protective tapes plate mounts & splicing & feet adhesives colour orinted tapes & labels sealants ഗ asteners Φ personal protection equipment Õ double coated ta screen stretching abrasives adhesives abrasive tools ape slit safety & maintenance packaging equipment masking tapes single sided tapes hook & loop

velcro **Jiiy Bostik ODADVANCE** FineCal

www.finecal.co.uk sales@finecal.co.uk



The FineCal Group

With over 44 years of business experience and serving a wide spread of industrial markets, the FineCal Group is proud of its high reputation in offering top quality products from leading manufacturers including the well known brands of 3M, Jiffy and Bostik. Whatever your application, our supplier partnership plus extensive stocking enables us to get the right product to you fast.



Aerospace & Commercial & military approved specialised products with full 'release' traceability. Automotive

Building & Off-Site Plastics, cloth and protective tapes & sealants. Construction

Electronics (inc white goods)	Wide choice of excellent products including cushioning foams: RoHS & REAch compliant.
Engineering	Masking & abrasives, protection tapes & anti-rust papers, screw locks and super glues.
Furniture & Woodworking	Abrasives & adhesives including pva's; sprays, brush-ons, edge-strippers and wood-fillers.

- Printing Industry Adhesive sprays, splicing & plate-mount tapes, glue-dots & screen-print inks pre & post press.
- Sign & Display Double sided tapes, foams and hot-melts; application tapes and Velcro.
- All Markets Choose from our in depth range of packaging materials, tapes, pallet films, corrugated, bubble, strapping cartons and packing system machinery too.

The FineCal team is dedicated to delivering a first class service. We have technical field people who can visit, conduct factory surveys and demonstrate products advising you of the best options. We can provide you with the most suitable of options from simple sales or contract to consignment or supply chain solutions (VMI).

We deliver (via our own transport) all over the South & South West and South-Wales and will organise fast shipments nationwide or abroad. We have trade counter facilities in Bristol where our helpful staff will advise you about products and applications. FineCal is very proud of its production facilities. This includes our award winning printed label division (see the inside back page), tape slitting, screen stretching and screen ink colour matching. So whatever you're after, you won't be disappointed.

Make FineCal your 1st choice every time.

63

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Workwear

The suggested applications for the products shown in this catalogue are based on our comprehensive knowledge of these products and their uses in industry. This should only be taken as a guide. As every application is slightly different we strongly recommend that customers conduct tests to assure themselves of the suitability of products before using them in production.

Product Solutions for Industrial Manufacturing

We aim to help our customers

Reduce Total Process Costs Reduce Supply Chain Costs

Improve Product and Process Quality

Improve Productivity

DOUBLE COATED TAPES

ADHESIVES

ADHE

PACKAGING

Appliances Display Electronics Food and Beverage Metals and Metalworking Maintenance and Operations

Major industries served

Paper Converting Power utilities Plastics Printing Signing Transportation

We can help in all of the key processes involved in manufacturing industry, from raw materials, through production to final assembly and despatch

Preparing Producing Assembling Fitting Finishing Testing Packaging Despatching

Abrasives Adhesives Double Sided Tapes Packaging Materials Single Sided Tapes Safety and Maintenance

one or more of

With product solutions involving

DOUBLE

4

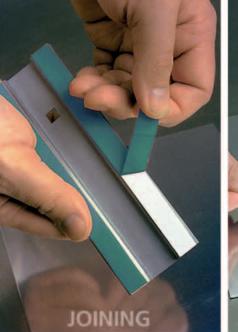
Double Coated Tapes



LE COATED TAPES

PACKAGING

ABRASIVES



Scotchmate Dual Lock

CLOSING

ATOYOTA

NY.IM

FIXING











Product Selection

Product Range	Key Features	Advantages & Benefits
General Purpose Double Coated - PAGE 8	Usually, a general performance adhesive coated on both sides of a variety of substrates (paper, plastic) with a choice of liners	Will be used for temporary holding prior to more permanent fixing, or in non critical , low weight bearing applications. Budget priced
Fingerlift Tapes - PAGE 8	The liner (paper or plastic) extends beyond the tape width, providing easy liner removal on one or both edges	Liner may be left in place until final attachment. Makes these tapes suitable for high speed machine application
Adhesive Transfer Tapes - PAGE 9	A pressure sensitive adhesive on a roll with no carrier. Available in a wide range of adhesive performance	The thinnest possible glue line combined with easy tear characteristics makes this range ideally suited for hand held applicators and dispensers
Double Coated Foam Tapes - PAGE 9	The thickness of foam provides some gap filling properties for irregular surfaces and the foam structure will determine the performance available	Wide variety of thicknesses, foam types, liner materials and types of adhesive makes for an extensive array of solutions
High Performance Double Coated - PAGE 10	Balancing the different requirements of high initial adhesion (peel) and long term performance (sheer) without compromising either.	Will bond to the widest possible range of substrates, providing a universal starting point for any product selection
3M VHB™ Acrylic Foam Tapes - PAGE 11	High performance acrylic foam tapes providing for permanent bonding of substrates under critical environmental conditions.	A proven alternative to mechanical fastening systems when designed into the assembly process
Hook and Loop - PAGE 13	Low profile, general purpose closure	Wide options of colours, fixings and formats
3M Dual Lock - PAGE 13	A one component strip of interlocking plastic stems with an audible snap.	Ideal for blind fixings and positive closure
Magnetic Tape - PAGE 13	A self adhesive magnetised strip for a clean attachment to metal (ferrous) surfaces	Closure system that only needs to be applied to one of the two surfaces
Plate Mounting Tapes - PAGE 14	A range of double sided adhesive tapes with precise thickness for mounting of flexographic printing plates	A system solution that provides precision mounting, high speed and long production runs, yet easy removal
Splicing Tapes - PAGE 14	A range of single and double sided tapes for butt, overlap and flying splices for all web materials	Industry proven solutions for Paper, Film and Foil - Manufacturers, Converters and Processors
Converted Products - PAGE 12	Custom cut shapes from any combination of tapes and backing materials to produce engineered component parts in convenient presentations.	Engineered parts in production friendly formats for ease of application and cost effective solutions

General Purpose Tapes / Fingerlift Tapes

ADHESIVES

General Purpose Tapes

General Purpose double coated tapes can be used for any non critical applications, such as folder assembly, sample swatches, picture mounting, to name a few where high performance is not required.

- Economical
- Available in a wide range of standard and non-standard widths
- Filmic and tissue carriers as well as adhesive transfer tapes
- Can be used with semi-automatic machines to speed up productivity where high production volumes are involved.

Other General Purpose tapes include Double Sided Cloth tape for temporary holding and machining and Double Sided Foam tape for light weight indoor signs and light weight fixings.

Typical Industries

Print Finishing Display Contract Packing Point of Sale Signage Picture Framing



Fingerlift Tapes

Fingerlift tapes are available with either an acrylic adhesive for performance, or a rubber adhesive for economy. This system allows easy removal of the liner to speed up production.

- Wide range of widths available
- Permanent or removable adhesive
 Short or long length rolls available from 50m – 500/1000m
- Transfer adhesive, filmic or tissue tapes

Fingerlift Tapes can be used to make up items at a later date, where the protective liner is left on the product until it is to be attached.

SAFETY AND MAINTENANCE

ABRASIVES

Typical Industries

Continuous Stationery Point of Sale Print Finishing Polythene Bag manufacture

Adhesive Transfer Tapes / **Double Coated Foam Tapes**

9

Adhesive Transfer Tapes

Adhesive Transfer Tape is pressure sensitive adhesive on a release liner. When pressed adhesive side down to the back of a surface, the adhesive grips immediately. The liner protects the adhesive until ready for use. Adhesive Transfer Tape can be applied manually or if reverse wound in the ATG Systems.

Scotch[™] ATG Bonding System offers a quick, easy, precise alternative to the usual methods for:

- Lightweight Joining
- Trim Bonding
- Component Fixing •
- Temporary Holding
- Product Assembly
- Positioning

ATG dispensers enable users to apply strips of pressure sensitive adhesive tape, in exactly the right place.

- Accurate placement direct to the surface
- No extra rub down needed
- Rewinds waste liner into gun
- No mess
- Quick no tidying of paper liner from work area

They are available in a variety of colours and a large choice of thicknesses to suit a multitude of applications.

- - - Environmental resistance
- **Distributes Stress**

- Practical in every type of business:
- **Furniture Manufacture**
- Art Studios
- Picture Framing
- Leather

- Woodworking
- Display
- Plastic Fabrication
- Hand work on assembly lines

Double Coated Foam Tapes

Double Coated Foam Tapes are available in different types of foam, such as EPDM, Polyethylene, Polyurethane, PVC or Neoprene. They are available with either acrylic or rubber adhesive, and in a variety of colours and a large choice of thicknesses to suit a multitude of applications.

Foam Tapes can be slit to any width to suit your requirements.

- Ideal for gap filling and bonding irregular surfaces
- Good for sound and vibration damping
- Available in low, medium and high density
- Forms dust and water seal
- Available with filmic liner where tearability is an issue.

Choice of adhesive available: Rubber (for internal use) - good on low energy surfaces Acrylic (for external use) - High durability

- - Good ageing characteristics
 - UV Resistant





- Point of Sale
- Textiles

High Performance Tapes



High Performance Tapes

These high performance products combine a very high level of adhesive peel & shear performance. Well suited to bond a wide variety of materials such as wood, metals, glass, powder coated finishes, paints and many plastics and fabrics.







- Available with three different carriers, PVC, for bonding textured materials, Polyester for clear higher temperature bonds and tissue for easy tearability offering different benefits dependent upon your application.
- Good on both high and low energy substrates.
- Excellent initial tack
- Good integrity bond achieved soon after application.
- Plasticiser resistant
- Good environmental and UV resistance.



Typical Markets

Plastic extrusions Metal Fabrication Blister packs and packaging Auto trim and interiors Picture Framing Elevators and lifts Point of Sale Sports Equipment Badge and nameplates Signage Fabric and leather stitching Shop fitting Furniture and trim Card Mounting Blind manufacturers

VHB™ Acrylic Foam Tapes 3M Sign Makers Assembly Acrylic Foam Tape

VHB[™] Acrylic Foam Tapes

An alternative to rivets, screws and welding.

For over 25 years, Industries worldwide have been using 3M VHB[™] Tapes on many different substrates. Very High Bond acrylic foam tapes, are high performing and economical alternatives to traditional mechanical fastening systems. Little or no investment in machinery is required. Your products are of better quality, stronger better looking and of a higher resistance to corrosion and environment.

- Finishing time is reduced and appearance enhanced by eliminating screws, rivets and welding.
- VHB[™] tape differs from regular foam tapes by its 100% pure acrylic adhesive core so it has high cohesive strength.
- Simple hand roller pressure and the bond is made.

Typical Markets

Plastic extrusions Metal Fabrication Blister packs and packaging Auto trim and interiors Picture Framing Elevators and lifts Point of Sale Sports Equipment Badge and nameplates Signage Fabric and leather stitching Shop fitting Furniture and trim Card Mounting Blind manufacturers

Quality Advantages

- Strong and durable bonds
- No drilling or welding
- No grinding or finishing of the bond
- Seamless finished product
- Vibration dampening
- Uniform bondline
- Enhanced aestheticsExcellent sealing
- propertiesUV resistant
- Chemical resistant

Cost Advantages

- No expensive machinery required
- Fast assembly process
- Reduced re-working
- Lower labour costs
- No investment costs

Flexibility

- Perfect for metals, plastics glass...
- Joins dissimilar materials
- Increases design possibilities
- Compensates for different thermal expansion rates
- Can be applied in-house or on-site
- Can be die-cut to your requirements





Typical Industry Applications

Commercial Vehicles and Transport Exterior panels are bonded directly onto the support frame

without drilling, screws or welding. No holes means no leakage or corrosion points, and no screws means a flat, smooth finish ideal for perfect application of graphic material onto trucks and buses of all types. VHB[™] tape also reduces vibration and rattles as well as surface induced galvanic corrosion, and seals the bond to make it totally watertight.

Electronics

Tiny modern electronic products can no longer be constrained by heavy, old-fashioned assembly materials. VHB™ tape can be precisely die-cut to bond and seal exact shapes, to absorb shock when circuits are fitted to their housing, to guarantee that underwater cameras and lenses are water-proof...and all this



with virtually no weight added to the product. Signs

Signs have a greater graphic impact when assembled with VHB[™] tape. Materials are undistorted by drilling, screwing or welding, and extreme weather conditions, e.g. very high winds, have no effect on the bond. Additionally, as VHB[™] tape bonds dissimilar materials and has very high static load bearing capacities, you can decide exactly how you want your sign to look and the material from which it is made.

Construction

For internal and external use, VHB[™] tape bonds architectural panels seamlessly to their frames and decorative features to the exteriors of windows. VHB[™] tape compensates for different rates of thermal expansion so you are free to choose your materials with one less constraint to worry about.

3M Sign Makers Assembly Acrylic Foam Tape

3M Sign Makers Assembly Acrylic Foam Tape utilises an acrylic based polymer that exhibits excellent long term holding power. The peel adhesion and tensile holding performance of Sign Makers Assembly tape is significantly higher than typical pressure sensitive tape products. Resistance to solvents, temperature extremes and UV light makes Sign Makers Assembly tape suitable for many interior and exterior applications.

