

Livasta

HIGH PERFORMANCE LABELSTOCKS

ABOUT LINTEC CORPORATION

LINTEC is a leading manufacturer of adhesive-related products. The company was established in 1934.

The product lineup covers many diverse products including adhesive papers and films for seals and labels, shatter-proof window films, adhesive sheets for outdoor signs, interior finishing mounting sheets, automobile-use adhesive products, semiconductor-related tape, and LCD-related adhesive products.

Our response to the needs of customers is a comprehensive approach that realises synergies between the soft elements (materials) and the hard elements (equipment). As a result, we develop and manufacture related equipment including labelling machines and semiconductor-related equipment.

We also develop and manufacture a variety of speciality papers, including colour papers for envelopes, release papers and films, and casting papers.

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Mr Makoto Hattori Representative Director, President, CEO and COO

FACT FILE:

Company name LINTEC Corporation

Head OfficeJapan

Established October 15, 1<u>934</u>

Representative Director, President, CEO and COO

Mr Makoto Hattori

R&D investment (March 2023) Yen 9.1 billion (57.8 million EUR)*

Net sales (March 2023) Yen 284.6 billion (1.8 billion EUR)*

No. of employees 5,418 (March 2023)

*XE Currency Converter Live rates IJPY=0.0063EUR 28/6/2023



WELL PLACED TO SERVE EUROPE

For over 20 years, we've been developing labelstock, tape and film solutions for customers across Europe. We deliver full technical support through our on-site laboratory in the UK, and these capabilities are backed up by the resources and expertise of our colleagues in Japan.

We also have comprehensive conversion facilities and extensive warehousing which enable us to meet demand quickly – including call-off orders for bespoke stock. Our wide-ranging sales network and agents provide service coverage throughout the region, offering help at every stage.

Like our parent company, LINTEC Corporation, we are leaders in innovation, always striving to extend the boundaries of possibility. Our ambitions for growth in Europe will see us continue to expand our customer base by delivering consistent, reliable service to businesses across diverse sectors.

At present we have local bases in 19 countries and employ 5,418 employees (March 2023). LINTEC has posted consolidated net sales of 284.6 billion Yen (1.8 billion EUR)*.

*XE Currency Converter Live rates IJPY=0.0063EUR 28/6/2023



TECHNOLOGIES (KOREA), INC.

LINTEC INDIA PRIVATE LIMITED

PT. LINTEC INDONESIA PT. LINTEC JAKARTA

RESEARCH AND DEVELOPMENT

Forward looking

Our research and development makes every day different – and it's why we love what we do. We never stop exploring and evaluating the latest raw materials, adhesives, face films, legislative requirements, print technology and inks. Our fascination with our own industry keeps us at the forefront of it.

In-house expertise

Extensive knowledge of raw materials, coating capabilities, print methods, environmental and legislative requirements mean we're able to take a holistic approach to your brief. We also carry out speculative development of our own in order to identify gaps in the market for new products.

Extensive facilities

Our four research centres are located in Warabi City, Sataima Prefecture in Japan. Covering thousands of square metres, each of these centres is equipped with an extensive range of state of the art test equipment. The centres house departments specialising in product research, new materials, clean room production and intellectual property. Within each product research department is a processing technology section which undertakes research into mass production and quality control of the developed products.

Research and development is fundamental to LINTEC's growth strategy as our ongoing investment in people, products and facilities demonstrates.

200+ researchers and product developers

Yen 9.1 billion (57.8 million EUR)* invested during the last fiscal year in developing the next generation of products

80+ years of innovation

Four Research Centres located in Warabi-shi, Saitama-ken, Japan

Additional Advanced Technology Building opened in 2016

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OUR PRODUCT RANGE

INDUSTRIAL IDENTIFICATION



These highly durable films can withstand abrasion, chemicals, UV exposure and extreme temperatures. Typical applications include nameplates, branding, warning and instruction labels (including variable information data).

