



# Plastex

## Polypropylene & Polyester

## STRAPPING PRODUCTS







## Plastex and the environment

As a worldwide supplier of plastic tensional strapping and vinyl matting, with manufacturing plants both in the UK & USA, Plastex conduct an ever improving policy of reducing the environmental impact of their production.

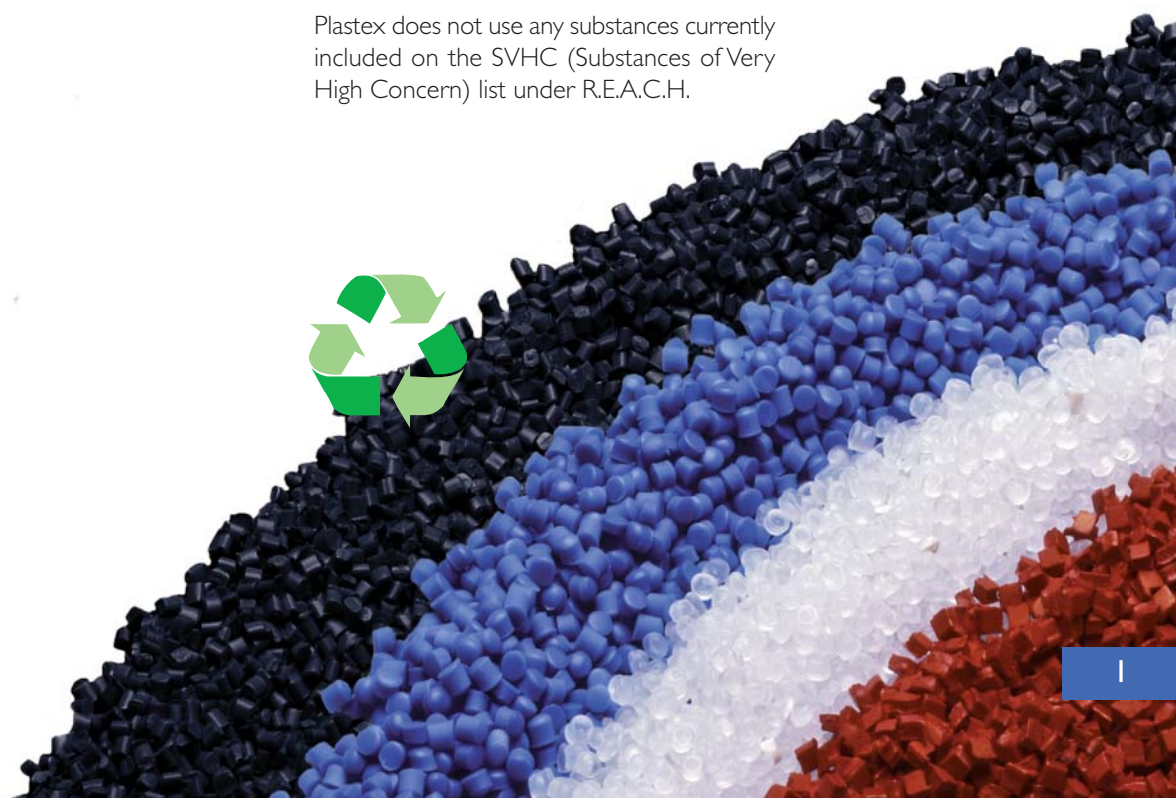
- 90% recycled material used in black hand strap manufacture.
- All production scrap is reprocessed for our own use.
- The company actively encourages the shipping of palletised unboxed products - cutting down waste, time & money.



**R.E.A.C.H** - *Registration, Evaluation, Authorisation and Restriction of Chemical Substances*

The European Community R.E.A.C.H regulation (2007) gives manufacturers the responsibility of providing high level human and environmental protection from the use of chemicals in manufacturing.

Plastex does not use any substances currently included on the SVHC (Substances of Very High Concern) list under R.E.A.C.H.







## Plastic Extruders Limited

*known globally in the trade as*

**Plastex**

Plastic Extruders Ltd was founded in 1962 and is a second generation family run business. A team of long standing employees maintain consistent levels of service and efficiency ...ensuring the highest quality strapping.



