FOCUS PACKAGING SOLUTIONS LTD

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AUTONOMOUS - ROBOTICS AUTOMATION - RECYCLE



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W: www.focuspackaging.co.uk



GREENER WAYS TO INCREASE PRODUCTIVITY AND REDUCE DEPENDENCY ON LABOUR

FREE CONSULTANCY FOR:

Robotics | Automation | Packing Machinery | Consumables | Packaging design

We will help you to reduce your carbon footprint and waste returns by using greener materials and packing machines. Start to prepare now for the coming new tax on single use plastic packaging that contains over 70% virgin material in 2020.

Introduction

Because of our current experience of supplying quality packaging consumables and packing machines such as pallet wrappers, shrink tunnels and strapping machines & servicing these machines with our engineers, to a wide range of manufacturing and distribution enterprises, has set us in a unique position to introduce AI machines (artificial intelligence) to our customers. These new machines if embraced, can increase productivity and reduce dependency on the current diminishing semi skilled labour force. We have set up supply and support arrangements with several international manufacturers so to be able to bring to you the very best of this equipment with the ability to support it in the field.

The Robots you will find here are not great big expensive game changers, but small competitively priced simple machines that can work side by side with production operatives without any safety issues increasing productivity, and even working by themselves doing essential repetitive tasks which can be a hard position to fill with low skilled labour. The CoBot is a highly efficient production aid, the Mir an internal self-guiding transport system that will either pull or carry weights up to 1000kgs. The Global AGV, is an autonomous driverless Fork Truck, that drives on a programmed route, which will include self-lifting picking and placing.

We have also looked at green issues and introduce plastics made from sugar cane and potato starch. There is also a single use LDPE plastic, PCW - VRV, which will avoid paying the plastic tax on single use plastics. Kraft paper carton sealing tape has far superior bonding abilities compared to any plastic tape. Its glue is made from potato starch and they both are completely recyclable with the carton.

Do not throw your waste out in bulk form, because it's expensive to hire large skips. By compacting it, you can reduce the number of skips required. Value can also be added to your waste by compacting it, because it can then be sold direct to processors as a commodity. Our universal compactor will weigh, compact, bale and bag in one simple operation. This baler compactor gives total control over the waste collation and disposal operation.

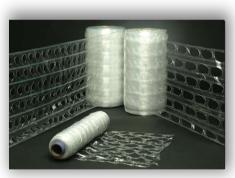
An introduction to Machine Pallet Stretch Wrap

Machine pallet stretch wrap, a critical component of modern logistics and supply chain management, is a highly efficient and versatile packaging solution designed to secure and protect goods during transportation and storage.

This innovative technology has revolutionized the way businesses handle their palletised shipments by automating the process of wrapping products on pallets.

Machine pallet stretch wrap not only simplifies the packaging process but also enhances load stability, minimizes the risk of damage, reduces material waste, and ultimately contributes to cost savings for companies across various industries.





Vent and breathe pallet wrap

Watch video - https://focuspackaging.co.uk/pallet-wrap/



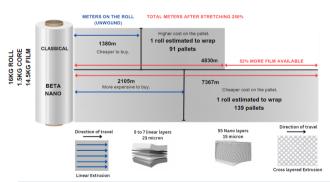
Are you wrapping pallets on a machine?

Here is a chance to reduce your plastic consumption by up to 50% and save money on the way.

Further advantages

- 1/Your packaging waste figures will be reduced.
- 2/ Your client will have 50% less stretch wrap to dispose of.
- 3/ You will need to hold less stock and spend less time ordering.
- 4/ Less time is involved in loading film onto the pallet wrapper.
- 5/ It runs more efficiently with less down time on the pallet wrapper.
- 6/ Less cardboard cores to dispose of. This will also reduce your packaging waste figures.

HOW BETA NANO 15 MICRON/55 LAYERS WORKS COMPARED TO A CLASSICAL 23 MICRON 5/7 LAYERS LINEAR STRETCH



Feature	23-micron 5-7 layers, linear extrusion	15-micron Nano 55 layers, cross layered extrusion	Benefits of Nano
Strength	Lower	Higher	More durable, less likely to tear or puncture
Flexibility	Lower	Higher	Can stretch and wrap around irregular shapes
Barrier properties	Lower	Higher	Better moisture, gas, and vapour barrier
Impact resistance	Lower	Higher	Better protection for fragile contents
Tear resistance	Lower	Higher	Less likely to rip or develop holes
Consistency	Lower	Higher	More uniform thickness and properties
Cost efficiency	Higher	Lower	Less raw material wasted in production
Retention properties	Lower	Higher	Better at retaining shape, less elastic recovery

https://www.palletwrapperuk.co.uk/products/nano-technology-film/



What is polythene?