- Developed especially for substrates commonly encountered within the signage market
 - Low cost alternative to the well known 3M VHB™ range.

11

Converted Products / Glue Dots™



PACKAGING

SINGLE SIDED TAPES

ABRASIVES

Die Cuts

Die-cuts on the roll with all the waste removed Die-cuts on the roll with centre and

edge waste removed

Butt-cuts

Butt-cut for the most economical of presentations

Oversize Liners

Tape or foam pieces with oversized liner for easy removal

Split Back Liners

Die-cuts with waste removed with split back liner

Sprocket Holes

Produced with sprocket holes for computerised registration system

Glue Dots[™]

Glue Dots[™] are permanent and removable adhesive dots with thousands of uses. The cost effective alternative to hot melt adhesive and slow drying glues means no more risks from burns,

no slow drying liquids and no more expensive dispensing equipment.



Converted Products

All adhesive tapes, whether they be foam, filmic, adhesive transfer tape, single-sided or double-sided, can be customised to any shape to suit specific production requirements or individual needs.

Using die-cut parts improves productivity, saves time, saves material and saves money. These can be presented either on rolls, with or without waste removed, in single cut pieces, sheets or strips.

Tape or foam pieces can have an oversized liner or a split back liner for easy removal. The presentation of the product can be engineered to suit individual applications, incorporating elements such as pre-spaced layouts and specified location holes to reduce both application time and production cost. All these tapes can also be slit from log roll into standard and non-standard widths, thereby releasing customers from the unnecessary restriction of standard sizes and large minimum order quantities.



Specialist die-cut shapes are widely used in the automotive industry, electronics, telecommunications and general manufacturing.

An everyday example of a converted product would be masking tape dots of various diameters for masking off apertures on product components prior to paint spraying.

- Available in low, high and super high tack
- Various diameters standard dot
- diameter 9mm
- Different profiles
- Acid free
- Odourless
- Packaged in handy dispenser boxes of 1000, 2000 and 8000.

For easy dispensing use the Dot Shot® Pro! The Dot Shot® Pro applies Glue Dots[™] Adhesive Products quickly, cleanly and precisely.

- A safe, smart alternative to tape guns, hot glue guns or liquid glue
- No electricity required
- Lightweight, triggerless design
- makes it safe for repetitive use
 Dispenses a wide variety of Glue Dots™ Adhesive Products



For acceleration of productivity the Dot-O-Matic[™] from Glue Dots International takes productivity to a new level. With a semi-automatic operation, the Dot-O-Matic[™] can apply up to 60 Glue Dots per minute, speeding up any production line.

Typical Applications

Printing Fulfilment Mailing Print Finishing Product Assembly Security Bindery Packaging

12

SAFETY AND MAINTENANCE

Dual Lock[™]/Hook and Loop/Magnetic Tape

Dual Lock[™]/Hook and Loop /Magnetic Tape

Dual Lock[™] Recloseable Fasteners provide an innovative alternative to screws, bolts, snap and other traditional fasteners. When pushed together mushroom shaped stems interlock with each other and an audible snap sound announces that the fastener is engaged.

- Fast, easy assembly & dismantling
- Self adhesive back with VHB™ or rubber adhesive to adhere to many substrates
- Available in different strengths
- 12 times the strength of traditional Hook and Loop





Hook and Loop

Hook and Loop fastenings are available where low profile, less weight, general purpose closures are required. Black or White Rubber or Acrylic Adhesive or non-adhesive Also available in squares or circles Non-adhesive available in a wide range of colours

Magnetic Tape

Magnetic Tape is used for signage, fridge magnets, pop up displays, double glazing and other magnetic fixing solutions.

Available in a variety of widths or in sheet form

1mm Adhesive Foam backed for attaching to uneven surfaces Transparent Adhesive backed for smooth surfaces or where the tape is visible through a transparent material.



Platemounting / Splicing



PACKAGING

A complete range of splicing tapes and products available in all

Splicing

formats.

SAFETY AND MAINTENANCE

ABRASIVES

We offer a range that can be used from board to high speed newspaper printing, repulpable and nonrepulpable. So we have a solution to whatever your splicing requirements are from core starting to the new 3M straight line flying splice.

Platemounting

Flexographic tape system. We offer a wide range of foam densities and adhesive systems to meet your every need in the printing process.

Positioning

precision mounting, with quick and easy application and removal.

Bonding

grips well during the longest runs and enables high running speeds.

Removal

quick, easy and clean removal from cylinder after use.



Also introducing the new 3M 'E' liner with its revolutionary micro channels for even greater performance all round.

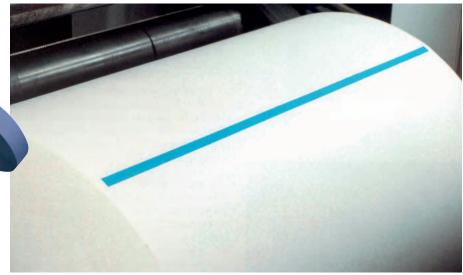
Choose E-series for:

- Easier plate removal
- Use with larger diameter print cylinders
- Better results with thinner plates



Choose EH-series for:

- Higher plate-side adhesion
- Use with smaller diameter print cylinders
- Better results with thicker plates



- The new generation of 3M tapes offer: • New adhesive technology for
- New adhesive technology for greater performance on a wider range of papers
- Greater performance at lower temperatures
- Higher running speeds.

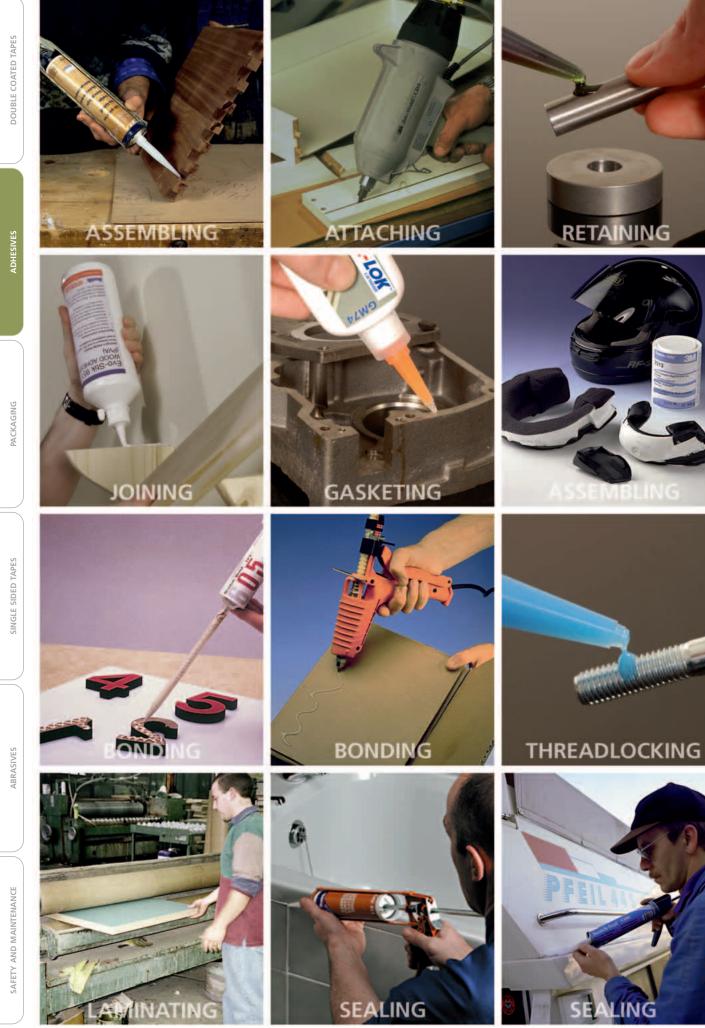
We also offer a range of General Purpose Splicing tapes and ancillary products to meet your every need, these include:

- High grab Double Sided tapes
- High temp Double Sided tapes
- Teflon tapes
- Masking tapes
- Webbing up tape
- Nose tabs
- Leader tapes

Adhesives



ADHESIVE:



Product Selection

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Product Range	Application Method	Bond Range	Service Temp °C	Typical Application
Water Based Adhesives - PAGE 18				
Contact - Pressure Sensitive - Insulation Acrylic - Neoprene - SRB PVA - Latex - Friendly alternative to solvent based adhesive.	Spray - Brush - Roller Coat Flow Gun - Notched Scraper	15 seconds to 30 days	-40°C to 250°C	Bonding Wood, Paper, Card, Rubber, Cloth, Foams, Expanded Polystyrene, Concrete, PVC, Leather, Insulation, Primed Metal & some Plastics.
Aerosol Spray - PAGE 20				
Contact - Repositionable High Bond Strength - Permanent Temporary - Fair to Good UV - Water & Weather Resistance Good Ageing Characteristics Variable Spray Patterns	Aerosol Spray	5 seconds to 1 hour	-43°C to 93°C	Bonding Metals, Wood, Plastics, Cloth, Foams, Rubber, Insulation Materials, Concrete, Ceramics, Leather, Card, Ideal for decorative laminate work & large surface coverage.
Solvent Based Adhesives - PAGE 19				
SRB - Neoprene - Nitrite - Contact Flow Gun - Thixotropic Gel - Nat Rubber Polyurethane Latex Gunnable Adhesives	Spray - Brush - Roller Coat Notched Scraper - Cartridges	4 minutes to 2 hours	-40°C to 149°C	Bonding Wood, Paper, Card, Rubber, Cloth, Foams, Expanded Polystyrene, Concrete, PVC, Leather, Insulation, Metals & Some Plastics.
Structural Adhesives - PAGE 21				
Single Part & Two Part Epoxies Primers - Non Sag - High Flow - Flexible Rigid - Low odour Self Priming, Crystal Clear - Coloured Single Part & Two Part Acrylics Activators - Low Odour -Mix Free Single & Two Part Polyurethanes High Flexibility - Thixo - High Flow Two Part Metal Fill Putty - Fast Cure High Temperature - Machineable	Static Mixing Systems Tubes - Scraper Semi & Fully Automatic Equipment	30 seconds to 3 hours	-55°C to 180°C	Bonding Metals, Plastics, GRP, Composites, Glass, Ceramics, Masonry, Wood.
Structural Self-Jigging Adhesives - PAGE	21			Bonding Wood, Plastics, Composites, GRP,
Single part - Flexible - Non Sag Thin Glue Line - Fast Handling Strength - Excess can be trimmed Self Clamping - Ease of Application.	Heated Cartridge Applicator Roller Coat - Sprayable Cartridge Preheaters	1 minute to 10 minutes Handling Strengths: From 30 seconds to 2½ minutes	-20°C to 80°C	Glass, Powder coat, PVC.
Hot-Melt Adhesives - PAGE 23				Bonding Wood, Paper, Card, Rubber, Cloth,
Sticks - Mini Sticks - Slugs Quadrack Chips - Low Melt -Colour Choice Granules	Extensive range of Electric - Air Spray - Low Melt Applicators Nozzles	25 secs - 50secs Pressure sensitive spray 2/3 minutes	-18°C to 150°C	Foams, Expanded Polystyrene, Concrete, PVC, Leather, Insulation, Metals & Some Plastics.
Super Glue - PAGE 22				Bonding Rubbers, PVC, Plastics, Wood,
High Performance Toughened Ultrafast - Non drip - Gel - General Purpose.	Bottles - Tubes - Syringes Dosing Tips - Dispensing Equipment - Activators	2 seconds - 90 seconds	-30°C to 200°C	Glass, Ceramics Fabrics, Card and Metals.
Anaerobic Adhesives - PAGE 22				Sticks Metals - particularly Brass, Zinc,
Thread sealing/Retaining Pipe Sealing - Permanent Assembly Ready Gasket - Fast Curing - Vibration Resistant - Eliminates Interference Fits Durable - Prevents Corrosion - Water Byelaw Approved (BS6920)	Bottles - Squeegee - Pumps Tubes - Dual Cartridge Mixers	5 minutes to 72 hours	-55°C to 200°C	Bronze, Plated Materials, Plastics, Some resistance to coated oily surfaces, Load Bearing Situations, Gasketing & Flange Sealing Jobs.
Sealants: Liquid & Solid - PAGE 24 Nitrile - SRB - Butyl - Silicone - GP High Temperature - Flexible Pre-Formed Solids Rapid Cure - Coloured	Tubes - Brush - Cartridges - Pails Caulking Guns - Drum Pump Dispensers Cartridges		-40°C to 150°C	Bonding & Sealing Metals, Plastics, Masonry, Wood, Glass Making Air Dust Seals, Gap Filling, Dissimilar Substrate Bonding, Potting & Encapsulating.

Water Based Adhesives

Water Based Adhesives

By eliminating dangerous solvents from your joining operations your workplace becomes environmentally friendly and simplifies container disposal.

Evo-Stik Safe 80

- Multi purpose adhesive which bonds immediately on contact.
- High shear strength.
- Good temperature resistance.
- Excellent final bond strength.



A multi purpose woodworking

adhesive (for indoor use only).

hard, plywood etc.).

Dowelling

This type of adhesive is

Koch and Morbidelli.

recommended for automatic dowelling on machines such as

Adhesive

• Needs pressure to adhere.

Has a high bond strength.

• Suitable for all wood types (soft,

AQUAGRIP 27844



3M Fastbond[™] 2000 Adhesive

This contact adhesive can be used on a wide variety of materials.

