Welcome to Exopack® Advanced Coatings  
Touching Everyday Life

Overview

We are global leaders in the development, manufacture and distribution of precision coated papers, films and specialty substrates for imaging, electronics, medical and optical technologies. We also offer unique Specialty films and Coating Services including toll coating (custom coating) and converting.

With our state of the art facilities, we apply our key technology platforms to develop high performance products for the most challenging applications. These products enter the marketplace via three main channels:

- Exopack Advanced Coatings branded products
- Innovative proprietary products developed under partnerships
- OEM or distributor labelled products

The coating, laminating and converting of flexible materials has been the focus of our business for more than forty years. Our unique combination of world class facilities, customised equipment, skilled personnel and expertise results in products with the optimum balance between cost and performance.

We have over 200 employees split between our facilities in the UK and North Carolina USA with a smaller group based in our distribution centre in Guangzhou, China.

Markets Served

Renowned for our optically clear adhesives and hardcoats, medical polyurethane films, conventional and progressive chemistries, ink receptive coatings and much more. Our products go to market under several well known brands.

- inspire® medical components for wound care, ostomy and medical devices
- reflex™ hardcoats for membrane switch and overlay films
- strat-fx™ optically clear hardcoats and adhesives for dynamic displays
- tecnilith® imaging and protective materials for electronics and next generation phototool products
- z-flo® conductive films and foils

The development and manufacturing expertise underlying these brands is also available via the coating services segment of Exopack Advanced Coatings.
MEDICAL COMPONENTS FOR WOUND CARE, OSTOMY AND MEDICAL DEVICES

Overview
The inspire® range of flexible components is supplied to manufacturers in the wound care, ostomy and medical device sectors. From thin polyurethane films to adhesive coated polyurethane foams and conductive substrates, the product range is designed to help manufacturers produce dressings that reduce the cost of patient care by providing improved healing and extended wear time. The products are manufactured to a high standard ensuring customers experience excellent yields and manufacturing efficiency during conversion.

Thin Films
The inspire® films are some of the most technically advanced and consistent products available. The combination of breathability, bacterial barrier, soft silky feel and supreme mattness make them the ideal choice for wound dressings; incise films and many novel medical products. Materials are available on paper or film backings and in a wide range of thicknesses and colours.

Foams
Ideal for wound care applications, thin polyurethane foam offers excellent breathability, protection and insulation to support optimal healing conditions. Our range of colours, thicknesses and softness provides customers with the opportunity to find the ideal material for their application.

Composites
Thin films, adhesives and foams can be combined in a variety of ways to create novel features. Through the use of our coloured materials and our in-house printing the potential for creating strong brand identity is vast.

Conductives
Carbon containing films that can be modified with silver or silver/silver chloride are available for a variety of electrode applications including ECG, TENS, biosensors and cosmetic applications.

Coating Services
With over 75 years of experience in coating materials for a variety of demanding markets, we feel confident that we can meet your needs. Whether you require a simple print added to a standard inspire® film or a brand new technology, we are in a position to provide cost effective components with functional performance that will add value to your products while maximising your productivity and minimising waste.

Touching Everyday Life
HARDCOATS FOR MEMBRANE SWITCH
AND OVERLAY FILMS

Overview
reflex™ is a range of high grade overlay films developed to meet the exacting requirements of Screen Printers, Membrane Touch Switch and Fascia-panel manufacturers and their end users.

Based on optical grade heat-stabilised polyester it has a typical residual shrinkage of less than 0.3%. It is two side coated in 1000 Class Clean Rooms, on one side with a well proven print receptive layer for UV and solvent base inks and on the other side with an advanced UV cured resin.

Exopack Advanced Coatings has achieved the optimum performance in hardness, embossability, chemical resistance, a switch lifetime of more than 5 million acuations and the ability to be die-cut.

reflex™ can be tailored to match different performance requirements including the application of different hardcoats and adhesives on to a variety of flexible substrates.