Polythene is crucial in packaging due to its versatility, affordability, lightweight nature, and excellent barrier properties against moisture and other environmental factors. It offers durability, flexibility, and customization options, contributing to cost savings, efficient transportation, and maintaining product quality. Additionally, its recyclability supports sustainability efforts in the packaging industry.

Polyethylene, commonly referred to as polythene, is classified as either Linear Low-Density Polyethylene (LLDPE) or High-Density Polyethylene (HDPE) and is categorised as a virgin plastic. It is the most expensive form and it is subject to the full rate of plastic tax which is defined by weight.

The financial burden of plastic tax can be mitigated by incorporating an additive known as Ethylene Vinyl Acetate (EVA) into the polythene material. This additive enhances the strength of the bag, allowing for a reduction in weight and thickness (by approximately 20%) without compromising performance. Plastic tax still applies.

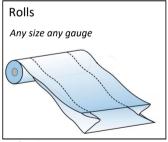
The inclusion of 30% Post-Consumer Waste (PCW) into the polythene mixture has the potential to decrease production costs and render the product exempt from plastic tax obligations. Not suitable for primary food contact.

Polythene and its wide range of applications.

Contact us now to inquire about your own personal requirement.

Cover and wrap the pallet 1 2 3

- 1. Top covers
- 2. Gusseted hood covers
- 3. Heat shrink covering
- 4. Covers for the wooden pallet



Lay-flat tubing Gusseted lay-flat tubing SWS (Single-wound sheet) DWS (Double-wound sheet)

Centre-folded Multi-folded J-folded.

Sheets



Cover sheets Top sheets Layer sheets Liner sheets

Vapour barrier sheets Flame retardant sheets Embossed sheets Multifold sheets.

Special Items



1. Elasticated banding can be incorporated for grip. 2. Any quantity from one upwards. 3 Any shape, any style.

Liners

Are items designed to retain a product or stop contamination from its retaining container.



Applications
Ponds & Reservoirs
Geosynthetics
Waste Management
Construction Site Containment

Agriculture & Food Chemical Industry Packaging Industry

Polythene sacks

Are ideal for transporting heavy items such as sand, cement, aggregate and horticultural seeds.



Polythene sacks are made from heavy duty LDPE. Available in two styles pillow and gusseted.



Collating and presentation for packing products, preserving freshness. Food grades available. Any style or size. Perforated and printing.

Shrink covers



Application by machine or hand. Any size, any gauge. UVA for protection outdoors.

For more information - https://focuspackaging.co.uk

Bio plastics

Bioplastics comprise of a range of materials with different properties and applications which mirror the fossil based plastic. A nature plastic material is defined as a **bioplastic** if it is either biobased, biodegradable, or features both properties. **Biobased** plastics are derived from vegetable fats and oils, corn starch, straw, woodchips, sawdust, recycled food waste and agricultural by-products.

Benefits

Bioplastics are driving the evolution of plastics. There are two major advantages of biobased plastic products compared to their conventional versions: they save fossil resources by using biomass which regenerates (annually) and provides the unique potential of carbon neutrality.

Recycled Plastics (Recover, Recycle, Reuse)

There are two trains of thought about recycling plastic. One is to recover 100%, use, recycle and reuse it again and again. By recycling and re-using plastic items as many times as possible, we can optimize their lifespan and therefore reduce our need to create new plastic.

This means we can:

- Reduce the consumption of energy used in the production of new plastic conserve non-renewable fossil fuels (oil)
- Reduce emission of gases like carbon dioxide into the atmosphere.
- Rreduce the amount of plastic waste going to landfill



https://focuspackaging.co.uk/biodegradeable-plastics/

COMPOSTABLE, BIODEGRADABLE & DEGRADABLE, WHAT'S THE DIFFERENCE?

BIO DEGRADABLE

- Disintegrates into ALL-NATUARL INGREDIENTS, but takes a little longer than compostable.
- · no harm to its surroundings
- NO MICRO-PLASTICS, no toxicity in the soil.

DEGRADABLE

- Commonly confused with biogradable, all things are actually degradable, it just takes time.
- Breaks down through CHEMICAL REACTION
- Could break down into MICRO-PLASTICS, which can end up in the food chain.

PLASTIC

- Contaminates the environment with MICRO-PLASTICS
- · Cannot dissolve in nature

HOW TO REDUCE YOUR PLASTIC TAX

We will reduce your carbon footprint and the amount that is to be paid on the single use plastic tax by employing PCW-V3V technology.

PCW-V3V delivers the same mechanical properties as virgin grade PE because of the range in variety of recycled plastics used. Non-shrink films start at 30% but can contain up to 100% PCW polymers, and our shrink film can include an impressive 50% of PCW polymers without losing any of the functionality you would expect – whilst all still remaining 100% recyclable!