- High performance
- Ideal for tabletop laminations
- Ideal for insulation panels
- Ideal for where large areas have to be covered.
- It can be applied using conventional spray equipment or a 3M CS 2000[™] adhesive applicator, this is designed for smaller volume users.
- Bonds are achieved to immediate handling strength without the use of drying ovens or other heat sources.
- One litre of Fastbond 2000 adhesive provides an average of three times the coverage compared with other solventbased alternatives.

Polyvinyl acetate (PVA) Adhesives AQUAGRIP 326 Evo-Stik 9

Evo-Stik 9517 Wood Adhesive

A multi-purpose PVA adhesive suitable for bonding most types of wood, chipboard, fibreboard or plywood.

- Suitable for interior and exterior use.
- Water and moisture resistant.
- Ideal for furniture and cabinet making applications.
- White in colour for ease of identification of coverage.
- Sets clear.





ABRASIVES

DOUBLE COATED TAPES

PACKAGING

SAFETY AND MAINTENANCE

Solvent Based Adhesives

Solvent based adhesives are the industry standard used for laminating and joining many substrates. The choice available solves bonding needs where there may be gaps in product capability in the waterbased range. Application by brush, rollers, or spray equipment gives a practical way to process a variety of surface areas in manufacture.



Evo-Stik GP Contact Adhesive

- Multi-purpose adhesive, bonds immediately on contact.
- High shear strength.
- Good temperature resistance.
- Excellect final bond strength.

Bostik 2402

- Two-part adhesive ideally suited to bonding rubbers including polychloroprene (e.g. Neoprene).
- Can be used in conjunction with Bostikure D Curing Agent as a high performance, two-part, cold curing adhesive system.
- Excellent resistance to water, heat and humidity.

Bostik 1782

Clear nitrile based adhesive particularly suited to bonding

- vinyls, fabrics, PVC, leather, metal, glass, china, wood and plastics
- Dries to form a virtually colourless and non-staining film.
- Provides a good chemical and temperature resistance
- Excellent ageing properties.

Evo-Stik Portable Sprayable

This is a multi purpose contact adhesive, suitable for bonding a wide range of materials.

- High performance contact adhesive.
- Cost efficient and time saving.
- Long open time.
- Excellent coverage, no waste.
- Non flammable adhesive.



Evo-Stik 613

- Suitable for bonding decorative laminate plastic sheeting to wood, metals and most types of board.
- Easily applied
- Bonds give excellent bond strength and high sheer strength
- It is temperature resistant.
- This is also available in a non-drip thixotropic version, Evo-Stik 613TX, for use on vertical surfaces.

Aerosol Adhesives

ADHESIVES

Spray 74

(Fabric and Foam Bonding

Adhesive)

- Fast tack with a foam tearing strength
- Non-misting, precise spray control and adjustable spray pattern
- Ideal in the furniture industry.

Spray 75

(Repositionable Adhesive)

- Allows material to be repositioned or temporarily fixed without adhesive transfer.
- Adheres in seconds with smooth glue line

Spray 76 (Long Bonding Range Adhesive)

- Offers strong one-surface bond
- Non-misting, precise spray control
- High temperature resistance



Spray 77

(Multi-Purpose Adhesive)

- Fast aggressive tack that securely bonds lightweight materials
- Suitable for use on expanded polystyrene foam without meltdown.
- Can be applied to either one or two surfaces.

Spray 80 (Neoprene

Contact Adhesive)

- Suitable for most types of rubber, vinyl and leather substrates.
- High temperature resistance
- Fast bonding and drying time.
- Superb plasticiser migration resistance characteristics.

Spray 90

(High Strength Adhesive)

- High speed and bonding strength
- One-minute drying time
- Good temperature resistance
- Non-misting and adjustable spray pattern.

ABRASIVES

SINGLE SIDED TAPES

21

DOUBLE COATED TAPES

SAFETY AND MAINTENANCE

3M Scotch-Weld[™] EPX[™] Adhesive Application System

(two-component structural adhesives)

The EPX system is one of the simplest methods currently available for dispensing two component adhesives.

It consists of 'Duo-Pak' cartridges, mixing nozzles and an applicator gun. The EPX system eradicates the complications of measuring and mixing adhesives with hardeners accurately critical to achieving perfect performance

- Avoids hand mixing and any resulting errors
- Bonds many materials
- Joins and seals in one operation
- Provides galvanic corrosion resistance on metals
- Reduces waste

Bostik Axiom 100PM Acrylic Adhesive

(two-component structural

adhesive)

This two part acrylic, structural adhesive provides tough impact resistant bonds with high peel strength across a wide range of substrates.

- Easy to use cartridge system for accurate application
- Up to 4mm gap fill
- No sagging
- Simple 1:1 ratio and controlled mixing system for constant bond strength
- Fast bonding with handling strength in 10-15 minutes (22°C)
- Available in 50ml and 200ml twin cartridges and in 5 litre containers for use in automated application equipment.
- Provides excellent chemical and temperature resistance.



et-Weld



3M Scotch-Weld[™] Thermoset Adhesive System

This adhesive offers a performance similar to many of the two component structural adhesives without the need to jig or clamp for long periods (simple alignment by hand is usually all that is required).

- Enough time is given to position or slide the two components together, then set to handling strength in seconds after compression.
- Full strength will then build up over a period of approximately 20 minutes to several hours depending on the materials and application.
- This is ideal because curing can continue to take place on finished materials during either storage or awaiting next process without clamping. This frees up production lines, increases time efficiency and savings.
- High volume production quantities are also available in a choice of larger containers to suit your requirements.

Cyanoacrylate Adhesives/Anaerobic Adhesives

RITE-LOK[™] CYANOACRYLATE RITE-LOK[™] **ADHESIVES**

LOK

RITE-LOK[™] Cyanoacrylate Adhesives are high specification, single component adhesives.

Fast and easy to use, these adhesives are solvent free and exhibit high tensile and shear strengths. RITE-LOK™ Cyanoacrylate Adhesives bond a wide variety of substrates and can be easily used with both manual and automated dispensing equipment.

Ethyl Cyanoacrylate Adhesives

- Multi purpose formulations for:
- Component assembly
- Maintenance

Low Odour Cyanoacrylate Adhesives

- · Low blooming whitening of joint area is eliminated
- For cosmetically critical applications

Metal Bonding Cyanoacrylate Adhesives

- High strength instant bonds for metals
- Available in high viscosities allowing excellent gap fill

High Temperature Cyanoacrylate Adhesives

- For demanding applications where higher temperature resistance is required
- Used in the manufacture of loudspeakers, electronics and under the bonnet in the automotive industry

Rubber Toughened Cyanoacrylate Adhesives

- Gives superior resistance to impact, vibration, high stress, temperature and humidity
- Excellent peel and shear strength
- **Surface Insensitive Cyanoacrylate Adhesives**
- Bonds porous and acidic substrates
- Works where conventional products fail

Plastic and Rubber Cvanoacrvlate Adhesives

Gives higher performance results on difficult to bond substrates such as polyethylene and polypropylene, when used in conjunction with RITE-LOK™ AC77 primer

Super Fast Cyanoacrylate Adhesives

 Instant adhesive for difficult to bond substrates, particularly porous substrates

Extra Fast Cyanoacrylate

Shown to provide extremely rapid bonding across a wide range of substrates

ANAEROBIC ADHESIVES

RITE-LOK[™] Anaerobic Adhesives are high performance, single component engineering adhesives that cure in the absence of air and in the presence of metal parts.

RITE-LOK[™] Anaerobic Adhesives are frequently used in assembly by original equipment manufacturers, maintenance departments, upgrade and overhaul projects and throughout the automotive and general engineering sectors. They are available in a wide range of strengths and viscosities, which allows them to be used across a broad spectrum of engineering applications. The RITE-LOK[™] Anaerobic range is used for thread locking, thread sealing, pipe and hydraulic joint sealing, retaining of cylindrical parts and gasketing.

Threadlockers

- Fills gaps between mating metal threads preventing vibration loosening.
- Seals against leakage and corrosion.
- Replaces traditional mechanical methods such as locks washers, split pins, Nylok nuts and wiring, reducing weight and inventory.

Retaining Compounds

- Used in the assembly of cylindrical components such as bearings, gears, shafts, bushes, pulleys, cylinder liners and rotors.
- Increases the load bearing characteristics of cylindrical joints.
- Reduces machining costs.

Gasketmakers

- Eliminates pre-cut gaskets, reducing weight, inventory and cost
- Improves seal and strength.
- For use on water, oil and fuel pumps, electric motor end covers, compressors, thermostat housing and most machined metal faces.

Pipe Sealants

- Used in thread and pipe sealant.
- Replaces PTFE tape and dopes.
- Provides an instant low pressure seal.
- Easy disassembly even after long periods.

SAFETY AND MAINTENANCE

ABRASIVES

PACKAGING

Hot Melt & Low Melt Adhesives & Guns

SAFETY AND MAINTENANCE

Adhesive Systems

- The 3M Jet-Melt[™] systems provide a versatile and convenient method of bonding a variety of substrates used in manufacturing.
- The availability of low-melt adhesives mean the product can be dispensed at lower temperatures minimising the risk of operator burns.
- Robust, reliable and easy to use hot melt application is the key to achieving high productivity, high quality and long term satisfaction of operators.

Industry Applications:

Furniture and Wood Working Industries

For rapid handling and high bond strength. Ideal for knothole filling.

Packaging Industry

For high initial tack and grab plus the advantage of quick setting properties.

Electronics Industries

For high temperature resistance and stability, components can be potted and encapsulated, has the advantage of thermal shock resistance.

Plastics Industry

For total performance, bonding characteristics are rigid and flexible and the ideal solution for materials with a high plasticiser content.

General Purpose intermittent use Glue Gun

- Trigger allows 3 fingered grip to reduce operator fatigue.
- 'No burn' shrouded tip.
- Stand doubles as nozzle removing spanner.
- Suitable for bonding paper, board, and wood surfaces.
- Light, well balanced and comfortable to use.
- Uses standard 12mm diameter glue sticks.
- Melt rate to 750g/hr. 240vac.

Hot Melt Glue Sticks

Packaging grade hot melt adhesive.

- Extended open time.
- Ideal for carton sealing.
- Sticks to all paper and board surfaces.

Application Equipment

- 3M Polygun™ EC Applicator
- Provides multiple application temperatures to dispense the adhesive at its optimum temperature.

3M Jet-Melt™ Polygun™ LTD Low Melt Applicator

- Palm trigger benefits the operator in reducing fatigue
- Rugged, reliable and easy to use.
- Excellent in reducing the risk of skin burns.



3M Polygun™ 2 Pneumatic Jet-Melt™ Applicator

- This air-powered gun has the best output in the range.
- Used where long beads or large volumes of adhesive are required.
- The unit can be bench mounted and used in conjunction with a foot pedal to optimise efficiency.

3M Jet-Melt™ Accessories (jobtailored applicator tips)

Every Jet-Melt applicator comes with a standard tip engineered for optimum general purpose use. To maximise productivity on specific jobs, you can select from a variety of optional tips and spreaders.



Gunnable Adhesives and Sealants

Evo-Stik Gunnable Adhesive

This multi-purpose gap filling adhesive provides a high initial grab and powerful bond strength.

- Bonds most porous and non-porous substrates
- Can be used to bond warped or uneven surfaces and is an alternative to using nails or screws
- Suitable for various applications including the bonding of wooden skirting boards, wall panelling and metal fixings.

3M Scotch-Seal™ Sealant

- A one component moisture curing general purpose polyurethane sealer that bonds and seals a wide range of substrates.
- It skins rapidly and cures quickly and offers good adhesion without primer.
- Thanks to its good elasticity, excellent resistance to tearing, ease of dispensing and good environmental resistance, it can be used in a wide variety of applications.

3M Weatherban™ Ribbon Sealant

- This is a synthetic rubber based, permanently soft sealant.
- Develops excellent adhesion when held in compression.
- Forms water tight seals around windows and door frames.

5313 Preformed Sealant Strip 3M Scotch-Seal™ Sealant

- This is a tacky solid extrusion sealant based on a synthetic rubber.
- The sealer is a non-curing type and retains the same properties and consistency after ageing in several different environments including weathering.
- It is best applied by placing it directly on the surface to be sealed.

BOSTIK BOND-FLEX SILICONE SEALANTS

Bond Flex is a range of high performance silicone sealants, which provide waterproof, durable seals, for a wide range of industrial applications. They offer excellent temperature and UV resistance and are available in a variety of colours.

Bond-Flex 100HMA

This is a high modulus acetoxy curing sealant which is FDA approved.

Bond-Flex 200LMA

This is a low modulus acetoxy curing sealant which is highly elastic and provides a good level of movement accommodation.

Bond-Flex 300LMN

This is a low modulus sealant with a neutral, low odour curing system.





Packaging

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Packaging Tapes

27

General Purpose Carton Sealing Tapes

General purpose filmic single sided tapes for sealing all types of boxes and wrapping materials.

The tapes are available in Polypropylene, Vinyl, and Water Based Acrylic versions.

Standard colours are transparent and buff (brown).

Waterproof Cloth Tapes

Also known as 'Gaffer tape', 'Duct tape', 'Tank tape'.