PETER O'SULLIVAN  
Sales Director

DAVID O'SULLIVAN  
Managing Director



*Plastex are proud to be the UK's largest trade only manufacturer of polypropylene and polyester strapping. Our advanced production techniques guarantee consistent tensional strapping for use in the most demanding fully automated machine environs. The company is committed to supplying the trade, and in turn, their end customer, with the most comprehensive range of stock and bespoke strapping available anywhere today.*

Working together with the  
packaging industry

SUPPLY TO THE TRADE - SECOND TO NONE

OVER 50 YEARS EXPERTISE TO THE TRADE

THE UK'S LARGEST TRADE MANUFACTURER



# We manufacture strapping and that makes all the difference.

Plastex manufacture sufficient strapping to encompass the globe once every 18 days.

When you buy our products you are also investing in our extensive knowledge that comes from over 45 years of designing, testing and manufacturing strapping for a diverse range of applications.

Expertise we readily apply to ensure all our trade distributors supply precisely the right strapping, with the right specifications for their customers.

## Quality beyond question

- The company integrate ISO accreditation into all manufacturing processes.
- In 1993 BS5750 was obtained - followed by a continued policy of striving for the highest production standards.
- Today, ISO 9001:2008 also ensures a continual improvement system.





# Our role is to get it right for you

Trade your thoughts and talk to us.

Our sales and technical staff are on the end of the phone should you require assistance when ordering and specifying for your customer needs. It goes without saying that confidentiality remains between Plastex and you - the trade distributor.

***We'll test an existing strap to ensure your customer gets the right strapping.***

Submit a 1 metre length of any strapping and we will test it to ensure the correct grade is specified for the application, ensuring 100% efficiency.



## Polypropylene (PP)

Being particularly lightweight, polypropylene is ideal for ease of carrying and benefits from high elongation properties that enable the strap to contract around packages that may settle.

***Applications include:***

corrugated, food, timber, newspaper bundles, light and medium weight packages.

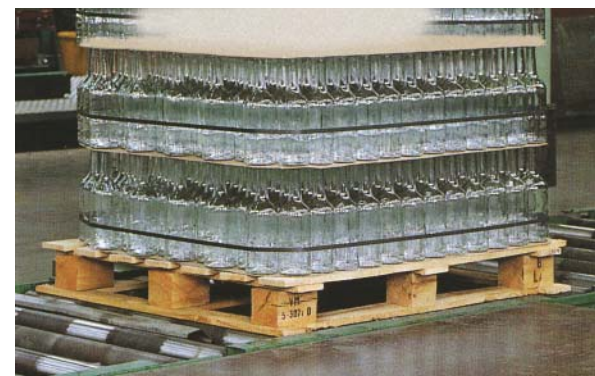
## When and where is Polypropylene & Polyester strapping used?



***Your customer's requirements will either be:***

### General Purpose Strapping

Plastex stock an extensive range of 'off the shelf' standard polypropylene rolls to suit a large proportion of current industry needs, including both hand and automatic core strapping. *All available ex-stock.*



### Bespoke Strapping

Strapping can be manufactured to suit a customer's specific requirements. Both polypropylene and polyester strap can be custom printed.

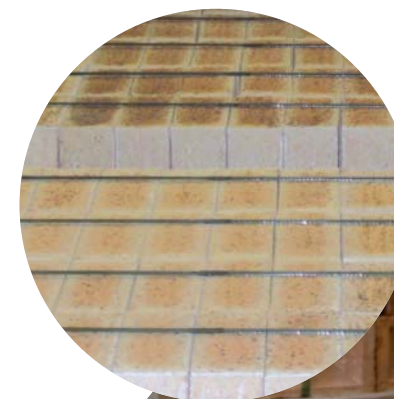


## Polyester (PET)

With high tensile strength and low creep for rigid loads, Polyester provides an ideal, hazard free alternative to steel strapping.

***Applications include:***

bricks, blocks, tiles, metals, pipework, can/bottle pallets and heavy packaging.





# Why select Polypropylene strap?



## PROPERTY

- Low density**
- High rigidity**
- Excellent chemical resistance**
- Thermoplastic re-melting**
- Resistant to abrasion & ageing**

## BENEFIT

- Easily carried
- Works on automatic machines
- Does not corrode, mark or rust
- Recyclable
- Long life/will not damage products
- Black strapping is also resistant to UV degradation

**Light duty • Flexible • Economical**

Polypropylene can be specified for any number of uses, the most widely applied being for unitising, bundling, stabilising, preventing breakage in transit and security, whilst minimising additional package weight.

## Composition

Extruded polypropylene homopolymer manufactured in an ISO 9001: 2008 environment.

## Tensile Strength

Polypropylene strap is manufactured to strict dimensional accuracy with precision winding, straightness and high tensile strength. Machine grade polypropylene is purpose-made for fully automated packaging lines.