Recyclable Plastic: Everything You Need to Know

Plastic Categories



Plastic Recycling Process



Call us to discuss your requirements



The differences explained;-

1. Polyolefin Shrink Film:

- Polyolefin shrink film is made from polyethylene, a type of plastic known for its clarity, strength, and flexibility.
- It offers high clarity, making it suitable for retail packaging where product visibility is important.
- Polyolefin shrink film has excellent seal strength and shrink properties, providing a tight and secure wrap around products. Its approved for direct contact with food, making it suitable for packaging food items.

2. PVC Shrink Film:

- PVC shrink film is made from polyvinyl chloride, a thermoplastic material known for its clarity, toughness, and versatility.
- It offers good clarity and glossiness, making it suitable for retail packaging and promotional labelling.
- PVC shrink film shrinks at a lower temperature compared to polyolefin, which can be advantageous for heat-sensitive products.
- However, PVC shrink film may not be suitable for direct contact with food due to potential migration of
 plasticizers and environmental concerns associated with PVC.

3. Overwrapping Films:

- Overwrapping films are typically made from various materials such as polypropylene, cellophane, or BOPP (Biaxially Oriented Polypropylene).
- They are used for wrapping individual products or bundles, providing a protective layer and enhancing the appearance of the package.
- Overwrapping films often have good stiffness and tear resistance, providing added protection during handling and transportation.
- They are commonly used for wrapping products like boxes, CDs, DVDs, and cosmetics.

Comparing Packaging Films: Polyolefin, PVC Shrink, and Overwrapping

SHRINK FILMS

POLYOLEFIN SHRINK FILM

For packaging, labelling, and promotions. Prized for its excellent clarity, high-speed performance, and exceptional tensile strength and tear resistance.

For packaging various items such as food, beverages, electronics, cosmetics, and for bundling applications. Polyolefin shrink film also offers very strong static seals, ensuring the security of packaged goods. Available in thicknesses ranging from 12.5 to 25 microns.



OVERWRAPPING FILM

For wrapping various products, including food items, confectionery, CDs, DVDs, and gift baskets. Overwrapping film ensures the integrity of the packaged goods while providing an attractive presentation. Reduces odour loss.

Conforms to any product shape. Available with or without perforations. Standard or double-layer



PVC SHRINK FILM

For packaging, labelling, and promotions due to its excellent protective properties and versatility. Employed for packaging food, beverages, electronics, cosmetics, and bundling items. Additionally, it's used for tamperevident seals, labelling, securing loads, and in DIY projects.





A COMPARISON OF THE DIFFERENT PROPERTIES OF THE BASE MATERIALS

1. Polypropylene (PP):

- PST tapes made from polypropylene are lightweight and economical.
- They offer good tensile strength and resistance to tearing, making them suitable for general packaging applications.

2. Polyvinyl Chloride (PVC):

- PVC PST tapes provide excellent clarity and resistance to moisture, chemicals, and UV light.
- They are often used for sealing cartons containing items that need protection against exposure to environmental factors.

3. Polyethylene (PE):

- Polyethylene PST tapes offer flexibility and conformability, making them suitable for sealing irregular surfaces or packages with rounded edges.
- They also provide good moisture resistance and are commonly used in food packaging applications.

4. Polyester (PET):

- PST tapes made from polyester offer high tensile strength and dimensional stability.
- They are suitable for applications requiring durability and resistance to high temperatures.



PLASTIC CARTON SEALING TAPES

Туре	Application Method	Available Sizes (Metric Units)	Description
Acrylic Tape Pressure Sensitive, General purpose and Low noise tape available	Hand or Machine	48mm x 66m / 150m 48mm x 990m	Acrylic adhesive tapes offer good adhesion to various surfaces and resist aging, UV light, and temperature changes. They are suitable for general-purpose sealing applications. The base material is available as PP or PET
Hot Melt Tape Rubber adhesive, high tack, low noise	Hand or Machine	48mm x 66m / 150m 48mm x 990m	Hot melt adhesive tapes are ideal for use in cold or freezing temperatures. They provide strong bonding after application and are suitable for packaging exposed to temperature extremes. The base material is available as PP or PET. The adhesive is a composition of polymers, resins and additives.
Solvent PVC tape low noise high tack	Hand or Machine	48mm x 66m / 150m 48mm x 990m	Solvent tapes are suitable for demanding packaging environments where a secure and long-lasting seal is required. It adheres well to a variety of surfaces and maintains its integrity even under challenging conditions such as extreme temperatures or exposure to harsh chemicals.
Polypropylene tape	Hand or Machine	48mm x 66m / 150m 48mm x 990m	It is lightweight, flexible, and cost-effective. Polypropylene tape typically comes in clear or brown (tan) colours and is suitable for sealing lightweight to medium-weight cartons.

Regular print and colours are available from stock All the tapes above can be printed or flood coloured to order.







VARIETIES OF KRAFT PAPER TAPE

1. Standard Kraft Paper Tape:

This is the basic type of kraft paper tape, typically made from unbleached kraft paper with a natural brown colour. It offers good adhesion and tear resistance, making it suitable for general packaging applications.