A plastic coated cloth tape with a thick, sticky, rubber based adhesive. Very tough and adheres well to virtually any surface. Tears easily and cleanly across the roll. Resists water. Available in widths of 25mm, 38mm, 50mm, 75mm, and 100mm by 50metre length rolls in Silver, White, and Black.

Masking Tape

Cream coloured single sided paper tape with a rubber adhesive coating.

For light duty sealing, tabbing, and bundling where clean and easy removeability is required. Will not damage most surfaces when removed.

Filament Reinforced Tape

Immensely strong single sided clear tapes reinforced with glass fibre filaments.

The filaments give enormous tensile strength and resist puncture and abrasion. Mono-weave has mostly linear strength; Cross-weave has both linear and lateral strength. The tape sticks extremely well to most clean surfaces. As the tapes do not tear they can be easily peeled off surfaces - leave a folded tab end for easy finger purchase. Recommended for very heavy cartons and where there are strong bursting forces. May also be used to reinforce edges and corners to resist punctures and abrasion in transit.

> The best tape to use for tabbing down the ends of coiled reels of steel and other sheet metals.

Coloured Packaging Tapes

Vinyl, Polypropylene and Low Noise Polypropylene tapes in standard colours. Mostly used as a simple visual label for product, batch, stores area, and operator coding on boxes. Available in 9mm and 12mm widths for bag sealing.

Kraft Paper Tape

Self adhesive brown paper tape. May be used for box sealing applications where polypropylene and vinyl tapes are not suitable. This tape is very effective on cartons which will be recycled.

Cross-weave; Filaments along length and across width of tape Mono-weave;

Mono-weave; Filaments run along length of tape





Size range width length 12mm 66m 24mm 66m 38mm 66m 48mm 66m 48mm 990m 72mm 66m Other specialist sizes available on request

Printed Tapes

Custom Printed Tapes

Vinyl or Polypropylene carton sealing tape printed to a custom design.

May be used to advertise company name or brand, give specific handling, storage, and shipping instructions. The tape also adds to package security as retaping an opened box is much harder to disquise.

> Virtually any design may be produced subject to a linear length maximum of 427mm and a width of up to 150mm. Colours may be standard or a specified PMS number. The background base of the tapes is clear or white as a standard. The background colour can also be customised as an optional extra.

THIS WAY UP

HANDLE WITH CAP

Vinyl tapes are available with up to 4 colours in widths from 25mm to 150mm. The tape has excellent visual qualities, sticks extremely well, even in cold ambient temperatures, and unwinds quietly from the roll.

Polypropylene tapes are available with up to 3 colours in widths from 50mm to 150mm. The tape has good visual qualities, sticks very well in normal ambient temperatures; it is noisy when unwound from the roll.

Low noise (quiet unwind) Polypropylene tapes are also available.

Custom Printed Tapes - Laminated

Heavy duty tapes with a custom printed message covered by a durable clear laminate. The tapes may be used indoors and outdoors, even in the most extreme environments, for pipe and cable marking, coding, and to convey instructions. Colours conform to British Standard specifications. The tapes may also be ready perforated to ensure the correct length is dispensed.

Standard Message Printed Tapes

Tough vinyl tape pre-printed with a standard cautionary message. The tape has bright red print on a white background. Rolls are 50mm wide and 66m long and may be used on a FRAGILE standard tape FRAGILE

GLASS

VAY UP

dispenser gun.

Stock messages;

FRAGILE FRAGILE **GLASS HANDLE WITH CARE** FRAGILE HANDLE WITH CARE CAUTION IS THIS PACKAGE DAMAGED THIS WAY UP **↑** HANDLE WITH CARE CONTENTS CHECKED AND SECURITY SEALED

Pistol Grip Dispensers

These are essential equipment for all carton sealing tapes. They can be used with both vinyl and polypropylene tapes. Simple to use and light to handle. The tape tension can be adjusted by a variable brake on the hub. The tape is cut off and the end smoothed down in one simple movement of the wrist.

Available for both 48/50mm and 75mm width tapes.

Protection and Cushioning

Bubble Wrap

Flexible, tear resistant, plastic packaging film with bubbles of air sandwiched between the inner and outer sides. The air bubbles provide good short term protection against impact, shock, vibration, thermal differences, and water damage.

Bubble film is also available with an antistatic additive to minimise the possibility of damage to sensitive electronic components. The resulting film is colour coded pink to distinguish from standard bubble.

There are two standard bubble sizes; Small - approx 3½mm high x 10mm wide bubbles Large - approx 9mm high x 30mm wide bubbles

Bubble film is available in rolls, perforated rolls, adhesive rolls, sheets, self-seal bags, and pouches.

Foam Rolls

A foam of tiny air bubbles encapsulated in polyethylene plastic. The material has a very soft non-abrasive finish and leaves no marks on most surfaces. Has good long term protection properties due to the foam being of closed cell construction.

Waterproof and CFC free.

Foam rolls are available in 1.0mm, 2.5mm, and 4.0mm thicknesses and a variety of roll widths

Corrugated Paper Rolls and Sheets

Low cost and efficient wrapping where flexibility is not required. Useful as interleaving in cases. Made from recycled paper.





Standard self-sea pouches



Anti-static rolls



Anti-static self-seal pouches



Air Filled Cushion Bags

Plastic pouches that are stored flat and inflated via a one-way valve when required. Used as a cushioning and protective gap filler the product is easy and cheap to store and produces minimal quantities and weights of packaging waste. One roll of air cushion bags can produce 4.8 cubic metres of void fill equivalent to 5 rolls of bubble film and 10 sacks of loose fill chips.

Dispensed and inflated using a simple bench top unit.

Loose Fill Polystyrene Chips

Free flowing loose fill chips manufactured entirely from environmentally friendly recycled polystyrene. Ideal for protecting boxed goods. Extremely light to minimise transport costs.

Supplied in 0.42 cu.m. (15 cu. ft.) bags



Protection and Cushioning Cardboard Containers



Jiffy Bag

The original Jiffy padded bag. Tough kraft paper outer and inner containing a shock and liquid absorbent filling. The original padded bag is the heaviest in the Jiffy range. The bag is ideal for heavy, sharp edged, or oily components such as engineering parts.

All Jiffy bags are available in a large range of sizes from A6 to A3 and come with a self seal adhesive closure strip.

Jiffylite[®] Airkraft[®] Postal Bags

The lightest bag in the Jiffy range consisting of a tough white paper outer and a bubble inner. This bag is ideal for high volume mailing operations.



Printers Boxes

2 piece lid and box cartons for A4 documents. Manufactured from top quality microflute board with a kraft finish.



Jiffy Mailmiser[®] Postal Bags

A lighter duty version of the Jiffy padded bag. This bag has been optimised for use where the weight of the consignment is a cost factor. Similar in construction to the original except the outer and inner kraft paper layers are separated by bubble film.



Jiffy range of sizes				
Number	Size (mm	Paper size		
00	115 x 195	A6		
0	140 x 195			
1	170 x 245	A5		
2	205 x 245			
3	205 x 320			
4	230 x 320	A4		
5	260 x 345			
6	290 x 445			
7	340 x 445			

Brown Cardboard Postal Tubes

The ideal protection for all long products or rolled documents, posters, charts, maps, etc. Very strong and crush resistant. Manufactured from spirally wound board. Sealed with 2 white plastic end caps



ABRASIVES

Single and Double Wall Brown Kraft Cases

Single and double wall cases manufactured from rigid flute corrugated kraft board. Ideal for packaging and shipping a wide variety of products.

Supplied flat for ease of storage.



SAFETY AND MAINTENANCE

ADHESIVES

Document Control & Labelling

ADHESIVES

PACKAGING

SHOCKWATCH

Documents Enclosed Envelopes

Self-adhesive water resistant protective envelopes that adhere to the side of cartons, boxes, or packages. The transparent window allows identification of contents without the need to open the package. Documentation is never separated from the package. Available in printed or plain versions.

BOCUMENTS ENCLOSED

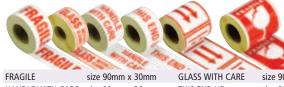
Printed Labels - Custom and Standard



Self adhesive paper labels in roll or sheet form on a silicone paper liner. Used to advertise, brand, caution, price, barcode, or any other information

Custom labels may be single or multi-colour, have specified adhesive properties, and be virtually any shape or size. A full design service is available.

Standard red text on white background labels in rolls containing 250 labels;



HANDLE WITH CAREsize 90mm x 38mmARROWSsize 100mm x 73mm

GLASS WITH CARE size 90mm x 38mm THIS END UP size 90mm x 38mm FRAGILE (Wine Glass) size 100mm x 73mm

3M Shockwatch Indicators

A precision impact detection device intended for use on the outside of a shipping carton. Non-mechanical and non-magnetic, it features a tiny liquid filled glass tube housed in a self-adhesive label. If a carton is dropped or otherwise sustains a severe jolt the liquid in the indicator changes from clear to bright red. The indicators are non-resettable giving clear visual evidence in which leg of the delivery chain that the damage was sustained.

The indicators are rated according to the G forces required to trip them;

Green – 100 Gs at 50 ms Avionics, AV equipment, Service/repair electronics, Computer equipment,

electromechanical equipment, instrumentation/gauges. Orange – 75 Gs at 50 ms Chinaware, Porcelain, Furniture, Glassware Red – 50 Gs at 50 ms Neon signs, Displays, Artworks, Exhibits Yellow – 25 Gs at 50 ms Palletised goods, heavy furniture



Pallet and Carton Labels

Highly visible pictograms and symbols internationally recognised by shippers and carriers. Aggressive high tack permanent adhesive.

HANDLE

ARN

NGE INDIC

NDICATOR IS RED

HOCKWATCH

NARNING

Strapping

Sealer

Tensioner

Polypropylene Hand Strapping

Extremely tough and strong semi-rigid plastic banding and strapping material in reel format. May be used to hold together and reinforce boxes, cartons and pallets.

Hand strapping is available in 12mm and 15mm widths with the following

breaking strains;

12mm x 0.5mm x 2000m reel	135kg
12mm x 0.65mm x 1500m reel	190kg
12mm x 0.76mm x 1200m reel	235kg
12mm x 0.8mm x 1000m reel	260kg
15mm x 0.63mm x 1750m reel	210kg
15mm x 0.75mm x 1500m reel	262kg

Hand Strapping Tools and Dispensers

It is impossible to fully utilise the strength of polypropylene strapping without using mechanical tools to apply tension and crimp on metal strap seals.

To keep the strapping tidy and clean, and store tools and seals in one easily transported package a wheeled strapping dispenser may be used.

Tensioner tools use a capstan and ratchet arrangement to wind in the strapping and apply as much tension as required with simple hand pressure. The tensioner locks the strapping taut while a metal seal is crimped on.

Sealer tools use a pincer type action to squash and crimp a soft metal seal over the ends of the strapping, forming an almost unbreakable seal.

The two functions may also be performed using one 'Combination' tool.

Plastic Buckles

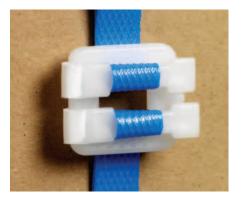
Strapping may be applied by hand tensioned and tied off quickly and simply using a plastic buckle.

This method is suitable for very light and easily crushed items where hand pressure alone is sufficient.

Electric Combination Tool

Combination Tool

This simple tool is powered by a rechargeable plug-in battery pack that takes all the effort out of applying strapping bands. The strapping is wound to a preset tension by a powerful electric motor and then instantly sealed by a friction weld, removing the need for several tools and metal seals



Dispenser

A thin clear polymer film of several layers which is applied in overlapping wraps around boxed and/or palletised goods. The film is stretched either manually or by machine as it is applied in order to elastically draw the items together. The inner surface of the film is slightly tacky enabling the layers to stick to each other. Provides a water and damage resistant surface and consolidates several items into

Blown Hand Film

Rolls designed to be applied by hand. The rolls come in the standard width of 400mm. Rolls are 300m long and, after stretching, yield around 350m of film. Standard thicknesses are;

9μ - Light duty, low weight goods 20μ - General purpose wrapping and palletising 35μ - Heavy duty, high weight packing e.g. Tiles, Bricks

Variants:

Black

Opaque film disguises valuable or sensitive items, protects contents from sunlight. **Extended core** Oversized cardboard core ends act as handles removing the need to use a dispenser.

Stretch Film – Machine application

Manual stretch film application is physically demanding and it is difficult to attain optimum stretch and optimum wrap efficiency by hand. It is also a labour intensive operation. For these reasons high output environments often require automated stretch film application machinery. Stretch Film for use in machines is available in long length rolls for both Core Brake and Power Pre-stretch applicators. one securely wrapped consignment.

Virtually all stretch film used in the U.K. is produced by extruding molten polymer through an annular die with a cold air blast in the centre - somewhat similar to blowing a huge bubble. The resulting 'blown' film has excellent multi-directional strength and puncture resistance.

There are several types available:



Pallet Top Covers

A filmic 'lid' that covers the top of a pallet and extends 25mm or so down the sides. It is held in place by an overwrap of stretch film. Useful to protect goods from overhead contamination (rain, dust, birds) when goods are stored outside. Available to fit all standard pallet sizes.

Stretch Film

Mimalite® Pre-stretched film

A unique banded stretch film which achieves high levels of protection using a very thin wrapping layer.