We can also supply flexible overlaminating films to protect the printed information and base material below, these include highly conformable materials that work with complex compound curves. A range of adhesives ensure the films stay put, whether affixed to high or low energy plastic, metal or a powder coated surface.

AUTOMOTIVE IDENTIFICATION



Since our earliest days, we've supplied high performance identification materials to European automotive Original Equipment Manufacturers (OEMs). The wide range of applications includes engine and passenger compartment warning and identification labels, Vehicle Identification Number plate labels, tread plates, 3D resin badges and exterior graphics.

Our technical department test all our products to ensure compliance with OEM specifications and all the materials we supply to the automotive industry are registered on the International Material Data System (IMDS).

ELECTRONIC& APPLIANCE



Our extensive range of printable films offers diverse applications for electronic components and appliances. Options include variable information labels, branding, warning, manufacturing tracking identification and tamper-evident materials. Our recyclable range enables both label and the item to which it is applied to be recycled in the same process.

These labelstocks offer excellent printability, dimensional stability and heat resistance. Highly durable, they are designed to remain firmly affixed and legible to the end of the product's life.

Many of our films are UL and cUL recognised to simplify the process for the customer to gain certification.

AEROSPACE & MILITARY IDENTIFICATION



We have developed ground-breaking products that push the boundaries of self-adhesive labels while fully complying with the military's stringent test methods.

Our bespoke, uniquely durable solutions are designed to withstand exposure to chemical and biological environments, air pressure extremes, thermal shock and prolonged solar radiation. Uses include variable information identification of portable field equipment, vehicles, fixed and rotary wing aircraft, surface ships, submarines and munitions. These solutions are also suitable for use on commercial aircraft.

HEAT RESISTANT TO 300°C



These white polyimide films have all the properties required for use in extreme heat, maintaining whiteness, barcode legibility and adhesive performance when exposed to 300°C for up to one minute. They also offer excellent resistance to abrasion and ribbon smudging. The smooth, ultraconsistent, high-opacity surface enables high-resolution printing with conventional inks and thermal transfer printing.

Excellent quality and cost-effective, these high temperature films are widely used by manufacturers in the electronics, automotive and appliance industries.

HEAT RESISTANT TO 1250°C



These revolutionary label and tag products will withstand extreme heat as well as harsh outdoor and chemical exposure. Label products can be applied up to 900°C and tag materials up to 1200°C. The products' specialist properties enable barcode identification and variable data to be added to the metal production lines via manual or automatic applicators.

Our heatproof range is recognised worldwide for its proven temperature performance, extreme durability and excellent high resolution thermal transfer printability.

Find out more at www.heatproof.eu

FOR CHALLENGING SURFACES



When faced with difficult application surfaces, we deliver unique solutions. Typical surfaces that can cause problems for conventional adhesives include textured, low energy, foamed and talc filled plastics, powder coated or galvanised metals.

We offer a wide range of film and adhesive combinations that provide excellent adhesion to such surfaces, deliver superior durability and yet convert cleanly with minimal to no adhesive ooze on press or during end-user processes such as thermal transfer overprinting.

OIL ABSORBING



Oily surfaces can pose a real problem for label adhesion, but our oil absorbing labelstocks use a unique adhesive to enable labels to be directly applied, meaning there's no need to degrease application surfaces. Labels can be printed with conventional ink or thermal transfer ribbon and will remain legible and firmly affixed.

These high adhesion, printable labelstocks are suitable for use in a wide range of industries including food processing, cosmetics, automotive, metals, hydraulic pipes and pumps.

BUBBLE-FREE ANTI-OUTGASSING FILMS



Bubble-free polyester labelstocks offer two important functions. Firstly, bubbles appearing on application can be removed by gentle rubbing. Secondly, these films allow the release of volatile gases formed by outgassing (caused by application to certain plastics such as ABS and polycarbonate). Outgassing can cause bubbles and occasionally lead to delamination of the label or graphic, but these films prevent these issues arising.

For long-term exterior use we also offer an easy-apply anti-outgassing solution suitable for applications such as earthmoving equipment and recreational vehicles.