2. Reinforced Kraft Paper Tape:

Reinforced kraft paper tape features additional strength and durability due to the inclusion of fiberglass or other reinforcing materials. It provides extra security for heavy or bulky packages and is resistant to tearing and punctures.

3. Water-Activated Kraft Paper Tape:

Also known as gummed paper tape, water-activated kraft paper tape requires moistening to activate the adhesive. It forms a strong bond with the carton or box when applied and offers excellent tamper-evident properties. This type of tape is commonly used in applications where security and sealing strength are paramount.

4. Printed Kraft Paper Tape:

Printed kraft paper tape can be customized with logos, branding, or messages, adding a personalized touch to packages. It serves both functional and promotional purposes, providing secure sealing while also enhancing brand visibility.

5. Coloured Kraft Paper Tape:

While traditional kraft paper tape is brown, coloured variations are also available to cater to different aesthetic preferences or branding requirements. These tapes are dyed during the manufacturing process and come in various colours such as white, black, or custom hues.

6. Machine Grade Kraft Paper Tape:

Machine grade kraft paper tape is designed for use with packaging machinery, allowing for automated application and high-speed packaging operations. It comes in large rolls compatible with tape dispensing machines and offers consistent performance and efficiency.



KRAFT PAPER TAPE

Kraft paper tape is a type of packaging tape made from kraft paper, a strong, durable, and recyclable material derived from wood pulp. It is commonly used for sealing packages, cartons, and boxes for shipping and storage purposes.

Kraft paper tape typically comes in rolls with a pressure-sensitive adhesive backing, allowing it to easily adhere to various surfaces, including cardboard, paperboard, and corrugated fibreboard. Unlike traditional plastic packaging tapes, kraft paper tape is biodegradable and

environmentally friendly, making it a popular choice for eco-conscious businesses and individuals.

Advantages over Plastic Packaging Tape

Aspect	Kraft Paper Tape	Plastic Packaging Tape
Environmental Impact	Biodegradable and recyclable material	Typically made from non-biodegradable plastic
Sustainability	Renewable resource (wood pulp)	Derived from non-renewable fossil fuels
Eco-Friendliness	Minimal ecological footprint	Contributes to plastic pollution
Decomposition	Breaks down naturally over time	Persists in the environment for centuries
Adhesive Properties	Strong adhesion to various surfaces	Similar adhesion properties
Compatibility	Suitable for most packaging materials	May not adhere well to certain surfaces
Ease of Use	Can be torn by hand, no need for tools	Requires a dispenser or scissors for cutting
Aesthetics	Natural, rustic appearance	Glossy, plastic appearance
Recyclability	Can be recycled with paper products	Often not recyclable due to mixed material composition

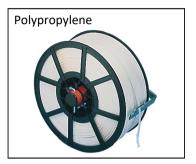
Glass fibre Reinforced







Strapping materials



For light to medium applications.





For heavy duty loads and possible alternative to steel.





For very heavy or sharp edged loads.



Watch Video - https://focuspackaging.co.uk/strapping-machines-

FLEXIBLE PACKAGING

Eco Friendly Films for food packaging

Nature flex

Polypropylene Film (OPP)

Coated Films

Biodegradable Films

Styles

Blocked bottom

Re-sealable.











FORMED TAMPER EVIDENT SEALS AND FLAT SEALS FOR SECURITY OR BANDING OF PRODUCTS TOGETHER

3

Other materials are PVC - PET - OPS

Perforated for easy tear

Shrink methods are hot air or steam

Print processes available are Gravure - CI Flexo - UV Flexo







Biodegradable tamper evident seals made from extruded cellulose that originates from wood pulp.

Once discarded and buried it disintegrates in under 2 months.

Short run Cushion Packaging and Cartons

We shall help you design your packaging free of charge, if the finished pack consists of several items ie outer carton cushioning and solid board box we are able to collate these and deliver them as a JIT service.

Short run carton and cusion packaging can start from quantities of just only 5 units Protective packaging can be supplied with a range of customised fitments in PE* Ethafoam * Polystyrene * corrugated fittings.

Design and advisory service

We design your packaging to ensure that your products arrive in perfect condition for your customer.

The problem with transporting a replica rifle for battle reenactments

Problem: 1 gun being damaged while being transported.







When the gun was dropped most of the force was exerted on the nozzle which damage the packaging and in some cases the nozzle too.

This is the foam retrieved from the nozzle of the gun where it guillotined its way through the protective foam.

Focus Packaging's solution



Four different foams were used to protect the nozzle in a cost effective method.

https://focuspackaging.co.uk/



ALTERNATIVE, GREENER MATERIALS SUPPLIED

Materials supplied

Machine Pallet stretch wrap Nano machine stretch film, 10-14 micron 100% plastic but super high strength and stretch reduces amount of film consumed.