The strap however, can only be as strong as the join used to secure - it is therefore vital that the correct method of joining a strap, for its given weightload, is used.

## Joining Methods

Either by hand tool manually with metal buckles or a range of seals, friction weld joint, or heat sealed. Small packages can be secured using plastic buckles.

## Breaking Strength

The following is for example purposes only. Many factors can affect the result:

- |  |   |
|--|---|
| <i>The type of package being strapped</i>                  | <ul style="list-style-type: none"> <li>- Rigid/compressible</li> <li>- Sharp/round edges</li> <li>- Friction between items</li> </ul> |
| <i>The method of transportation</i>                        | <ul style="list-style-type: none"> <li>- Internal/export</li> <li>- Palletised/loose</li> </ul>                                       |
| <i>The type of seal</i>                                    | <ul style="list-style-type: none"> <li>- Plastic buckle/metal seal</li> <li>- Heat/friction seal</li> </ul>                           |
| <small>Refer tool manufacturer for seal efficiency</small> |   |
| <i>Safety factor</i>                                       | 1.5 - 2.0 of weight load  |

As a rule of thumb; a safety factor between 1.5 & 2.0 is desired.

Total load weight = 500 kg

4 straps each of 300 kg breakload = 1200 kg

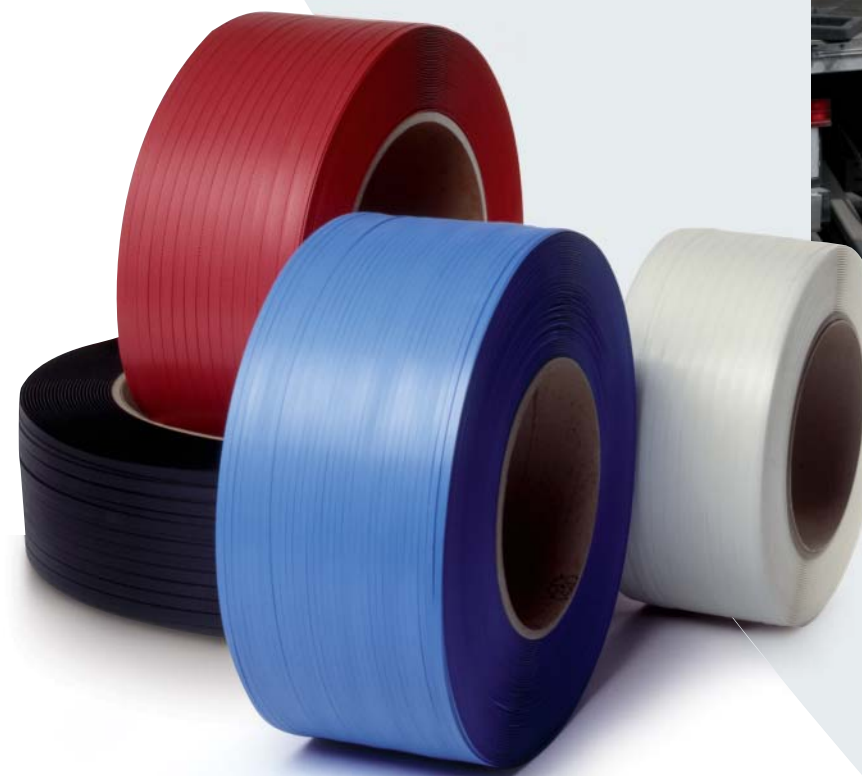
Seal efficiency 75% (Friction weld) = 900 kg

Safety factor =  $900/500 = 1.8$

(between 1.5 and 2.0, so should be acceptable).

Due to the many parameters that can affect the result, each unitisation can require different amounts and breaking strength of strapping.

The final specification is the responsibility of the applicator.



**100% Recyclable**

WHY POLYPROPYLENE STRAPPING

MACHINE GRADE OR HAND GRADE



# Hand Grade Polypropylene strapping

Available in many different sizes and colours on either cardboard cores or plastic reels. Designed to be applied by hand or with a range of joining tools.



Available with  
immediate  
ex-stock  
delivery to the  
trade only.