Our bubble-free labelstocks can be printed using all conventional print methods and can be overlaminated without compromising functionality.

HIGH CHEMICAL RESISTANCE (FOR INDUSTRY)



Durafol® is particularly suited to applications requiring extreme chemical and mechanical resistance. It is widely used for applications within the automotive, aerospace, chemical storage and electronic industries.

A thermal transfer printable polyester, it enables production of on-demand high performance variably printed labels. Its high chemical resistance means it can be exposed to a variety of chemicals such as toluene, xylene, brake fluid, Skydrol® and acetone without compromising the print or top coating.

OVERLAMINATING



These films enhance the appearance and extend the life of printed labels and graphics. The extensive range includes matt, satin, gloss and textured films. Premium products include hardcoated versions to prevent surface scratching, thermal transfer overprintable films, and long-term exterior films with built-in UV screening properties to prolong the life of conventional and digitally printed labels.

CABLE IDENTIFICATION



Typically used for data and power cables, LINTEC cable marking materials are designed to produce reliable wrap-around, self-laminating and flag labels.

Wrap around solutions include polyester films and more conformable PVC products.

Self-laminating labels utilise a clear film that is typically pre-printed with a white block and overprinted with variable data. Upon application, the tail of the label overwraps the printed information to protect against abrasion, water and dirt ingress.

Flag labels are commonly used for smaller diameter fibre optic cables. Featuring a durable white polyester film, the flags wrap around the cable and adhere 'adhesive-to-adhesive' to produce highly visible identification.

TAMPER-EVIDENT 'VOID'



A clear way to flag any attempt at interfering with products or packaging, if the label is removed the tamper-indicating properties will instantly reveal a 'VOID' message.

Highly effective, these labelstocks are widely used by automotive, electronic, appliance and telecommunication manufacturers for security marking applications such as asset tracking labels and tamper-evident seals.

Available in a variety of colours, the product range includes materials suitable for application to low-energy surfaces and non-transfer films that, upon removal, only indicate the VOID message in the film surface.

TAMPER-EVIDENT DESTRUCTIBLE



This range of durable labelstocks is designed for security marking applications such as asset tracking labels and exterior tamper-evident security seals. If anyone attempts to remove the label, the material will fracture easily, thwarting any attempt to re-apply it. Available in white, metallic silver and clear, all feature highly consistent surfaces to enable reliable high definition thermal transfer printing.

SECURAFOL® TAMPER-EVIDENT DESTRUCTIBLE



For interior applications requiring an ecofriendly alternative, we also offer Securafol®, a non-PVC film, available in both white and clear. These cost-effective films offer a unique balance of high tensile strength with low internal strength making it easy to remove waste on press but incredibly hard to remove once applied. Typical applications include asset labels, security seals and pharmaceutical box seal labels.

CUSTOM MESSAGE TAMPER-EVIDENT LABELSTOCKS & TAPES



Available as either printed labels or self-wound packaging tape, the products reveal a message when removed, helping to discourage product tampering and theft. Upon removal, the message can be visible on the film surface and transferred to the substrate or, alternatively, non-transfer versions are available where only the film surface reveals a message and there is no transfer to the application surface.

Customising options include: bespoke colours, sub-surface sequential numbering, perforating and adhesive modification. Typical applications are seals for cartons, cargo, crates and palletised goods.

DISSOLVABLE & WASH-OFF



This range of thermal transfer and direct thermal paper labelstocks facilitate recycling and reuse.

Dissolvo paper labelstocks, removable with hot or cold water, are ideal for applications such as returnable containers and reusable consumer packaging. Both paper and adhesive are 100% dissolvable, enabling easy removal.

Our Placon range is commonly used by the logistics sector; the labels adhere firmly to the plastic crates throughout the shipping process but are easily removed with warm water when required.