15 micron+ contains 30% PCR (tax avoidable) Power stretch with 30% PCR will stretch to 300 % + It reduces amount of film required to wrap a pallet. The higher the film is stretched , the less plastic is used.

Pre stretched and Nano machine 100% plastic.

Hand applied pallet stretch wrap

Standard hand wrap with 30% PCR Nano Pre stretched. 100% plastic 6-9 micron

Shrink films

LDPE - Polyolefin - PVC - Bio film

Fold over, wrapping films OPP - BOPP

Polythene & your 2 Nature Crop alternative options

1/Bio film from Sugar Cane. 2 / Compostable Films made from Potato & Corn Starch are Bio degradable 3/ PCW - VRV film. Reduces virgin plastic content from 30% & upwards. It also avoids the single use plastic tax Bags / gusseted sacks / rolls / sheets / collation & shrink film Food grade polythene. BRC certified

Printing 8 colours, both sides & in the gussets

Flexible packaaina

Nature ex & biodegradable films Sealable pouches & bags Food grades available

Carton sealing tapes

PVC & Polypropylene – 30% PCR to avoid plastic tax
Kraft paper tapes - stronger seal with longer life (water dispenser required)
Self adhesive Kraft paper tapes (water dispenser <u>not</u> required)
Coloured and printing available

Banding filmsPlastic - Paper

Strapping

PP & PE

Cartons

Corrugated and solid board

Protective packaging

Cut foam / air bags / Recycled void fill

Tamper evident seals

Biodegradable film Formed to shape or flat

Free consultancy for:- Robotics | Automation | Packing Machines | Consumables | Packaging design

We will help you to reduce your carbon footprint and waste returns by using greener materials and packing machines.

Reduce your pallet stretch film consumption and <u>costs</u>. Avoid the plastic tax on tapes and polythene.

We offer a full range of Turn Table pallet wrappers to Automatic Robots and Over Arm Wrappers

- Stretching of the film can vary from 20% to 500% dependent on the film and wrapper.
- Turntables range from 1650mm to 2400mm diameter
- · Mast heights reach up to 3.1 meters
- For easy access to the turntable, this can be sunk into the floor or via a very low profile ramp.
- The film can be formed into a rope for extra ventilation or support, operated from the control panel.
- Weighing scales with printers can be incorporated into the turntable wrappers
- Auto-film apply and auto-cut is available on some models.
- · Robots mitigate the need for large turntables and can travel to where the load is
- Over Arm Wrappers are good for light or delicate loads.













Check your wrapping cost before you spend your money. CALL US NOW!





Visit our website - https://www.palletwrapperuk.co.uk

THE 3 DIFFERENT AUTOMATIC INLINE STRETCH WRAPPING SYSTEMS

The Turntable



Watch video - https://vimeo.com/364644984/c7f434ce12



Ring Wrapper
Watch video
https://vimeo.com/364647743/35e62b751a



Over arm Wrapper
Watch video
https://vimeo.com/271851272

Turntable pallet wrapping can now be done without an operator.

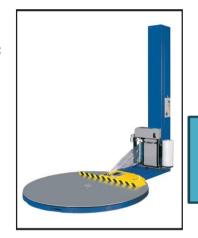
This state-of-the-art pallet wrapper that can be started by another robot i.e a driver-less forklift truck:

- Applies the film automatically
- Wraps the load
- Will cut the film when the cycle is finished
- Then secures the loose tail to the load.

Along with an infrared/radio remote control, these four systems allow the machine to be operator free from all manual work, increasing safety, improving packaging quality and saving time. Its cycle can be started by a driver-less forklift truck which will then collect the pallet and take it to the loading bay when the wrapping cycle is completed. This pallet wrapper can be fitted with weigh scales and a printer if required.

Specification

- Automatic cycle for film application, pallet wrapping, cold cutting and securing the tail of the film to the load.
- Hot air device to blow the film tail and weld it to the load, eliminating the flapping tail.
- Loading plate 2000 mm (because of the film applicator unit)
- Maximum height of pallet: 2200 mm
- Maximum size of the pallet: 800x1200 mm
- Maximum loading weight: 2000 kg





https://focuspackaging.co.uk/

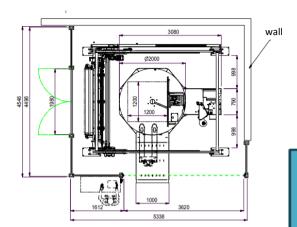


Static Top Sheet Dispenser

Enhance the functionality of your turntable pallet wrapper with a seamlessly integrated static top sheet dispenser. This innovative device streamlines operations by eliminating the need for manual retrieval and placement of the top sheet. By automating the process, operators are relieved from the physical exertion of handling, collecting and positioning the sheet over the pallet load.

Operational control lies within the pallet wrapper, allowing for precise coordination of the dispenser's stroke to apply the top sheet efficiently prior to wrapping the load. This not only enhances productivity but also ensures consistent and secure coverage, minimising the risk of product damage or contamination during transit or storage.