Hand Grade

Available Ex-Stock

Width x Thickness	Average Breaking Strength	Meterage	Colour	Core Sizes Available
12.0 x 0.50	135	2,000	Black	Plastic Reel Only
12.0 x 0.63	165	1,500	Black	Plastic Reel Only
12.0 x 0.65	190	1,500	Black	Plastic Reel Only
12.0 x 0.70	205	1,300	Black	Plastic Reel Only
12.0 x 0.76	235	1,200	Black	Plastic Reel Only
12.0 x 0.80	260	1,000	Black	Plastic Reel Only
12.5 x 0.86	300	1,000	Black	Plastic Reel Only
12.5 x 0.86	300	1,000	Yellow	Plastic Reel Only

## Specifications at a glance:

Width	5 - 19mm
Thickness	0.35 - 1.0mm
Quality	Hand grade to Fully Automatic
Elongation	14 - 20%

# Machine Grade Polypropylene strapping

Purpose made for table top, automated large arch and high speed machines. Precision wound coils for smooth continuous running, lightweight and safe to handle.



Machine Grade

Available Ex-Stock

Width x Thickness	Average Breaking Strength	Meterage	Colour	Core Sizes Available
9.0 x 0.55	100	4,000	White	200x190
12.0 x 0.55	125	3,000	Blue	200x190
12.0 x 0.55	125	3,000	White	200x190



# Why select Polyester strap?

## PROPERTY

**High rigidity**

**Low creep**

**UV resistant**

**Orientates well**

**Elastic memory**

**Good temperature resistance**

**Toughness and impact resistance**

**Excellent chemical resistance**

**Transparent gloss appearance**

**Value**

## BENEFIT

Works in automatic machinery

Maintains tension

Outdoor applications

Very high tensile strength

To aid strap tension even in packs that settle/shrink

Reducing ageing effects/rusting

Does not split easily

No corrosion, non toxic, no dust or hairs

Quality appearance. Label/package visibility

Equivalent cost per linear metre is less expensive than steel strapping

Polyester strap is predominantly used in the heavy duty sector of packaging - whether applied by hand or machine. It is polyester's strength and robust properties that warrant its continuous use.

## Composition

Extruded thermoplastic polyester manufactured in an ISO 9001: 2008 Environment.

## Tensile Strength

Polyester has a very high tensile strength, which combined with a low creep factor enables excellent retention of applied load. At the same time ease of application and subsequent disposal generates a fast and highly efficient packaging process for either manual or automated use.

## Joining Methods

Either by hand tool with metal buckles or seals, or friction welds, or heat sealed.

## Breaking Strength

The following is for example purposes only. Many factors can affect the result:

*The type of package being strapped*

- Rigid/compressible
- Sharp/round edges
- Friction between items

*The method of transportation*

- Internal/export
- Palletised/loose

*The seal strength of*  
Refer tool/machine manufacturer for seal efficiency

- Plastic buckle/metal seal
- Heat/friction seal

*Safety factor* 1.5 - 2.0 of weight load

As a rule of thumb; a safety factor between 1.5 & 2.0 is desired.

Total load weight = 800 kg

6 straps each of 300 kg breakload = 1800 kg

Seal efficiency 75% (Friction weld) = 1350 kg

Safety factor =  $1350/800 = 1.7$

(between 1.5 and 2.0, so should be acceptable).

Due to the many parameters that can affect the result, each unitisation can require different amounts and breaking strength of strapping.

The final specification is the responsibility of the applicator.



WHY POLYESTER STRAPPING  
MACHINE GRADE OR HAND GRADE



# Polyester strapping for hand & machine applications

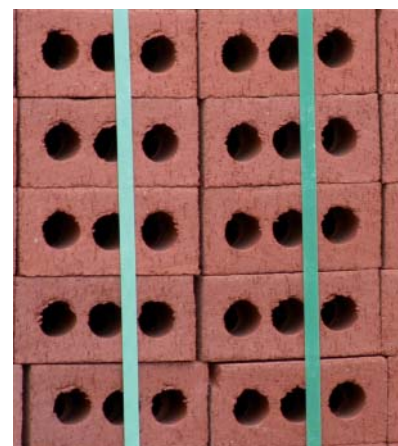
Available in a variety of widths and thicknesses in plain or embossed textured finishes. Polyester contours well to aid strap tension, while providing high rigidity and low creep factors.

## Hand Applications



Polyester's high tensile strength and impact resistance make it ideal for stabilising and palletising in bottling plant & food processing applications, where a non corrosive and non toxic strap is essential.

## Machine Applications



Machine grade polyester is designed to run through large arch machines in industries where heavy duty strapping is required, especially when a machine incorporates a press - as polyester strapping has high elasticity properties enabling it to move with the package.