Unlike conventional film Mimalite film is stretched to the optimum length by the manufacturer. This pre-stretched film may then be hand applied without the need to use great effort.

The film is a specially formulated three layer laminate. The inside layer is slightly tacky, allowing the film to stick to itself as it is applied. The middle layer confers excellent strength and puncture resistance. The outer layer is scratch resistant and glossy, with a slippery surface that will not stick to adjacent wrapped pallets.

Conventional stretch film has a tendency to sag when pulled away from a pallet. Mimalite film is very elastic and will spring back when pulled. This minimises the chances of pallets toppling or bursting when transported.

The edges of Mimalite film are rolled into a bead. This prevents the film from tearing and acts as a form of strapping around the pallet.

Mimalite[®] Core Brake Turntable Applicator

A simple, economical, and very efficient method of automating pallet wrapping.



A stacked pallet is placed on the machine turntable. The stretch wrap leading end is attached to the base of the pallet in the normal way. The turntable rotates whilst a head holding a roll of stretch film moves up the mast. The rate of rise and number of wraps may be programmed to achieve the desired level of wrapping protection. The film is stretched by means of a core braking system which has two tension settings – light for easily crushed goods, and standard for normal packaging.

The machine will accept virtually all standard cored stretch films.

NEW Coreless Film

Used roll cores can contribute significantly to the weight of your packaging waste. Eliminate them completely using Coreless Winwrap film

This is the first film to do away with the need for disposable cores. A purpose designed reusable heavy duty plastic core is inserted in the roll for easy hand application.





Mimalite film is available in 7 micron and 9 micron thicknesses and may be used in place of conventional stretch film up to around 23 micron thicknesses. There is a significant reduction in the weight of packaging waste generated using Mimalite compared to a conventional stretch film.

Mimalite may be machine applied using simple and economical Core Brake automatic machines.



Edge and Corner Protectors

Cardboard edge guards are a very economic way to stabilise palletised loads and reinforce the exposed corners of the pallet. Strapping applied over corner reinforced edges will not crush the cartons and will clamp the whole pallet load together.

Available in brown Kraft standard finish or Aluminised water resistant finish.



ADHESIVES

Polyethylene Film

Pallet Covers

A continuous tube of 120 micron PE film sized to slip over the outside of most standard pallets. Any length may be cut off to fit varying heights. The film may be left loose or heat shrunk around the pallet using a hot air/flame gun. The pallet may topped off with a pallet top cover.

Produces a very tough, impermeable, and tamper resistant barrier.





Heat Shrink Flame Gun

Used to shrink heavy gauge film around palletised goods. The flame gun uses easily available propane gas. No electrical connection is required making the gun highly portable and eliminating trailing wires. The gun is fully heat shrouded and remains cool to the touch on the outside

Lay Flat Tubing

Clear polyethylene tubing on flat reels. Ideal for packing and protecting long narrow objects. May be simply sealed at each end by heat welding, taping, or knotting. Available in many widths ranging from 100mm to 900mm.

Standard film thicknesses 250 gauge and 500 gauge

Polyethylene Protective Film Centre Fold

General purpose clear polyethylene film. For use as protection against dust, moisture, abrasion in storage or transit.

The film is folded in half on the roll for ease in handling and storage.

Widths range from 0.5m folded opening to 1m width to 2m folded opening to 4m width.





Heat Shrink Film

DOUBLE COATED TAPES

High quality clear and tinted wrapping films for encapsulation and collation of assorted products. May be heat shrunk to fit almost any shape, regardless of how irregular, using a heated tunnel or hot air gun. The film acts as a protective layer and often improves the presentation of the product.



Available in a very wide variety of sizes, thicknesses, and shrink characteristics to suit virtually every requirement.

Polyvinylchloride or Polyolefin?

- PVC does not function on automatic machines
- PVC works faster on chamber machines
- POF is more economical in material
- POF is more likely to work on both old and new machines
- POF tends to be cheaper per m² than PVC
- PVC has a poorer environmental image
- PVC generally gives a better product presentation

There is no simple answer and every application needs to be assessed separately. Please call us for expert advice

PVC Heat Shrink Films

The original high gloss shrink film giving the best overall presentation. The film has extremely good clarity and very low haze. It will shrink at relatively low temperatures, minimising energy costs. PVC film is available in both biaxial and unidirectional shrink formats and may be shrunk to between 90% and 60% of its original size.

PVC films have a maximum shelf life of 60 days and should be stored at temperatures below 25C and away from direct sunlight.

Food suitability certificates are available on request.



Polyolefin Heat Shrink Films

Polyethylene/Polyethylene and

Polyethylene/Polypropylene multi-layer engineered films. These films are an alternative to conventional food grade PVC having the advantage of much better temperature tolerance – they do not require refrigerated transport and cool warehouse storage. The films have good lay flat properties, are more dimensionally stable, and will work on virtually all kinds of machine from manual to high speed automatic.



SINGLE SIDED TAPES

ADHESIVES

All Purpose Polythene Bags

ADHESIVES

Light and Medium Gauge Bags

Clean clear bags manufactured from virgin quality low density polyethylene.

- Ideal for all general light to medium weight packaging.
- Protects contents from dirt, dust, and moisture
- Clear film contents always visible
- Approved for food use
- May be permanently sealed by heat welding

Bags are available in 30 micron (120 gauge) and 50 micron (200 gauge) thicknesses. Sizes range from 100mm x 150mm to 600mm x 900mm.

> Write-on panel gripseal

Heavy Duty Polyethylene Bags

Clean clear bags manufactured from virgin quality low density polyethylene. Thicker gauge for use with heavy or sharp edged objects. Extra strong seams resist splitting. May easily be closed securely using heat sealers or neck sealers.

The 125 micron (500 gauge) bags are available in a large range of sizes from 100mm x 150mm to 600mm x 900mm 233

Plain clear gripseal

Grip-Seal Polyethylene Bags

Clean transparent re-sealable bags that can be used again and again.

Once pressed together the grip-seals remain firmly closed but can be quickly opened when required. Tear and burst resistant, available plain or with write-on panels.

Manufactured from 40 micron film, the bags are available in sizes from 56mm x 56mm to 375 x 500mm

Packaging Automation

ADHESIVES



3M Matic 700a

Top and bottom belt drive. Top and bottom Accuglide™ tape heads. Seals 30 uniform size cases per minute

3M Matic 800af

Fully automatic case sealer. Indexes cartons then folds carton flaps. Accuglide™ tape heads seal top and bottom seams. Side belt drive. Seals 28 cases per minute

Automatic Box Sealing Machines

A large range of automatic carton sealers for use in high volume output environments. Boxes may delivered to the infeed by hand or along powered or gravity feed conveyoring.

Box sizes

The machines will accept a wide range of width and height boxes.

Manually adjusted machines may be set up for long runs of same size boxes and have a high maximum rate of throughput.

Random size machines sense varying height and width boxes at the infeed and set themselves automatically. They are ideal for packing areas where many different size boxes are produced simultaneously. They have a slower maximum throughput rate.

Box weights and solidity

The overall proportions, weight, and solidity of the box types to be packed will determine the best belt feed mechanism to use; Bottom belt feed – Heavy, stable,

regular boxes.

Top and Bottom belt feed – Most medium to heavy ordinary shaped boxes.

Side belt feed – Light, small, easily crushed and irregular shape boxes.

SINGLE SIDED TAPES

Automatic Pallet Wrapping

The application of stretch film to pallets by hand is a slow and tedious job. Hand wrapped pallets are rarely secured with the optimum number of wraps, or with the ideal level of tension. Automatic machines are available for virtually all medium to high volume pallet wrapping operations:

Core brake machines

Film tension is set by adjusting a braking mechanism on the film core. Height and number of wraps may be preprogrammed. Suitable for relatively low output and light protection environments.

Power Pre-stretch machines

Film core axles and applicator axles are set by gearing to deliver a very high and consistent level of film stretch. Most application parameters can be preprogrammed. Suitable for medium to high output environments and most pallet types.

Octopus machines

The ultimate wrapping machine. Completely automatic, can insert top covers, high volume, for use in very high output operations.

Core Brake Wrapper

PACKAGING

SAFETY AND MAINTENANCE

Single Sided Tapes

Application Tapes	0 p. 4	1
Cloth Tapes Cotton Flame Retardant Glass Waterproof	p. 43-44	1
Electrical Tapes	<mark>е</mark> р. 42	2
Foil Tapes Aluminium Copper Lead	p. 44	3
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ILE SIDED TAPES



SAFETY AND MAINTENANCE

DOUBLE COATED TAPES

PACKAGING

ABRASIVES

Masking/Application Tape

ADHESIVES

Masking Tape

Masking tape is in use everyday in industry, from general purpose paint masking to high temperature use, from harsh environments, masking against corrosive chemicals to fineline applications where detail is more important.

General Purpose Masking Tape

- Highly conformable crepe paper
- Ideal for paint masking or • surface protection
- Removes cleanly after use
- Tears easily from the roll

High Temp Masking Tape

- Critical masking applications •
- Paint / Powder coat masking
- Multi Bake •
- Automotive
- Die Cuts

Fine Line Masking Tape

Fine Line Paint Masking

Specialist Masking Tape

- High Tack Masking
- Low Tack Masking Tape
- ٠ Flatback Masking Tape

Application Tape

Cuts and tears easily

Adhesive legging is very common with conventional application tape. We offer new improved 'PerfecTear' eliminating those annoying adhesive strings.

Less material waste

With our improved application tape customers find they have less wastage when the tape is removed from the vinyl, and without adhesive residue.

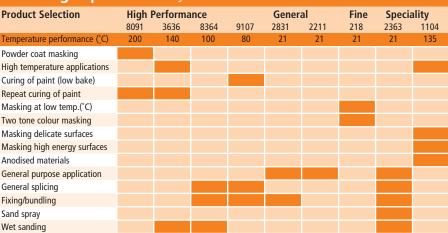
Works well wet or dry

Many sign makers use application fluid during installations. Our products work well in both wet & dry environments, saving potential hazards with mess and clean up.





Masking Tapes Availability Guides



Application Tapes Availability Guides

Product Number	Regular Premium		Premium				gular	
	500	525	550	575	600	625	650	675
Mil Thickness	4.3	4.3	4.3	4.3	5.6	5.6	5.6	5.6
Adhesion PSTC #1	4-6oz.	8-10oz.	12-14oz.	16-18oz.	4-6oz.	8-10oz.	12-14oz.	16-18oz.
One Piece Small Decals								
One Piece Large Decals								
Die-Cut Lettering								
Pin Striping								
Mid-Size Striping								
Wide Striping								
Small Cad Lettering								
Large Cad Lettering								
Printed Alum. Signs								
Printed Acrylic								
Gloss Laminates								
Glass								
Smooth Fiberglass								
Polycarbonates/Plastics								
Synthetic Marble								

Electrical Insulation/Self Amalgamating Tapes

ADHESIVES

PVC Electrical Insulation Tape

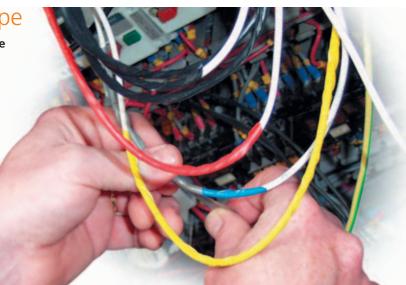
These tapes are extremely versatile, and have the following properties;

- Flame retardant
- Self extinguishing
- Easy tear
- Easy unwind
- Flexible, will conform to awkward shapes
- Water resistant
- UV resistant
- Aggressive, Non-corrosive adhesive
- Conforms to BS EN60454 Type 2

ADVANCE

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• Vast selection of colours, and sizes



Thickness 0.13mm Breaking Load 26N/cm Elongation 180% Adhesion to steel 2.4N/cm Service temp.°C 5 to 70°C



DADVANCE

Applications

Automotive

Loom harnessing within higher temperature areas of the body compartment. Colour coding of cables.

Electrical

Electrical insulation of cables. Colour coding electrical cables.

Electrical appliance manufacturers

Harnessing, waterproofing, insulating, abrasion protection and packaging.

Electronics

Degaussing and rotational coil wrapping. Insulating, circuit identification and cable bundling.

Chemical

Insulation and corrosion protection. Masking during chemical process plating.

Construction

Protection during shot blasting. Light duty pipe wrapping. Prevention of electrolytic corrosion.

Brewery trade Pipe wrapping



Used for the insulation, waterproofing and protection of electrical components. We offer a range of products dependant upon application specifications. We can supply tapes designed to joint and repair solid dielectric power cables up to 132kV. Self amalgamating tape has excellent physical and electrical properties, with a high degree of stability, and excellent water and ozone resistance.



SAFETY AND MAINTENANCE

Cloth Tapes

Cloth Tapes

All cloth tapes are strong and offer good conformability, they have non-corrosive adhesives keeping any reaction with the surface applied down to a minimum.

Some cloth tapes will peel clean from surfaces, usually polycoated tapes perform better in this respect although surfaces should be tested if this is critical. Surfaces should also be as clean and dry with any loose material and dust removed as far as possible.

Cloth tapes should be applied at between $+10^{\circ}$ C and $+40^{\circ}$ C

Tapes should be stored at a temperature of no lower than +5°C. If tape is left in a van or unheated warehouse in the winter months, it will need time to warm up prior to application.