In summary, the static top sheet dispenser offers unparalleled convenience, efficiency, and reliability, optimising the pallet wrapping process and empowering operators to focus on other critical tasks within the business. The net result is one person being removed from the pallet wrapping operation. This whole operation can now be controlled by the forklift driver.





Watch video - https://vimeo.com/528878076

ORBITAL WRAPPING

- NELEO semi-automatic orbital wrapper with
 reels designed to wrap any kind of long
 product. Ring I/D starts from 500mm up to
 50 meters
- **2. ATIS** automatic orbital wrapper with 2 reels designed to wrap any kind of product operator free. Ring I/D starts from 500mm up to 2.50 meters
- 3. ARTEMUS special orbital wrapper with 2 reels designed to wrap any kind of round or hollow product. Ring I/D 500/900 mm









Watch Video - https://vimeo.com/368574930/ccd71de28c

ORBITAL WRAPPING - ROTATING RING MACHINES FOR SPIRAL WRAPPING WITH STRETCH FILM

This selection of machines is designed to wrap any elongated profile made from a variety of materials including plastic, aluminum, copper and wood.

COMPACTA



The Compacta range is the entry level of orbital wrappers which will wrap products in stretch wrap. With the addition of supplementary holders bubble wrap or foam can be added for extra protection. see reverse Ring sizes 4, 6, 9 and 12.

ORBIT



The Orbit Range is where two technologies meet. The flexibility needed by high speed and high performance line machines becomes available on Entry Level horizontal machines to be added to work cells or integrated lines.

Ring sizes 4, 6, 9, 12 and 16.

SPIRO



Spiror machines are the top of the line in spiral stretch wrapping. This family of rotating ring automatic machines offers outstanding performances both in terms of product handling and durability.

Ring sizes 3, 4, 6, and 9

COMPACTA SPR



Designed to pack regular sized products without using a heat tunnel. It also eliminates the need for the use of loose fill. i.e Shredded paper and polystyrene chips. *Ring sizes 4 and 6*

Watch Video - https://focuspackaging.co.uk/strapping-machines-and-tools/

How to apply protective packaging (cold method) to your product for an ORBITAL WRAPPING operation.

Pluripac M (manual)

The Pluripac M is a manually operated machine for applying bubble wrap, foam or polyethene reels that will enclose your product via a cold wrapping device (i.e. it does not use heat to shrink). The Pluripac M is compatible with new or already installed Compacta manual horizontal stretch wrapping machines.

COMPATIBLE WITH MANUAL HORIZONTAL WRAPPING MACHINES COMPACTA

Pluripac M

Pluripac (automatic)

This is a **semi and automatic** bubble wrap, foam or polyethylene reels cold packaging device. Compatible with Orbit and Spiror automatic horizontal wrapping machines.

Low energy consumption. Easy to use.



Pluripac

Watch Video - https://vimeo.com/368574930/ccd71de28c

We have the very best built and the best technical range of taping machines at the best prices.

The range consists of side drive and top drive tapers to accommodate different types of cartons. There are fixed height top tapers or self-adjusting height tapers if there is a selection of cartons on the conveyor simultaneously. The top end taper in this range of machines will tape the base and close the top flaps at the same time however it does need filling beforehand. There are stainless steel versions of these machines

The complete range of taping machines consists of the following:

- Semi-automatic fixed format boxes taping machines
- semi-automatic random size boxes taping machines
- automatic fixed format box taping machines

A selection of the many carton tapers available



Semi-automatic low headed taper



Semi-automatic manual adjustment



Semi/manual automatic stainless steel



Belt feeder



Automatic self- adjusting taper



Automatic Stainless steel taper

Visit our website for more information and videos

https://focuspackaging.co.uk/carton-taping/

Case Erecting

Manually erecting and closing the flaps on a carton is a laborious and slow process making it quite an expensive operation. To speed this manual process up we have the **Starbox** which is pneumatically driven and will close all 4 base flaps when placing the erected carton on top it.

The carton can now be slid over a base taping unit on its way to be packed. Once packed it can be moved to go under a top taping unit to be sealed and dispatched.

For larger runs of assembling cartons we have the automatic **Superbox** which will erect cartons from the flat form, close the base flaps, tape these and then pass it onto the conveyor belt for filling.

Available in 3 sizes 544, 545 and 645.

Starbox



Superbox

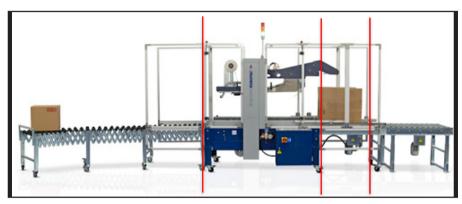


Click the links below to watch videos

Starbox - https://vimeo.com/437202541 Superbox - https://vimeo.com/437206511

Fast Taping Line with self adjusting automatic height detector. Up to 72 cartons per hour.