**Remember,  
un-boxed orders  
save money as  
well as the  
environment**

Specifications at a glance:	
Width	9 - 32mm
Thickness	0.4 - 1.5mm
Break Strength	200 - 1500kg
Elongation	10 - 15%
Colours	Black, Clear, Green White, Red, Yellow Orange, Blue



# Custom Printed Strapping

Available on both Polypropylene and Polyester strapping.

Benefits:

SECURITY

ADVERTISING

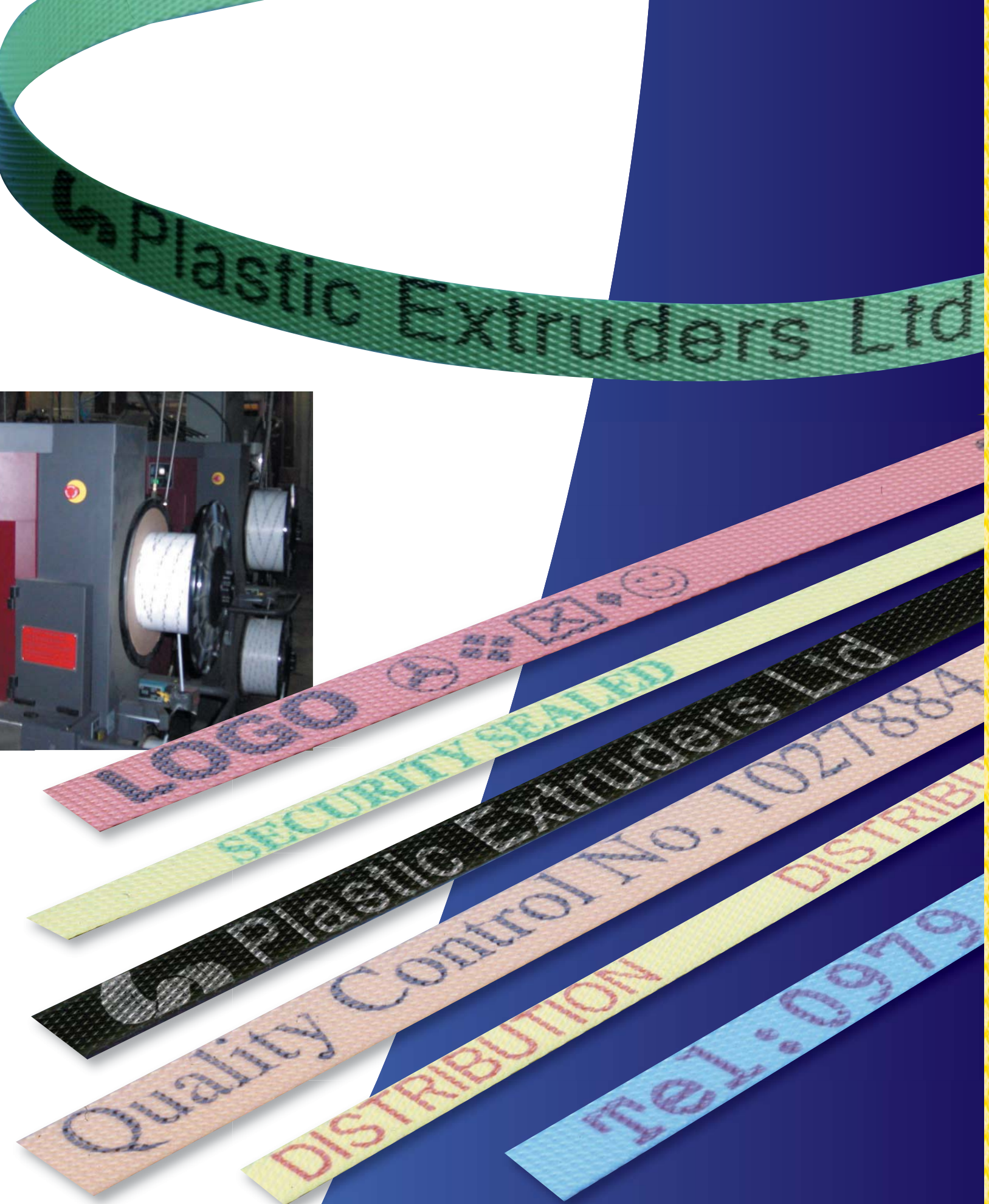
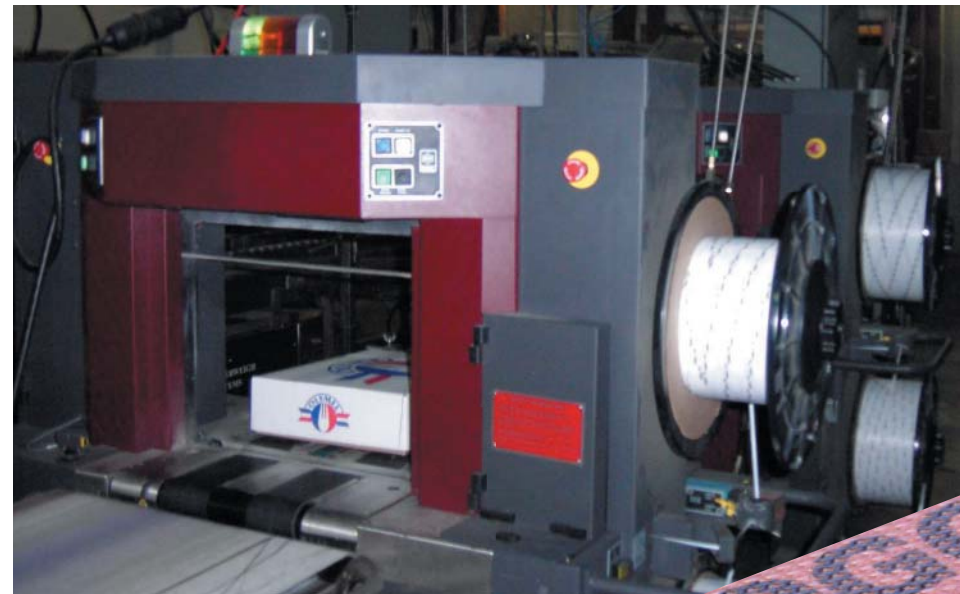
DISTRIBUTION