A fully biodegradeable - environmentally responsible choice with neutral ph values and therefore unlikely to react with surfaces it is applied to.

- Un-bleached cotton cloth
- Conformable to awkward shapes
- Can be written on
- Easy unwind and strong
- Good abrasion resisitance
- Non-corrosive adhesive
- Uncoated cloth

Applications

Protection of iron works during road re-surfacing. Masking during shot blasting and painting. Masking off aircraft engine parts during manufacture and servicing. Sealing of bandages and dressings on animals. Strapping of sports equipment handles.

Waterproof Polycoated Cloth Tape

- Very long term outdoor exposure
- Highly conformable
- Very good abrasion resistance
- Very good water resistance
- Easy tear
- Good handling properties
- Strong versatile product for general industrial use
- High tack, adhering to a variety of surfaces
- Writable surface
- Wide colour range
- Gloss finish

Applications

Sealing ammunition cases. Masking off during shot blasting. High temperature duct sealing. Masking off during ship refurbishment. Colour coding. General splicing holding and wrapping. Patching and repairing.





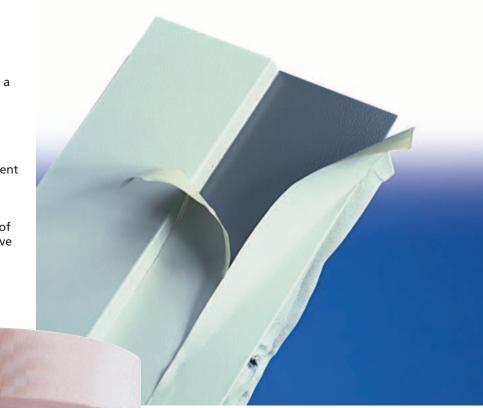
Cloth/Protective Tapes

ADHESIVES

General Purpose Glass Cloth Tape

Glass Cloth Tapes are used for high temperature insulation and provide a heat stable seal.

- Able to withstand intermittent temperatures up to 288 degrees Celsius or higher
- Easy unwind
- Conformable, providing permanent seal
- High tensile strength, increasing protection
- High temperature performance of Silicone adhesive reduces adhesive transfer
- Silicone adhesive long ageing properties help increase productivity



Applications

High temperature applications requiring high tensile strength. Permanent sealing of high temperature ducts or chambers. Used as back up strip for submerged arc welding.

High Specification Flame Retardant Cloth Tape

- Flame retardant conforms to FAR 25.853
- Specification printed onto tape for easy identification
- Clean peel up to 4 days at +50°C
- Excellent adhesion level
- Writable surface

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Applications

Sealing gaps between flame retardant panels. Joining hardboard partitions in cargo holds, known as 'Cargo Tape'.



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SAFETY AND MAINTENANCI

Polyurethane Protective Tape Polyurethane Protective tapes are an extremely fast and exact way to provide exceptionally tough

surface protection on metals, woods and plastics.

It combines a number of unique properties that make the product extremely effective at preventing damage caused by abrasion, erosion, minor impact, and fluids.

- Extremely Tough and Durable, Providing Long Service Life
- Puncture and Tear Resistant; Preventing Fluid Penetration
- Conformable to compound curvatures; Can Fit Most Shapes
- Fast and Easy to apply; Saves on Installation labour
- A Solvent Free Surface Protection Solution; **Environmentally Responsible**
- Can be die cut to specific shapes
- Can be painted or printed on without priming

Applications

'Leading edge' protection against particle and rain erosion. Used extensively in Aerospace, Transportation, Marine, Construction, and General Industrial applications.

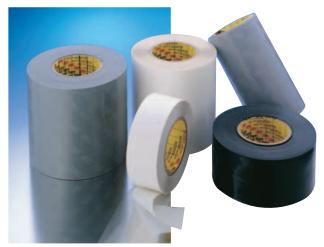
Enviromental Exposure

Low temp flexibility - no cracking after 24 hours at -51C Maximum Service Temp - film softens above this limit 135C

Outdoor grade tapes withstand 24 hours immersion in the following substances with little or no effect. Petrol

- Engine Oil **Distilled Water**
- Unleaded Petrol
- JP-5 Jet Fuel

Diesel Fuel JP-4 Jet Fuel Hydraulic Fluid



Bumpons™

Bumpon[™] Protective Products are polyurethane pressure-sensitive adhesive-backed products that can be used as feet, stops, spacers, and protectors in many applications.

- The aggressive, high-tack pressure-sensitive adhesive is protected with a release liner, making application fast and easy.
- The polyurethane is a durable, resilient, elastomer.

Low Tack Protection Tape

Surface Protection Tape is used to keep substrates clean and to protect from unnecessary stains, abrasions, or scratches during fabrication, transportation, and installation processes.

This material is a LDPE film with an ultra-low tack adhesion for removable use.

- Flame retardant
- Flexible
- Conformable
- Good abrasion resistance
- Non-corrosive adhesive
- Easy unwind
- Clean peel
- Water resistant
- UV resistant Low tack

Applications

Protection of stainless steel and glass finishes on cars. Protection of number plates.

Temporary protection of acrylic coated metal and UPVC door and window frames.

Protection of domestic appliances during delivery or removal.

Protection of machine parts, printed circuit boards, chromed and metal surfaces.

Protection of TV and monitor screens during transit.



Protective/Plastic Tapes

Litho Tape

A UPVC film tape, which is optically transparent and photographically opaque.

These tapes resist the effects

of changing atmospheric conditions, and can provide sharper visual definition.

They are frequently used in the printing industry alongside splicing tapes.

- Transparency allows accurate positioning
- Firm adhesive which is long ageing & resistant to softening

Applications

Graphic Arts Industry - Opaquing, stripping, and edging. Printing Industry - Splicing.

Electrostatic Powder Coating Tapes

Single coated tapes with a pressure sensitive adhesive. They are chemical resistant and can easily withstand temperatures up to 240°C which are typically used for curing epoxy and polyester based powder coatings.

No elaborate surface preparation is necessary before applying tapes, just a thoroughly clean surface and firm roller pressure. After baking and cooling the tape is easily removed in one piece, leaving a sharp paint edge with no adhesive residue.





Polyimide Tape, High specification Electrical Masking Tape

- Translucent polyimide film backed silicone adhesive
- Extremely low electrostatic discharge properties
- Flame retardant and chemical resistant
- Virtually eliminates circuit board degradation due to electrostatic discharge
- High performance at high temperatures

Applications

Mask for circuit boards during wave solder or solder dip process.

Release surface in fabrication of parts cured at elevated temperatures.

Polyethylene UHMW Tape

UHMW Polyethylene is a thermoplastic that has a unique combination of properties which makes it ideal for tough impact wear or sliding applications.

- Abrasion resistant tape
- Resistant to puncturing, gouging etc
- Coated with an aggressive rubber resin adhesive

Applications

Conveyor flat guide rails. Discharge chutes. Glue sealing plates. Rotor blades. Spray booth liners. Tank and bin liners. Drawer and cabinet slides. Feed and grain chutes. Packing table tops.

SAFETY AND MAINTENANCE

Plastic Tapes

ABRASIVES

PTFE Plastic Film Tape (Teflon Tape)

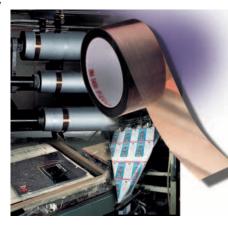
A range of polyester tapes with high temperature silicone adhesives are available for masking off the connectors prior to gold plating.

High temperature masking tapes are also used for roller tinning and wave soldering, the product choice is dependent on critical aspects of the circuit board i.e. temperature. This tape provides an easy release surface by wrapping rollers, plates, belts etc where a build-up of sticky materials, ink and paints would normally occur. Teflon tape's main properties are:

- Performs at high temperature
- Low friction film, which is resistant to wear
- Cross directional strength
- Resistant to chemicals, solvents and salts
- Removes cleanly
- Low friction

Applications

Masking off the connectors prior to gold plating. Roller tinning. Wave soldering.



Polyester Tape

Polyester Tape is a high temperature film tape with a silicone adhesive for use in composite bonding operations or to remove flashing after bonding.

- Removes cleanly from stainless steel, anodized aluminum and glass after a five-hour bake cycle at over 170°C
- A strong, heat resistant tape for edging glass slides when mounting transparencies



Single Sided Foam Tape

Use these tapes to protect products from the element of destruction.

A wide variety of backing / adhesive combinations meet demanding applications requiring gasketing, baffling, cushioning and insulating Foam Tapes include Vinyl foam tapes, Urethane foam tapes and Silicone foam tapes. Vinyl foam tapes feature a closed cell design to provide durability, flexibility, weather resistance, and a seal against dust, light, and moisture. Urethane foam tapes have an open cell and include models with excellent cushioning characteristics and high absorbency to trap moisture

dust, and contaminants. Typical applications for Single Sided Foam tapes include:

- Glazing Doors
 - Partitioning
 - Roofing
 - Construction
 - Air Conditioning
 - Roof Lights
 - Electrical Exit Signs
 - Traffic lights Control Units

Foil Tapes

DOUBLE COATED TAPES

ADHESIVES

Aluminium Foil Tape Moisture and chemically resistant -

- Moisture and chemically resistant helps seal and protect many sensitive assemblies and surfaces
- Aluminium foil backing provides long term protection from water, dust or chemical damage
- Thermally conductive maximises efficiency when heating or cooling by -increasing the transmission over a broader area
- Heat and light reflective helps protect plastic components from heat warpage
- Flame resistant helps protect parts from flame damage
- Outdoor performance resists UV degradation and provides long lasting service
- An ideal choice for Duct sealing due to its heat resistance

Applications

General sealant indoors and out. General purpose patching, sealing and holding applications.

Electroplating of aluminium.

Moisture barrier e.g around windows in aircraft, buses and in appliances. Duct Sealing.

Lead Foil Tape

- Electrically conductive 'thieving' action eliminates metal plating edge build-up
- Acid resistant applicable in many etchings, milling and plating operations
- Malleable high conformability, can be worked easily with burnishing tools
- High density ideal weighting or balancing medium.
- X-ray opacity helps protect components from x-rays
- Effective as a marker or locator in x-ray inspection operations
- Offering ultimate protection from water, dust,
- chemical damage and radiationCrude rubber adhesive offering good chemical resistance

Applications

Electroplating, Radiation barrier , Moisture barrier. Chemical milling patch work. X-ray plate masking. Paint stripping of aircraft.



Electromagnetic Compatible Tape

A range of plain and embossed metal foil tapes based on Copper or Aluminum that can control electromagnetic interference and shield or absorb radio frequency interference.

Applications

Used for EMI / RFI and static shielding. Grounding of sensitive electronic components. Provide conductive properties.

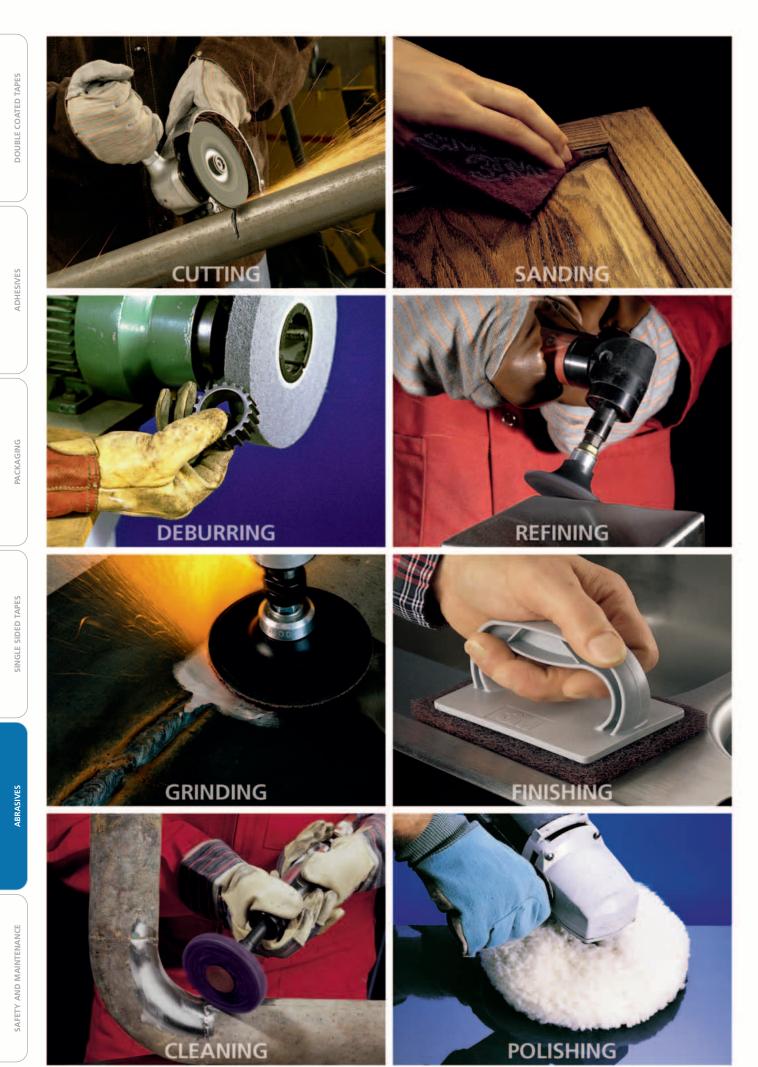
ABRASIVES

PACKAGING

Abrasives



ABRASIVES



Product Selection

ADHESIVES

All abrasives are a product of three basic elements-Minerals, Bonding methods and Backings.