Side belt driven taping machine for random size boxes with automatic top flap closing and top & bottom taping.



According to sight requirement

Automatic height adjusting, flap closing, taping and sealing unit Self centring unit Powered loading conveyor * optional

You can have this machine for £638.20 over 36 months. For an 8 hour day = £3.99 per hour For a 16 hour day = £1.99 per hour

12 months warranty
Service contract.

This machine can also be presented with cartons that have already been closed and sealed at the base.

Automatic Taping Line - https://vimeo.com/519231171

WATER - ACTIVATED ELECTRONIC AND MANUAL TAPE DISPENSERS FOR KRAFT PAPER TAPE



- Superior Closure & longer sealed life
- Tamper Evident
- Improved Presentation

- 100% recyclable
- Resistant to temperature change
- Cost effective and increased productivity.

KRAFT PAPER TAPE	DISADVANTAGES OF PLASTIC TAPE
Meter for meter you use less	Duplicate layers often required due
Kraft paper tape. A single layer	to the low tack of synthetic glue.
application is only required.	, ,
Natural glue welds into the fibre	Synthetic glue is affected by dust and
of the carton.	particles on the box & temperature.
Kraft is recyclable with carton.	Tape must be separated for recycling.
A better closing seal equates to	The tape can be separated from the
better product security because	carton during transit, allowing for
the seal cannot be broken.	products to be pilfered.
Variations in temperature and	Plastic tape is affected by
humidity will not affect the	temperature and humidity which
superior bond making it ideal for	compromises its bond, making it
long term storage.	unsuitable for long term storage.



Watch video https://vimeo.com/364653572/b33aa17ea1

Manually operated version - Watch video - https://vimeo.com/382598700/4e68866801

CHAMBER MACHINES, L SEALERS AND SHRINK TUNNELS - For presentation/display packaging (Polyolefin or PVC)

Chamber Machines



Combination Unit (Manual)



Automatic L Sealer & Tunnel



Side Sealer and Shrink Tunnel



MES 455 - 680

Chamber machine available in two sizes MES 455 - 500 x 400 x 250

MFS 680 - 750 x 600 x 250 Production rate: 480 per hour

Film Thickness: 8 - 80 micron MES 455 230V 50Hz Single Phz

MES 680 400V 50Hz 3 Phz +N

MES 455MT

L Sealer and Shrink Tunnel Manual Production rate: 720 per hour Film Thickness: Polyolefin 8-80 micron

Sealing Sizes 500 x 350 x 150 400V 50Hz 3 Phz MES 700-80

400V 50H7 3 Phz +N

Automatic L Sealer with shrink tunnel Production rate: max 2400 per hour Sealing Dimensions. L Sealer 40-250 L x 40-300 W x 5-80 H 250V 50Hz 13Amps Sgl Phz Shrink Tunnel, Chamber size 400mm x 200mm x 800mm

MES30A

Side sealer with heat shrink tunnel continuous motion.

End seal bar 380mm (530 or 680mm) Product Size (mm)

80-700 L x 80-230 W x 10-180 H Two other sizes available on request. Shrink Tunnel - 5 sizes available on request.

Machines suit able for processing polyolefin, polypropylene and PVC. (not suitable for LDPE) Low cost entry level machines | High speed continuous motion machines

Best utilisation of film | Low energy efficient heat tunnels

Single or multi-pack wrapping | Upstream or downstream integration

Robust products, well built with world class engineering | Suitable feed conveyors available

Watch video - https://focuspackaging.co.uk/l-sealers-and-shrink-tunnels/

SHRINK TUNNELS, SLEEVE SEALER AND L SEALER - Collation, Transport, and Protection (for LDPE/Polythene)

5040 M or A



Entry level Automatic or Manual L Sealer and tunnel available in two sizes and two styles M and A

Production rate: M: 600 | A: 900 Pack Weight: 8Kg Pack Sizes

W: 50 – 350 – 450 H: 10 – 190 – 240 L: 50 – 450 - 550

5845 AVH



High productivity L sealer with up to 50 units/minute. Industry 4.0 capability

Pack Weight: 12kg

Polythene Thickness 25-40 micron

Pack Sizes W: 30 – 380

H: 20 – 120 - 180

L: 100 - 550

Tunnel and Sleeve Wrapper



Full inline automatic or 90 degree side feed for semi-automatic working available in three sealing sizes.

