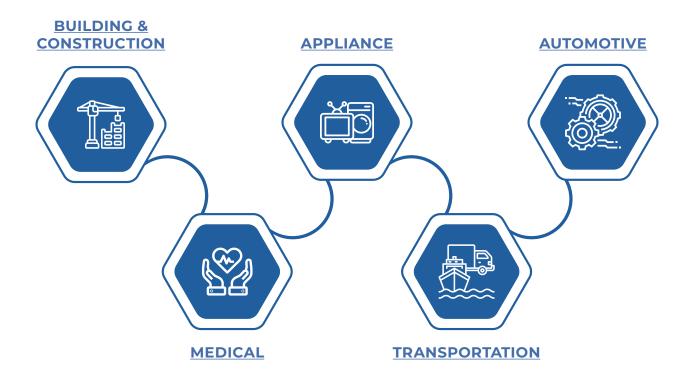
Your expert converting team at TPC will select the cutting, printing, and coating methods that work best with your application's substrate. This ensures that your converted parts have tight tolerances with clean edges, even coatings, and clear markings.

INDUSTRIES & APPLICATIONS SERVED

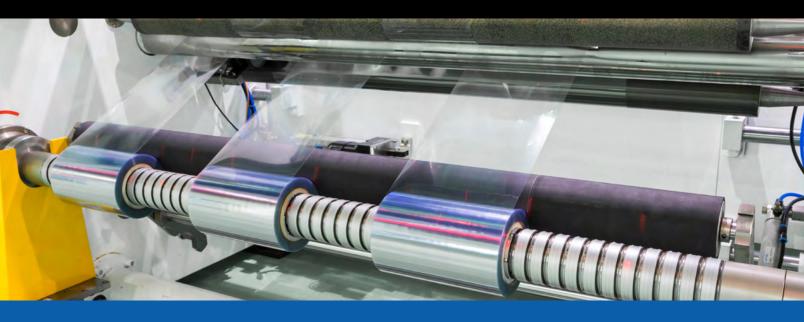
Although converting is often associated with packaging applications, many industries rely on converting services to receive the materials and products they need.



SOME OF THESE INCLUDE:



INDUSTRIES & APPLICATIONS



WITHIN THESE INDUSTRIES, CONVERTING IS USED TO PREPARE MATERIALS SUCH AS:

- TAPES & ADHESIVES: WHETHER USED TO MARK WALKWAYS, CONDUCT ELECTRICITY, OR
 SEAL PACKAGES, TAPES ARE USED IN VIRTUALLY EVERY INDUSTRY. CONVERTING ENSURES
 THAT THEY ARE AVAILABLE IN THE RIGHT SIZE WITH THE RIGHT APPEARANCE AND
 ADHESIVE STRENGTH FOR A GIVEN APPLICATION.
- FOAM: FOAM MATERIALS OFTEN NEED TO BE DIE-CUT FOR USE AS INSULATION, GASKETING, OR PADDING. THEY MAY ALSO RECEIVE ADHESIVE COATINGS IN THE CASE OF FOAM PARTS/ PIECES AND TAPES.
- PAPER: PAPER ROLLS CAN BE CUT AND PRINTED BEFORE USE IN PACKAGING AND DISPLAY
 APPLICATIONS. THEY MAY ALSO REQUIRE PROTECTIVE OR ADHESIVE COATINGS.
- PLASTIC & COMPOSITE FILMS: PLASTIC FILMS ARE CRITICAL FOR MANY PACKAGING
 APPLICATIONS. HOWEVER, BEFORE BEING USED IN PACKAGING FACILITIES, MASTER ROLLS
 MUST BE CONVERTED VIA CUTTING, SLITTING, AND SPOOLING PROCESSES INTO ROLLS OF
 THE APPROPRIATE WIDTH AND LENGTH. CONVERTING CAN ALSO APPLY PRINTED ELEMENTS
 AND ADHESIVE COATINGS TO THESE FILMS.

If an application uses spools of material, converting can save manufacturers time and money by ensuring materials are ready for processing.

KEY CONSIDERATIONS TO SELECTING THE RIGHT CONVERTING SERVICE PROVIDER

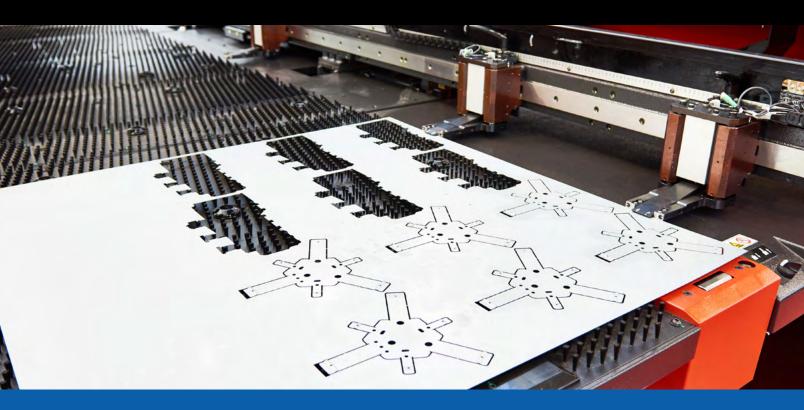
As with any outsourced process, the success of converting depends on choosing a skilled service provider.