The five types of minerals used as abrasive coatings are:-

Aluminium Oxide

a synthetic mineral with a tough structure, used in both woodworking and metalworking applications

Silicon Carbide

Hard, sharp and friable, used for sanding paint, lacquer, plastics and glass

Garnet

A naturally occurring mineral well suited to hand sanding operations

Zirconia

A tough, sharp synthetic mineral with a self-sharpening characteristic, suitable for heavy grinding

3M Cubitron Mineral

A tough long lasting mineral, with a unique "stay sharp" microscopic crystalline structure.





There are four principle types of adhesive bonds which consist of varying glues, resins and combinations to impart heat or water resistance.

Backings are invariably Paper, Synthetic fibre cloth, or Vulcanised fibres and will often include grinding aids to lubricate and reduce heat generation.





Specialised Abrasive Systems

3M Stikit™

a self adhesive fixing system which ensures sheets remain firmly in place to Stikit accessories whilst in use, but are easy to apply and quick to remove

3M Hookit™

A hook and loop fixing system, which means that products can be attached and reattached as many times as necessary

3M Roloc™

a quick release mechanism based on a unique thread requiring half a turn for ON or OFF plus a positive locking mechanism

Abrasive Sheets & Rolls

ADHESIVES

PACKAGING

offered in a selection of abrasive, grit and backing material combinations to cover a wide range of industrial requirements. Sheets come in various sizes and rolls provide an economic source from which the operators can cut a required length.

Abrasive Sheets and Rolls are

Including the 3M Stikit[™] self adhesive fastening or 3M Hookit[™] fixing system for easy attachment or reattached as many times as necessary

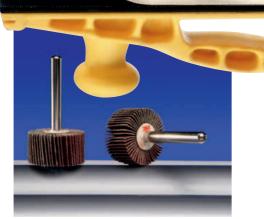
Non woven abrasive materials

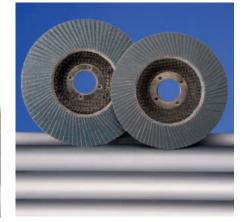
These products consist of an open structure of non woven nylon impregnated with abrasive grain that is bonded together with synthetic resins

Scotchbrite[™] finishing wheels and Beartex[™] abrasive products can be used for all cleaning, decorative, finishing, polishing and deburring operations. For use on metals, wood, and other surfaces

A selection of hand pads are available for use on a broad range of hand applications from cleaning to polishing

Non woven discs can be used with electrical or air powered equipment





Abrasive Belts

ADHESIVES

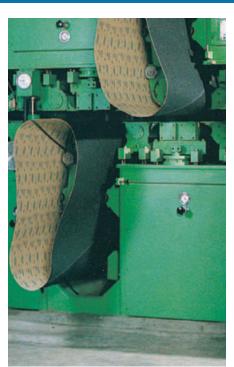
Abrasive Belts are supplied in various mineral/backing combinations and formats. Coated abrasives provide fast, cost-effective solutions to stock removal and finishing problems.

The three main types of backings are Paper, Cloth and Polyester. The abrasive coatings can be Aluminium Oxide, Silicon Carbide, Cubitron™ Mineral or Zirconia with grit sizes from 24 to 400



Conversion Service

We have access to one of the most complete ranges of abrasives in Europe, for example Norton, 3M and Klingspor allow us to produce high quality abrasive belts with sizes ranging from 6mm to 400mm width in any desired grit or length. This new conversion service offers the benefits of competitive prices, quick lead times and smaller minimum order quantities.





Flap Discs

Flap Disks work as the abrasive flaps, individually bonded for a tough reinforced fibre backing, wear down. As they wear they expose the next layer of abrasive material, giving a consistent finish and very long life. Abrasive Discs

Fibre Discs

The use of high quality abrasive grain provides fibre discs with high performance results on sanding and polishing of metals.





Benefits include

- Will grind and blend in one operation
- Leaves a constant high quality finish
- Runs cooler with low noise levels
- Easy to mount with no backing assembly required

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Grinding Wheels

A large range of high performance Grinding Wheels are available for use on a wide variety of applications such as:

- Cutting tool production
- Internal grinding
- External grinding
- Profile grinding
- Angle grinding



A variety of the most commonly used wheel shapes are available



Dynabrade™ Industrial Power Tools

We can offer a range of portable abrasive power tools for grinding, deburring, filing, sanding and polishing to meet the needs of many industries.

Abrasive Belt Machine available as air powered or electric. The system replaces tedious hand filing and sanding. Abrasive Air powered finishing tools are available for work on most surfaces. Tools are ergonomically designed and feature high torque air motor and rear exhaust, lever throttle, side handle and adjustable speed control.





Random Orbital Sanders come supplied air-powered or electric for work on large areas of metal, fibreglass, solid surfaces and plastics. Mini Random Orbital Sanders are ideal for reaching tight spots and corners or for removing dust nibs on clear coat paint systems.



ADHESIVES

Safety and Maintenance

Eye Protection		p. 61
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ADHESIVES

PACKAGING

SINGLE SIDED TAPES

ABRASIVES

Respiratory Protection

Respiratory Protection

We offer a full range of respiratory protective equipment tested to the relevant European Standards and CE certification. Selecting the correct respiratory protection requires a working knowledge of the relevant legislation, respiratory hazards and the various types of respiratory protective equipment (RPE) that are available.

Selection of respiratory protection follows a basic four step method.

- 1. Identify the Hazards Dust, Mist, Metal fumes, Gas, Vapour etc
- Assess the Risk asses the hazard levels against safety standards, consider other protection
- 3. Select the right Respirator disposable, half mask, full face, powered or airline
- 4. Training in fitting and use to optimise respiratory protection.

Maintenance free particulate respirators:

Maintenance free particulate respirators are available to meet the key classifications of FFP1, FFP2, FFP3 and Welding Respirators. In most cases available in different options of Cup shaped, Foldable, Buckle strap and or valved formats.

FFP1 Respirators:

Low level of fine dust (up to 4 times workplace exposure limit) and oil or water based mists typically found during hand sanding drilling and cutting. 3M 8835 Dust/Mist Respirator

FFP3 Respirators:

Higher levels of fine dust (up to 20 times WEL) and oil or water based mist typically found when handling hazardous powders found in the pharmaceutical industry or work with biological agents and fibres.

3M 9312 Dust/Mist Respirator

Welding Fume Respirators: Welding masks provide protection against moderate levels of fine dust (up to 10 times WEL), oil or water based mists and metal fume and zone gas. These are designed specifically for welding and soldering applications.



3M 9928 Welding Respirator

3M 9322 Dust/Mist Respirator

FFP2 Respirators:

Moderate levels of fine dust (up to 10 times WEL) and oil or water based mists typically found during plastering, cement sanding and wood dust.

Moldex 2400

CUITY LED

Segre CN P1

Respiratory Protection

Reusable Respirators

Over prolonged periods of use reusable respirators offer exceptional value and quality and all combine comfort and ease of use.

Full Face masks incorporate integrated eye protection, or if you prefer separate eye protection the half mask range is designed to be compatible with goggles and spectacles. Small Medium and Large Face piece sizes are available to ensure the best possible fit.

Depending on the filter required, the reusable respirator (full or half mask) can protect against particulates only, gases and vapours only or a combination of particulates and gases and vapours.

Maintenance free Reusable Respirators

The 3M 4000 Series Respirators incorporate a unique design with integral filters. They are exempt from the maintenance requirements of the COSHH regulations if disposed of within a month.

Available for Organic Vapour / Particulate combinations as well as Organic Vapour/Inorganic+Acid Gas/particulate combinations.



3M 4251 Maintenance Free Reusable Respirator

> 3M 7503 Fully Maintainable Premium Silicone Half Mask

Reusable Half Masks

3M 7500 Series Fully Maintainable Half Masks offer unrivalled comfort from the exceptionally soft silicone face seal

Reusable Full Face Masks

The 3M 6000 Series Full Face Mask is one of the lightest, most well balanced masks available with long wearing comfort and easy to fit design.

Gloves

Choosing the right glove:

Hands at work are extremely vulnerable to a wide range of hazards, which include:

- 1. Cuts and Lacerations
- 2. Blows
- 3. Chemical attacks
- 4. Extreme Temperatures

The extent of the protection provided depends on the type of glove chosen and the materials and design used in the particular glove. In the end there will be a variety of requirements needed. You should consider grip, dexterity and most importantly the correct level of protection whenever choosing a glove and generally a compromise must be made.

Cut Resistant Gloves:

Cut Resistant gloves are used in a wide variety of applications from the glass industry to handling of sheet metal and any other work place where there is a risk of cuts to the hands. Cut Resistant gloves are usually manufactured using Kevlar or Dyneema and incorporate a variety of features including latex or leather coated palms, dot grip palms and fingerless. When selecting a cut resistant glove

consider the following requirements:

- The level of protection you need as prices vary widely. Generally the more protection you get the less dexterity the glove has.
 - 2. The level of grip you require, you may require more grip for example when handling glass than you would changing a circular saw blade. 3. Whether you require the glove to be puncture resistant as well as cut resistant. There are gloves on the market now that are specifically designed for refuse collectors among others who are at risk of a syringe puncturing the glove, as Kevlar and Dyneema gloves are woven they offer no puncture resistance.

Disposable Gloves:

Disposable gloves are used in a wide variety of applications from the food industry to engineering companies. When choosing a disposable glove there are three main materials to consider Latex, Vinyl and Nitrile. Generally this choice is down to preference and/or any

allergies that the user may have. All these different types of glove are available in different sizes with powdered or powder free options.

> Thermal Gloves: Thermal gloves protect from extreme temperatures whether hot or cold. Typical applications are cold store and freezer gloves, Welders heat resistant gauntlets and heat resistant chemical gloves. These types of gloves generally have a thick thermal lining inside and various outer coatings.

ACKAGING

General Purpose Gloves:

General purpose gloves come in many different shapes and forms including Rigger, Drivers and Criss Cross gloves as well as many others. These types of gloves offer less protection when compared to the more specialist gloves but can be more cost effective.

Waterproof Gloves:

Water proof gloves are used for various jobs inside and outside the workplace, from washing up gloves to fully coated PVC Gloves used in the construction industry. We hold stock of a large variety of waterproof gloves.

Chemical Gloves:

Chemical Gloves should be used whenever handling dangerous chemicals or irritants. These gloves vary in length, lining and protection level. Some gloves are more suitable than others when using different types of dangerous chemicals so you should always play safe and ask for advice when selecting this category of glove.

DOUBLE COATED TAPES

ABRASIVES

Footwear / Head Protection

Footwear

Safety footwear protects the feet and lower leg of workers when working in hazardous environments. Risks must be assessed to identify the appropriate protection features that are required. Hazards include toe impact, sole penetration, slippery/oily surfaces, hot surfaces and areas in which chemicals are used.

We stock a wide variety of safety footwear from budget ranges of low cost footwear up to designer ranges such as Caterpillar and Dr Martens.

Budget Range:

Our budget range of footwear such as our chukka boots and shoes offer steel toe caps and optional safety midsoles to meet your safety requirements at the lowest cost possible. Ideally this type of footwear would be used periodically as a more comfortable boot may be more appropriate for use over long periods of time.

Head Protection



Workers are killed and many others seriously injured as a result of not wearing adequate head protection. Wearing a safety helmet greatly reduces

your chances of being seriously hurt. All Safety helmets sold within the EU must be designed to meet European standards and be CE marked, additionally safety helmets must be produced under ISO 9002 quality, bear the kite mark and be manufactured to meet HSE regulations for sale in the UK.

> Lower levels of head protection are available for areas where you are not required to supply safety helmets but feel some form of protection beneficial.

> > This lower level form of head protection comes in the form of bump caps which are available in either a baseball cap style or PVC option.

When choosing the right type of safety helmet you must consider the working environment and any possible hazards that may present themselves to workers but if you are in any doubt a site survey should be carried out to assess hazards.

All our head protection can be supplied incorporating your corporate logo if required, using either labels or printing depending on the helmet manufacturer. Baseball style bump caps can be embroidered.

PACKAGING

SINGLE SIDED TAPES

Footwear / Eye Protection

Rigger Boots:

Rigger boots are generally used in the construction and

building trade and incorporate both a safety toe and midsole. These boots can be supplied either

> warmlined or unlined depending on your preference and also with or without a scuff cap.

Safety Wellingtons: We offer a wide range of safety wellingtons by both Dunlop and Egoli suitable for both general purpose, as well as use in the food industry. **Premium Ranges:**

Our Premium range of footwear is vast, including safety trainers, boots and shoes which offer both excellent protection and a high level of comfort. Brands include Himalayan, Caterpillar and Dr. Martens. Whatever your requirements we can recommend a suitable product at a reasonable price.

Please contact a member of our sales team for assistance.

ADHESIVES

SAFETY AND MAINTENANC

Eye Protection

Whether you are looking for safety-specs, over-specs, goggles or visors we offer a full range with a selection of styles, lens types and colours. All our eye protection complies to EN170/EN172.