QUALITY CONTROL

Printed strap not only improves the appearance of goods being strapped, it also offers a valuable marketing tool for the end user.

Benefits of supplying printed strap include:

- Improved security and visual awareness of consignment tampering.
- Enhanced presentation and brand identification.
- Practical way of distinguishing and coding packages.
- Can be used with manual, semi automatic and fully automated processes.



Printing process is in single colour with a choice of standard ink colours.



# Strapping ancillaries

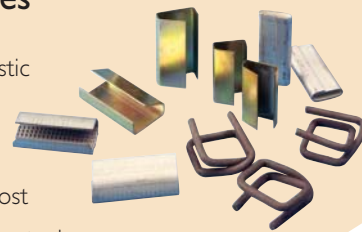
## Hand Tools

Plastex offer a comprehensive range of hand tools from one and two piece tools, for use with 12-16mm strapping. All tools are supplied ex-stock and are backed by a full warranty.



## Seals & buckles

A large range of plastic or metal buckles, and a full range of metal seals for most tools are available ex-stock.



## Edge Protectors

**APEX**  
Individual rigid plastic edge protectors are available in two sizes.



## Pallet Probes (Pal-probes)

A quick and easy method to pass strapping under a pallet. Ideal for use in confined spaces.



## Vynaband

Supplied in continuous reel form, of 20 loops, providing a quick and reusable method of stabilising pallet loads for internal transportation. Standard loop, red colour; 3.5m circumference stretching up to 4.5m.



## Band & Buckle

Plastex manual strap is also available in various 'easy to use' dispenser kits incorporating metal or plastic buckles dispensing from the outside of the coil in PP and PET.



## Ejtex

200 multi-purpose protectors in continuous reel form, supplied in a handy self-dispensing carton.

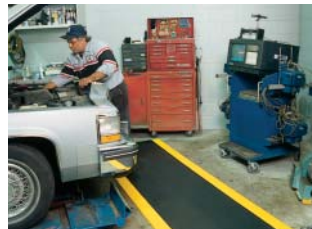




# Plastex Matting

Plastex matting products are widely used throughout the packaging industry, delivering a range of health & safety benefits.

*Anti-fatigue matting and flooring range includes:*



## Tuff Spun

*An economical anti-fatigue foam matting.*



## Zed Land

*Patented foam construction with ESD properties.*



## Zed Tred

*Heavy duty ribbed surface on a high density foam.*

*Anti-fatigue matting with slip resistant properties include:*



## Vynagrip Modules

*Reducing slips and standing fatigue at work.*



## Heronair

*A hard wearing and versatile work horse.*

For more information please contact  
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Plastex matting and strapping solutions

FOR THE PACKAGING INDUSTRY





# Plastex

## Polypropylene & Polyester

## STRAPPING PRODUCTS

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