LONG-TERM OUTDOOR



Our durable PVC labelstocks offer excellent dimensional stability combined with good solvent, humidity, elevated temperature and UV resistance. Highly conformable and coated with powerful adhesives, they are ideal for automotive and marine identification labels, outdoor equipment and electrical appliances. They accept conventional inks and thermal transfer printing and can be used to print on-demand variable information labels.

As an eco-friendly alternative, we also offer a range of exterior acrylic films in a variety of colours.

SCREEN PRINTABLE



Supplied in sheet form, these products' superior lay-flat capabilities enable trouble-free conversion.

Polyester films include clear, white, bright and brushed metallised options that can be applied to textured and low energy surfaces whilst exhibiting minimal to no adhesive ooze. Other specialist products include destructible tamper-evident films, premium long-term exterior conformable PVC and clear films for window graphic applications.

POLYESTER DOMED BADGES



Domed badges add an extra dimension to any labelling requirement and we have developed a range of films specifically for them. High performance adhesives deliver superior bond strength in conjunction with chemical, temperature and UV resistance.

These materials are widely used for automotive badges and trim, white goods, computers and electronic items. Unique topcoatings enable excellent anchorage of screen inks and polyurethane resin, and graphic impact can be enhanced with embossable or debossable grades.

ULTRA-THIN OVER- OR UNDER-LACQUER DECAL FILM



When used under-lacquer, the innovative 'no-label-look' is achieved by applying this labelstock to a painted substrate and then over-lacquering it with a clear varnish. Only minimal lacquer is needed to imbed the label, creating a better aesthetic finish as the graphic looks as though it's been directly printed on to the application surface. This, coupled with its graphic durability, lends itself to many design-conscious applications.

The film can also be surface applied for more cost sensitive applications.

The lightweight and aerodynamic properties also make this labelstock ideal for use in aerospace and automotive applications.

REMOVABLE



Our removable adhesives provide reliable, long-term label adhesion with clean removability when required. This makes them popular for many applications including POS, tracking and information labels.

Our proprietary methods of combining adhesives and films ensure ultimate bond strength between face material and adhesive, ensuring the adhesive doesn't detach from the face film when the label is removed. A variety of adhesion levels are available to cater for a wide range of surfaces.

EASY-APPLY FILMS



These clear or white non-PVC films enable bubble-free application to flat glass surfaces on contact.

Quick and simple to apply, the films offer reliable adhesion and are easily removed when required, leaving no adhesive residue, making them ideal for point-of-sale window graphics and labels. Easy-apply solutions include 'self-wetting' adhesives and embossed release liners that enable air release of conventional adhesives upon application.

The Mothergreen® ultra-clear film offers excellent optical clarity and dimensional stability with the additional benefit of being manufactured using at least 80% recycled PET from discarded drinking bottles.

SELF-CLING



Clinglok is an ingenious labelstock that adheres to itself and not the labelled item. Our proprietary 'cling' coating acts as a permanent adhesive only in contact with itself. This self-cling coating also deters dirt attraction around the label edges (a problem with conventional self-adhesive labelstocks).

A matt white, print receptive polypropylene labelstock, Clinglok offers good resistance to chemicals, humidity and abrasion. Its broad range of applications include jewellery, eyewear, cable and industrial tagging.

AUTOCLAVABLE FILMS FOR PHARMACEUTICAL IDENTIFICATION



The extreme temperatures involved in autoclaving – around 121°C – create a very harsh environment for identification labelling. Our autoclavable polyester films can withstand these high temperatures without risk of peeling off and their high transparency allows easy viewing of container contents.

They can also withstand gamma ray and alcohol sterilization methods.

The films provide exceptionally high adhesion to curved surfaces, even on small diameter containers, including ampules, syringes and test tubes.

Available with clear adhesive or clear adhesive with UV luminescent additive designed to enable the identification of missing labels during automatic dispensing.

-196°C CRYOGENIC



Our cryogenic labelstock can be directly immersed in liquid nitrogen at -196°C without risk of delamination. They can be variably printed via thermal transfer or laser, so fine batch and barcode detail can be captured accurately even for small vials and test-tubes. Their excellent curved surface adhesion ensures secure attachment for reliable identification of blood, DNA, tissue and stem cells.