These products are backed up by a programme of customer oriented development work to respond to customer needs.

Features and benefits
• Excellent Print Receptive Coating
• Chemical Resistant
• UL Listed Base Film
• Embossable
• Abrasion Resistant
• Optically Clear
• UV and Solvent Based Inks

reflex™ Antimicrobial
Concern about the risks associated with bacterial and viral infection has led to demand for products and systems of work that minimize the impact and spread of infection in the workplace and public buildings. Exopack Advanced Coatings has responded by developing reflex™ Antimicrobial LT to add to its range of high grade graphic overlay films.

reflex™ Antimicrobial LT incorporates SteriTouch® antimicrobial additive during the manufacturing process. Based on innovative silver technology SteriTouch® is designed to eliminate the growth of harmful organisms such as bacteria, mould and fungi. The integration process ensures even distribution of the SteriTouch® antimicrobial agent throughout the textured hardcoat and the film surface, providing a reliable, stable bacterial barrier. All SteriTouch® additives have FDA EFSA and EPA approvals, importantly, they also have BPD (biocidal products directive) support, enabling their use throughout Europe.

reflex™ Antimicrobial LT based on a UL listed polyester film employs our superior proprietary primer technology offering excellent anchorage of our textured hard-coat to the front side and of both UV and solvent based inks to the reverse side, making it suitable for a wide range of applications in sanitary conditions.

The superior scratch and chemically resistant surface of reflex™ Antimicrobial protects against dust, cleaning and damage from many of the chemicals used in a working environment.

reflex™ Antimicrobial LT is coated in 1000 Class Clean Rooms achieving optimum performance in hardness, embossability, chemical resistance, a switch lifetime of more than 5 million acuations and the ability to be die-cut.
Optically Clear Adhesive Film (OCAF)
This is a free-standing, pressure-sensitive, bonding film designed specifically for laminating both smooth and rough substrates. Its cleanliness, durability and high optical transmission make it most effective for use in rear projection screens, touch screens, flat CRTs and other applications where adhesion and optical clarity are crucial.

Easy Clean Gloss/Anti Glare
Industry experts agree that graffiti needs to be removed as soon as possible after an attack. strat-fx™ Easy Clean Gloss can prevent the material under the film becoming damaged as well as providing a surface that can be cleaned, using simple or existing cleaning solutions and procedures, leaving no ghosting effects.

Surface modified strat-fx™ coatings combined with high clarity polyester film with optically clear, fade resistant, pressure sensitive adhesive can be used inside shopping centres, offices and public buildings and also within transportation systems to protect against graffiti and general damage.

High gloss and anti-glare options can be applied to potentially any smooth, nonporous, panelled or glass area exposed to scratching, chemical attack, pens and paint abuse.

Whilst conventional window film has provided solutions to safety and security issues for many years, the combination of high clarity films and unique easy-clean strat-fx™ chemistry now provide cost effective cleaning options, easy to replace and instal.
tecnilith® Amber Phototool

An extremely easy to develop film that has been designed to provide excellent resolution. The film is highly stable and offers extremely low haze, high actinic density and resolution. Slightly darker image colour helps with registration to the PCB panel. Films are coated on a 0.007” polyester base for maximum dimensional stability and durability. The product resists tearing, ripping and deterioration caused by age and repeated use and exhibits superior resolution allowing for 1000 lines/mm with sharply defined images.

Formulated for easy processing it delivers outstanding performance in dry film applications and long use in LPI applications when used in combination with tecnilith® Artwork Protect Film.