Safety Spectacles:

Style is an important factor when choosing the right spectacles for your work force – eye protection is more likely to be worn if it looks good. We offer eye protection that people prefer to be seen in and protected by.

An additional consideration when choosing safety specs is the lens type with options including clear, smoked and yellow lenses all of which offer UV protection by filtering harmful UV rays.

Safety Goggles:

Safety goggles offer a higher level of protection, also protecting against liquids, gases and dust. Lenses are offered in both polycarbonate and acetate options in many of our premium products. Polycarbonate lenses protect against higher speed particles of medium energy and molten metal where as acetate lenses offer excellent chemical resistance

and protection against high speed particles of lower energy.

Visors and face shields:

Regular eye protection may not be enough when at risk of larger particles such as metal fragments, larger wooden chips and rocks. Face shields can protect against these types of hazards and many more as well as providing excellent visibility and the added advantage of replacement visors.



Over-specs:

Also known as cover-specs these are used to provide protection over prescription spectacles and are an alternative to expensive prescription safety spectacles.

Hearing Protection

Hearing Protection

As the number of Construction, Manufacturing and other Industrial companies are on the increase, so are the number of people exposed to harmful levels of noise in the workplace. Over 29% of all workers are exposed to hazardous levels of noise during at least a quarter of their working day, and 11% are exposed at all times. Due to the nature of noise being unseen it can be easily ignored but the results can be devastating, causing everlasting deafness either partial or total.

Here is a selection guide to assist you in selecting the appropriate category of hearing protection:

Disposable Earplugs and Dispensers

An inexpensive and convenient option for protecting your work force against low risk noise levels usually made from self adjusting foam providing a comfortable form of protection. Available in various pack sizes, corded or uncorded, detectable and non detectable and in conjunction with dispensers these are probably the most popular form of hearing protection available.

Reusable Earplugs:

Reusable earplugs last for weeks, reduce waste and can save money in the correct environment where workers can retain and store earplugs for reuse. Simply wash in warm water to clean between uses. These plugs are available in various designs.

Ear Defenders:

When you need to block higher volumes of noise we offer a range of ear defenders from the maximum noise reduction

available in an earmuff to the more economical designs. The right hearing protection should block out the harmful noise whilst allowing workers to communicate.

Helmet Mounted Ear Defenders:

Helmet mounted ear defenders are available in the same ranges as the standard ear defenders but can be attached to compatible safety helmets.

Electronic and Radio Ear Defenders: Electronic ear defenders improve audibility of vital

communication and emergency sounds but still protect hearing in noisy environments. Radio ear muffs are available equipped with integral radio and long life battery.

Banded Earplugs:

Banded earplugs are convenient when walking in and out of noisy environments. After use they can be worn around the neck until the next time they are needed. Available with replaceable pods.



Indoor and Outdoor Workwear

We offer a wide range of workwear to meet all production and industrial requirements. We offer a comprehensive range from several market leaders and can provide any garments identified with a corporate design or promotional message.

Boilersuits

Polycotton standard Click, concealed stud front, pockets and elasticated waist. Available in sizes 34" - 54" in colours Navy/Royal/Orange/Red/White and Spruce.



Warehouse Coats Polycotton Click, concealed stud front, rear vents, breast and lower pockets. Available in sizes 34" - 52" in colours Navy/Royal/White and Spruce.

Trousers

Polycotton Super Click, Zipfly with hook/bar, Button fastening belt loops, Hip pockets, Rear pockets with stud flap, sewn in crease. Available in sizes 30" - 48" in colours Navy/Royal and Spruce.



Corporate Wear Classic shirts, Pilot shirts, Polo shirts, Tee shirts, Sweat shirts and Fleece Jackets are available in all sizes and various colours. All are suitable for embroidering or screenprinting Company logo or promotional message.

High Visibility Clothing

All individuals working on or near roads are required to wear high-visibility warning clothing (Class 2 or 3) complying with BS EN471 (paragraph 4.2.3 b). In addition, on motorways or other high-speed roads, full-length-sleeved garments are required (paragraph

4.2.4). The retroreflective material used should be to Class 2. The colour of the clothing should be fluorescent yellow or orange.

High visibility Lined Traffic Jacket Polyester-coated outer shell with a 3M Scotchlite™ reflective tape, nylon lining and polyester padding. Conforms to Class 2. Fully taped seam waterproof garment with strong zip for extra reliability and storm flap secured by press studs. Two waist pockets with

protective flaps, inside chest pocket and map pocket. Concealed hood in the collar. Long length. Sizes: S - XXL

Hi visibility Bomber Jacket

Our hi vis bomber jackets conform to EN471 Class 3 and incorporate press stud flap fasteners, fully taped seams, 2 lower front pockets with flaps, storm cuffs and a concealed hood.

High Visibility Waistcoat CE Marked and meets the EN471 requirement. A lightweight polyester waistcoat made from a comfortable and breathable fabric. With retroreflective Class 2 material, 2 horizontal bands and two shoulder bands. Standard garments have hook and loop fastenings. Also available with two horizontal bands of reflective material around the torso and two shoulder bands.

> High visibility trousers are also available to complement the range.





AFETY AND MAINTENANCI

Flooring/Sorbents

Floor Marking Tape/Paint

We offer a range of both Indoor and Outdoor Vinyl Floor Marking Tapes in a range of colours. They offer a guick solution to demarkation with minimum inconvenience. It is recommended to prime your surface before applying tape. Can be applied by hand or applicator. Temperature range -4 - +75 °C.

Paint can offer a convenient solution via aerosol where the surface is not suitable for tape, it can be hand or applicator applied. It is quick drying and chemical resistant.

Car parks

Roadwavs



Floor Marking Tape/Paint

Indoor Tape

Marking Lanes and corridors in factories and warehouses Marking danger or no-go areas Highlighting safety equipment locations Schools Sports Halls

Outdoor Tape **Outdoor Paint** Car Parks Marking danger or no-go areas Marking danger or no-go areas Highlighting safety equipment locations Highlighting safety equipment locations Roadwavs All outdoor areas All outdoor areas

Public Places

Barrier Tape

A non adhesive tape which marks out and alerts people to hazards in public and high traffic places. Available in red/white, black/yellow and green/white. Also available reflective barrier tape which conforms to EU legislation (directive 92/58/CEE) concerning road safety at night. Ideal for any areas after dark where people's safety might be compromised. Eq. Shopping Centres, Schools, Thoroughfares etc.

Safety Walk

Safety is paramount within the work place and in public places, Anti Slip surfacing can offer a solution where slippery surfaces are an issue.

Anti Slip surfacing is available in:

General Purpose: For everyday traffic

Coarse: Larger mineral resists clogging in muddy or oily environments

Conformable: Foil backed for use on irregular surfaces Resilient: Vinyl topped with moisture proof backing for bare foot use in wet area

Sorbents

All indoor areas

Sorbents or Spillage Kits as some people refer to them can be used in a wide variety of applications ranging from simple maintenance to emergency spillage clean up kits.

There are 3 main categories of Sorbents which are outlined below:

Maintenance Sorbents

Ideal for absorbing oil and other Industrial fluids cleanly, safely and efficiently.

Oil Sorbents

For absorbing oil not water. Being hydrophobic (repels water), they are ideal for absorbing oil from areas where water may also be present

Chemical Sorbents

Are the ideal solution for hazardous spill control. They provide very high absorption capacities and are suitable for absorbing a very wide range of liquids - even aggressive acids and alkalis.

Kits are available in various sizes and varieties so if you would like more information please contact a member of our sales team.

Sorbent 3M Chemical Sor

ADHESIVES

PACKAGING

Safety Signs

Safety Signs

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A small selection from the range of signage solutions to cover the entire range of safety signs to make your business a safe place to work and meet the regulations enforced by the HSE (Health and Safety at Work Regulations 1999). Where applicable the products are designed to meet the UK and EU legislation (BS 5499 and 92/58 EEC).

> Fork-Lift Trucks operating

The majority of signs are available in either 1mm rigid plastic or self adhesive vinyl options although other custom made signs are available. Caution

> HEALTH AND SAFETY LAW

> > Designated

smoking

area

Glow in the dark signs:

Protective

footwear must be worn

Fire

exit

We can offer signs that will meet almost any requirements including glow in the dark evacuation route marking products. Night time, windowless, or smoke filled areas can cause serious reductions in visibility. The use of photo

luminescent products will clearly mark out emergency escape routes, fire exits, stairways and the location of fire fighting and emergency equipment. These products all comply to IEC 60695-2-1/2:1994 and are made of non flaming materials.

Fire escape keep clear

No smoking

Smoking Ban:

Smoking in enclosed places is now banned in the whole of the UK. We now offer a wide selection of "no smoking" signs to meet the latest legal requirements including vehicle stickers, self adhesive and rigid plastic wall signs. Additionally we can supply smoking shelters, bins and alarms.

Industrial Cleaners & Maintenance Sprays

We stock a large range of industrial cleaners and have outlined below just a few of our most popular products

3M VHB Surface Cleaner (IPA)

(IPA) Isopropyl Alcohol is a solvent used to clean a surface prior to adhesion. VHB surface cleaner is available in 1 litre cans or boxes of 100 impregnated sachets.

3M 5-Way Plus Penetrating Lubricant

- 1 Loosens rusted parts
- 2 Lubricates
- 3 Demoisturizes
- 4 Cleans and Protects Metal
- 5 Stops Squeaks

Available in 171ml non aerosol pump spray can.

Industrial Citrus Cleaner

A citrus cleaner which solves the problem of removing difficult substances such as many dried non curing adhesives, tape residues, grease, oil and dirt. Available in 500ml aerosol spray or 171ml pump action spray.

3M Scotch-Brite™ Floor Pads

The Scotch-Brite[™] floor maintenance system offers a complete range of floor pads,from a heavy duty stripping pad to a polishing pad to produce a mirror shine.

Other products include:

Stainless steel cleaners, Graffiti remover, Chewing gum remover and Scouring pads.











Paper Products

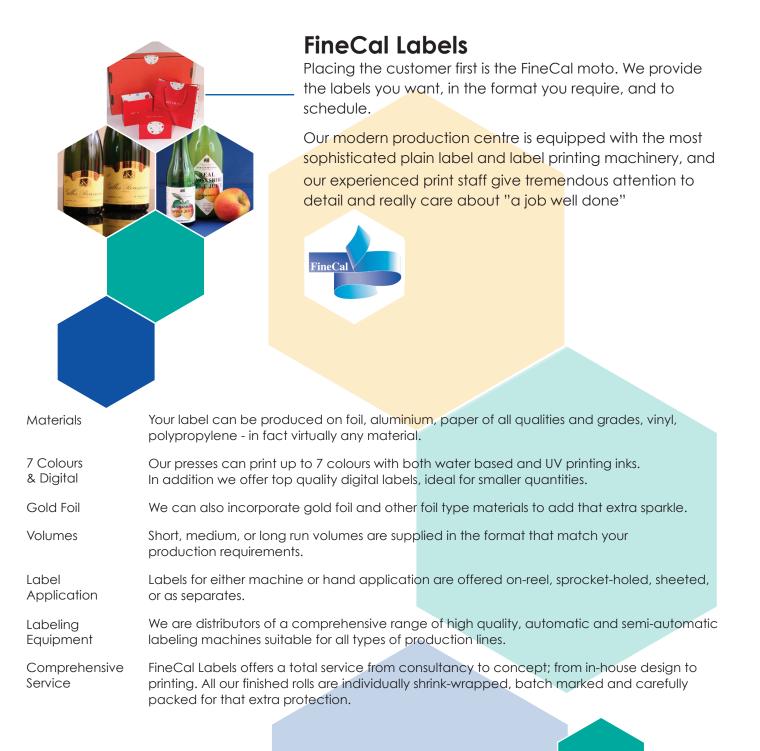
A comprehensive range of quality, branded products designed to deliver all-round value for money, time and time again. There's everything you need from toilet rolls to wiping rolls; from hand towels to dispenser systems.

Many of our products are industry specific, so you get the right product for the right job, everytime. The range of paper disposables comes in different plys, colours, lengths and material (including embossed) for use in all types of industrial applications.

The Range Includes:

- Centre Feed Rolls
- Hygiene Rolls
- Jumbo & Mini Jumbo Rolls
- Wiping Tissues
- Industrial Wiper Rolls
- Hand Towels
- Specialist Wipes

ADHESIVES



Your label says it all and understanding your needs is all important. Therefore we would enjoy the opportunity to work closely with you in creating that perfect job. For customers who require it, we operate a daily delivery service following fast response and turn around times.

Our labels are used by nationally known, blue-chip companies especially food retail. We print for leading businesses in the aerospace and electronic fields; top manufacturers in the industrial and chemical sectors plus MOD. We meet or better the most stringent specifications required by virtually any user, anywhere.

It is hardly necessary to add that high quality - with dependable consistency - comes as standard when you work with FineCal.

FineCal Labels - always creates the right impression.



Several ways to order

Our Sales Team will be delighted to hear from you and receive your instructions by Telephone, Fax, E-mail, Post, website or you can order and collect from our trade counter in Bristol.

Easy ways to pay

Subject to a minimum order of £50, placing your orders with us is simple. You can pay by Credit Card or send payment in advance upon receiving our pro-forma invoice. In fact why not open an account allowing you to take up to 30 days credit providing your initial minimum order is £100 (exc VAT)

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