The product range includes white materials suitable for printing via thermal transfer, direct thermal, laser, and colour water-based ink-jet printing. A clear thermal transfer material is also available and is particularly suited to applications requiring overlapping wrap-around labels.

LABORATORY IDENTIFICATION



Our innovative solutions for equipment ID are designed to resist the extreme temperatures and chemicals used within the challenging laboratory environment.

This non-transferable fused label technology offers superior long-term abrasion, chemical and thermal shock resistance. Permanently fused to ceramic and glass surfaces through the use of extreme heat, the labels are heat resistant to 1250°C on ceramics and to 600°C on glassware.

HIGH CHEMICAL RESISTANCE (FOR LABORATORIES)



Durafol® offers extreme chemical resistance to harsh cleaning agents such as IPA, xylene and acetone without compromising the print or topcoating. This makes it ideal for applications within the laboratory environment where printed information (such as patient ID and batch numbers) must remain highly legible to ensure reliable traceability.

A thermal transfer printable polyester, it enables production of on-demand high performance variably printed labels. Our range of high performance adhesive coatings ensure outstanding adhesion on most surfaces.

DIRECT THERMAL FOR HEALTHCARE



A matt white direct thermal printable polypropylene engineered to offer excellent print quality combined with superior water, light, chemical and heat resistance when compared to conventional direct thermal films. In addition, due to the superior product characteristics, printed images remain legible for extended time periods when compared to conventional films.

Resistant to immersion in liquid nitrogen at -196°C, the material is suitable for cryogenic storage identification.

The product can also be used with handheld printers to produce on-site labels for industrial, inventory and field research purposes.

FOR FROZEN & WET SURFACES



Chill AT is an innovative all-temperature adhesive for applying labelling to food and frozen goods packaging. Created using proprietary hot melt adhesive technology, Chill AT is specially formulated for demanding applications such as labelling icy and wet surfaces.

Suitable for application at temperatures as low as -23°C, it provides a solution for applications that are beyond the capability of conventional freezer adhesives.

Chill AT complies with FDA Regulation 175.125. It is suitable for direct food contact labels applied to poultry, dry food, processed, frozen, dried, partially dehydrated, and raw fruits and vegetables.

DIGITALLY PRINTABLE – UV & LASER



Our range of products designed for extreme conditions includes water-based ink-jet printable materials capable of withstanding submersion in liquid nitrogen at -196°C, and products that comply with BS-5609 sea water immersion for chemical drum labelling.

For desktop laser use we offer a wide range of durable films which comply with a variety of demanding end-uses and unique solutions, such as ultra-low conductive 'laser-safe' metallised films that prevent sparking within the machine.

DIGITALLY PRINTABLE WATER-BASED MEDIA INKJET



Suitable for the new generation of on-demand, high-resolution, four-colour printers the media features a micro-porous surface which is highly absorbent enabling fast drying times.

STATIONERY & DECORATIVE



This versatile product range encompasses both functional and decorative applications for a vast range of stationery related products used in the home and workspace. There are labelstock solutions for POS, creative purposes and packaging – including a highly conformable removable option that can be applied to small diameter surfaces such as artists' brushes and ballpoint pens.

Some applications are actually integral to the product itself, such as our 'repeel' and extra-low adhesion options which are ideal for re-usable notes and decorative stickers.

ALTERNATIVE TO PLASTICS



Conventional paper is inherently porous, hydrophilic and has considerably weaker mechanical properties compared to plastic. Traditionally these characteristics excluded the use of paper for many applications.

LINTEC R&D, in conjunction with our own paper mill, continue to develop unique paper materials to overcome these limitations. Our superior water-resistant paper labelstocks are, in many cases, a suitable alternative to plastic films. The materials are coated with either hotmelt, conventional emulsion or new biomass-based adhesives derived from plants.

As an example, PLALESS® direct thermal paper offers superior water resistance, rub resistance and microwave oven compatibility. The material has successfully replaced plastic based labelstocks in the food, beverage, and logistics sectors.