Suitable for the most demanding PCB manufacturing environments.

tecnilih® Artwork Protection Film

With cleanroom lab, pilot, and production-scale coating facilities, we closely partner with electronics market leaders to leverage our technologies in ceramic coating, high temperature and fire-retardant resin systems. Additionally, we offer expertise in handling various foil substrates, dry film photo-resist, and photosensitive coatings.
Conductive Films for Medical Applications

Their precise coating, uniformly dispersed conductivity, and ‘through’ conductivity, make our films ideal for use in a variety of compact and lightweight medical diagnostics and treatment devices. Applications include:

- **Stimulation Electrodes**
  Conductive Films for TENS stimulation for back pain, strains and muscle-pull

- **Defibrillator Electrodes**
  Conductive Films used in patches applied to patients

- **Monitoring Electrodes**
  Conductive Films for EKG, EEG and other medical monitoring

**Overview**

Manufacturers around the world trust Exopack Advanced Coatings to deliver high-performance conductive films and foils. Our high performance conductives are lightweight, cost-effective and high performing, with carbon-filled polymeric films, provided with or without silver coatings, and conductive coated foils offering surface and through conductivity. These materials also resist corrosion and attack by chemicals, won’t flake and are unaffected by humidity.

**Whiteboards**

Our conductive vinyl films are designed and used throughout the world in electronic whiteboards that interface with computers and assure a reliable contact that generates co-ordinates for precision mapping.

**Current Collector for Batteries**

Battery performance is key to the portability and popularity of consumer favourites such as cell phones, camcorders, power tools, laptops and personal entertainment devices, as well as industrial applications for communication and transportation such as for cell towers and relay stations, motor-scooters and electric vehicles. The current collecting properties of Exopack Advanced Coatings’ conductive film help assure reliable power and performance.

**Development and Custom Coating Services**

For custom designs, Exopack Advanced Coatings offers conductive films in an assortment of materials, thicknesses and widths. Exopack Advanced Coatings will work with your development team to provide the performance requirements required for your application.
Speciality Films and Coating Services

Overview
With two ISO-certified manufacturing facilities in Europe and the US both having multiple coating lines, cleanrooms and laboratories we are committed to be the leading provider of coated materials. Our technical staff continually develop new techniques, formulas and applications that add competitive advantages for our customers' products. Through close co-operation with major OEM’s and with our own technologies we supply, often complex coatings to various substrates to meet the most demanding applications. All communication is tightly controlled by confidentiality.

Coating Services
With shorter product life cycles and changing technologies, contract coating and converting offers a set of strategic options that enhance your flexibility without the added investment in equipment and workforce.
From small scale trial facilities up to large scale production operation we offer a range of coating processes.

Industries we Serve
Materials developed solely by us or jointly with customers, are used in a variety of products in the following high technology markets:
• Automotive
• Coated Fabrics
• Defence
• Electronics
• Information Storage
• Medical
• Optical Films
• Security
The collective knowledge of our team means we can deliver creative solutions to your novel business objectives and challenges. Contact Exopack Advanced Coatings today to put our products and services to work for you.

Capabilities
Coating widths to 1600mm (64")
Wide coating thickness range with high levels of coating accuracy

Coating and Drying Methods
Multiple coating methods which can be aqueous, solvent or 100% solids systems:
• Reverse roll
• Direct gravure
• Reverse gravure
• Direct and post metered slot-die
• Knife-over-roll
• Proprietary Coating Methods
• UV
• Thermal

Process Control
Process data logging
Camera inspection
Electronic SPC charts

Pilot Coating Facilities
Development Laboratory
Modular laboratory coating facility to 300mm (12")
Pilot coating facility 600mm (24")

Additional Equipment
Mixing facilities
Slitting/Sheeting/Rewinding
Filtered air to class 1000 (M4.5) conditions
Printing
Our custom engineered coating equipment can be modified in-house to adapt to customers' needs.
FOR FURTHER INFORMATION

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About Exopack Holding Corp.
Currently managing eighteen production facilities strategically positioned across North America and the United Kingdom, as well as a global network of alliance partners, Exopack is an established leader in the development, manufacture, and sourcing of paper and plastic flexible solutions for various consumer and industrial end-use markets.
For more information, please visit www.exopack.com or call (877) 447-3539.

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