BEFORE CONTRACTING A COMPANY TO CREATE YOUR CONVERTED PARTS, CONSIDER THE FOLLOWING KEY QUESTIONS:

- CAN THE COMPANY SUPPORT YOU THROUGHOUT THE WHOLE PROCESS? CHOOSE A FULL-SERVICE CONVERTING SOLUTION WITH SUPPORT FOR EVERYTHING FROM PROTOTYPING THROUGH INVENTORY MANAGEMENT, SO YOUR FUNCTIONAL AND LOGISTICAL REQUIREMENTS ARE ALWAYS MET.
- DOES THE COMPANY HAVE THE EXPERIENCE TO COMPLETE YOUR PROJECT? LOOK FOR A COMPANY THAT HAS PROVIDED EXPERT CONVERTING SERVICES FOR MANY YEARS, WHICH WILL ENSURE A MORE REFINED PROCESS ULTIMATELY RESULTING IN GREATER EFFICACY AND EFFICIENCY. ENSURE THAT THEIR EXPERIENCE SPANS DIVERSE INDUSTRIES, APPLICATIONS, AND CONVERTING PROCESSES, SO THAT WHATEVER YOUR APPLICATION MAY BE, THEIR TEAM CAN PRODUCE THE SPECIFIC ITEMS YOU NEED.
- HOW DOES THE COMPANY ENSURE QUALITY? ISO 9001:2015 CERTIFICATION IS A GOOD WAY
 TO CONFIRM THAT THE COMPANY UPHOLDS A STRICT COMMITMENT TO QUALITY AT EVERY
 STAGE OF THE PROCESS. WHEN YOU CAN CONFIRM THAT RIGOROUS QUALITY ASSURANCE
 PROTOCOLS ARE IN PLACE, YOU CAN REST ASSURED THAT YOU WILL RECEIVE CONSISTENT
 AND UNIFORM PRODUCTS.

KEY CONSIDERATIONS TO SELECTING THE RIGHT CONVERTING SERVICE PROVIDER



YOU CAN ALSO EXPECT THE FOLLOWING WHEN WORKING WITH A HIGH QUALITY CONVERTING COMPANY:

- FLEXIBILITY: WHETHER A PROJECT CALLS FOR DIE-CUTTING, PRINTING, OR COATING,
 CUSTOMERS CAN ACHIEVE THE PRECISE MATERIALS THEY NEED, REGARDLESS OF THEIR ONSITE CAPABILITIES.
- SAVINGS: OUTSOURCING CONVERTING SERVICES ALLOWS CUSTOMERS TO REALIZE SIGNIFICANT COST AND TIME SAVINGS, ALL WHILE FREEING STAFF TO FOCUS ON CORE COMPETENCIES.
- QUALITY: CONVERTING PROFESSIONALS EMPLOY THE LATEST EQUIPMENT AND TECHNIQUES
 TO ACHIEVE HIGH-QUALITY RESULTS WITH FAST TURNAROUNDS.

Don't hesitate to discuss these factors with a potential partner before entering into a contract. The best converting providers are communicative and client-focused and will be happy to discuss how they can add value to your project.

CHOOSE CONVERTING SERVICES AT TPC CONVERTING SOLUTIONS



For over 50 years, <u>TPC Converting Solutions</u> has fulfilled the packaging and converting needs of a diverse range of industry clients. Our services are custom-tailored to each client while offering quick turnaround and cost-efficiency.

TPC Converting Solutions takes an innovative and customer-centric approach to converting services. Our team leverages a strong supplier network to quickly obtain the highest quality materials, no matter how specialized your application.

<u>To learn more about TPC's converting services, click here</u>. To get a project started, <u>contact our team</u> today.

ABOUT TPC CONVERTING SOLUTIONS

With more than 50 years of expertise in working with companies and products in nearly every industry, **TPC Converting** provides new ideas that improve our partner's efficiency and effectiveness in the workplace.

Offering selected corporate rebates and product-specific loyalty programs, TPC provides customized tapes and packaging solutions for many areas of business including manufacturing, fabricating and assembly, packaging, protecting and shipping, facilities repair and maintenance; marking identification and coding, building, and construction and HVAC.

CONTACT US



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