ECO-FRIENDLY SOLUTIONS



LINTEC is continuously expanding the range of products that lower environmental impact.

Our Mothergreen® range of polyester labelstocks are manufactured using recycled PET water bottles. Depending upon the construction, recycled content is up to 100%. The film manufacturing process consumes less fossil fuel and produces considerably lower CO₂ emissions compared to traditional production using virgin PET.

The films include printable coatings that are free of volatile organic compounds (VOCs) such as ethyl acetate, toluene and xylene. These coatings eliminate carbon dioxide emissions derived from solvents.

ADDITIONAL PRODUCTS

In addition to the label materials presented within this catalogue, LINTEC manufacture a wide range of other products, including:

Automotive tapes, functional and protective films

Primarily designed for OEM use, the products include double sided tapes, wiring harness fixing tapes, self-healing anti-chip PU protection films, paint replacement films and temporary protection films for alloy wheels.

Industrial double-sided tapes used for bonding and mounting

Products include film, foam and nonwoven tapes. LINTEC offer product ranges designed to offer specific functionality including light shielding, optically clear, low-tack processing films (to enable die-cutting of non-adhesive materials) and spacer materials for membrane switch production.

Window films

A wide range of products including printable, heat reduction, exterior weatherable, privacy and view control films.

Wide format digitally printable media

Wide format digitality print methods the films enable bespoke decoration of walls, windows, floors, transportation and building facades.

For more information regarding the above and to see other ranges available please visit our website www.lintec-europe.com

BESPOKE PRODUCT DEVELOPMENT

Working with you

We focus on your specific requirements and create innovative products to help generate new customers and profit for your business. Our EU technical team will work closely with you and our EU and Japanese R&D laboratories to develop bespoke and often ingenious solutions.

Our typical development method is to gather the customer brief and then investigate which components are suitable. We offer an extremely wide range of topcoatings, films, adhesives and release liners which can be combined on a custom basis to meet your particular needs.

Next, we produce A4 trial sheets for initial evaluation. If necessary, we will then produce a trial roll using one of our R&D pilot coater machines before moving to bespoke 'full-scale' production. This typically starts from as little as 500m² which can be slit or sheeted as required.

The laboratory can also perform detailed analysis and evaluation to ensure the resulting product is fit for your purpose. This process includes a range of tests, including environmental, adhesive performance – peel and shear, accelerated weathering, chemical resistance, testing to OEM specifications and compliance with EU directives.

Throughout the development and production process, you'll have a dedicated point of contact.



OUR ENVIRONMENTAL CREDENTIALS

"We have to broaden our scope when working to support the environment. There is only one earth."

This statement is the benchmark against which we develop and maintain our environmental management systems. We are committed to both reducing our environmental impact as a manufacturer and to developing environmentally friendly products.

We actively pursue the development of environmentally friendly products. These include fully re-pulpable adhesive films, water-soluble adhesive papers and non-PVC wide format graphic ranges. We also make extensive use of recycled materials in the manufacturing process.

Our procurement processes

Our procurement policies aim to reduce environmental impact through careful management of all materials and parts. We extend these principles to our suppliers, requesting that they too implement all necessary environmental preservation steps.

Our UK office is ISO14001:2015 accredited

This means we work to a framework that helps reduce waste and energy use to improve efficiency and cut the cost of running our business.

Award winning

At Labelexpo Europe 2015 LINTEC Corporation received the Award for Sustainability for the KP5000 film, which uses the highest percentage of recycled PET pellets (80%) in the industry.

MANUFACTURING PLANTS



Tatsuno Plant



Komatsushima



Agatsuma Plant



Lintec Korea Inc



Kumagaya Plant



Madico USA



Chiba Plant



Mactac Americas I.I.C.



t Shingu Pla



Lintec



Ina Technolog



PT. Linted



Mishima Plant /Doi Plant



Lintec (Suzhou)
Tech Corporation



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