Sealing Sizes

500x400x220 | 700x600x380 | 900x800x380

Production rate 720 units per hour **Film Thickness** 20-100 micron

Shrink Tunnels suitable for processing LDPE/Polythene to 35 micron thick

Low cost entry level machines | High speed continuous motion machines | L Sealer/Sleeve Sealer

Good utilisation of film | Low energy efficient heat tunnels

Single or multi-pack wrapping | Upstream or downstream integration | Industry 4.0 capability

Robust products, well built with world class engineering | Suitable feed conveyors available | Good Guarantees

Watch video - https://focuspackaging.co.uk/shrink-tunnels-collation-and-protection/

Discover the versatility of our state-of-the-art strapping machines, designed to streamline your packaging experience. Our machines are designed to work with polypropylene (PP strapping), polyester (PE strapping), and robust steel banding. Encompassing different industries with their various products..

Key Features:

- Materials: Polypropylene, Polyester. For steel sealing apply for details
- Types: Choose between Static or Hand-held machines with practical features
- Applications: Ideal for strapping cartons, sealing, and bundling items like newspapers
- Automation: Options include Semi-automatic or Stand-alone automatic for conveyor line use without human intervention

















Watch Video - https://focuspackaging.co.uk/strapping-machines-

Please turn over

A VERY FAST, COMPETITIVELY PRICED, ECONOMIC LABEL APPLICATOR WITH DIFFERENT TYPES OF PRINTERS

This is a versatile and adaptable labeller which automatically applies adhesive labels to containers & envelopes with a throughput of up to 4000 units per hour. It is can be used for at rectangular objects, apply labels on to vacuum filled pouches for food or coffee and non-food products. It can operate as a stand-alone table-top unit or be integrated into a production line.

Variety of Applications: done automatically

- Scratch Off labels for Lottery Tickets, Phone Cards and Gift Coupons.
- Pharmaceutical, Cosmetics, Beauty and Skin Care Products
- Vacuum Pouches for food or Coffee Products
- CD/DVD/Blu-ray sleeves and boxes
- To make this machine more versatile lnk jet printers or full colour printers can be added.
- Input feeder and collection trays can be designed to accommodate different products
- The machine can be made wider, longer and deeper to accomodate a product.





Watch video - https://focuspackaging.co.uk/label-applicator/

There are 3 types of printers available for this machine.

Thermal printer

Thermal printing produces the lowest cost of print, good for whole labels in black only. This is the most economical way to print a label.

Inkjet Printer

The Inkjet is suitable for over printing onto existing labels and can work with one, two or three print heads depending on the accuracy or surface area of print required.

Colour Printer

The Afinia is a versatile full colour inkjet printer. It is ideal for small quantity runs and high print detail. The change over process is fast, simple and easy.

Feeders

Both the input and output feeders can be customised to take a variety of products that may be required for printing on. The output tray can be custom designed to suit many filling requirements.





FOLD OVER WRAPPING TECHNOLOGY. Protects products on retail display & helps contain product aroma

Tabletop overwrapper



Entry level semi automatic fold over wrapper



Polypropylene, perforated and printed films

Watch video - https://vimeo.com/348699566 | Watch video - https://vimeo.com/363768440

WEIGHING - HORIZONTAL COMPACTING - BALER & BAGGING

The perfect compactor/baler for small waste bags
Pre compress waste to reduce the need for many larger skips Compact
waste and turn it into a value commodity for processors

Features

- Built to size
- Electrical weighing scale (optional)
- One button operation
- Easy bagging facility
- PLC control system
- Suitable for compacting a wide range of materials
 Sawdust, straw, paper, seeds/grain, textiles and similar loose materials and much more

Not suitable for wet products

20kg before



50cm after



16kg block



Watch Video - https://vimeo.com/393474364

Please turn over

Machine for the compression of packaging materials for recycling or disposal. * Not suitable for wet products







CONTROL PANEL WITH DISPLAY

- > Select bale diameter (small-medium-large)
- Select operating mode (manual mode-automatic mode)
- > Cut wrapping film (in manual mode only)
- > Machine start/stop
- > Signal lamp: "bale ejection flap opened"
- Reversing mode (run conveyor belt in reverse direction)
- > Open/close bale ejection flap

WHY RECYCLE?

SUSTAINABILITY
Recovery of

materials that otherwise would be thrown away.

CIRCULAR ECONOMY To regenerate and

reuse the same material.

SPACE SAVING

Compact waste material instead of leaving it lying around loose and in bulk.

USABILITY

Easy control panel with monitoring of the machine's capacity.

FEATURES		ReCYCLE
throughput	kg/h	up to 300
bale diameter	mm	up to 400 (adjustable)
bale length	mm	600
pressed density depending on baling material	kg/m³	250-400
catchment speed	m/s	0,36
power supply voltage	V	400 V ± 10% (3 Ph + N + PE) 50 Hz
binding agent film	μm	23
film reel diameter	mm	250
film reel width	mm	500-600
binding and bale ejection		fully automatic
manual reverse belt conveyor		manual
indicating of bale diameter		LC display
filling level indication		acoustic + optical

Watch Video - https://vimeo.com/524386120

Industrial Scales, Calibration | Maintenance | Repairs | Hire Service, throughout the UK

Our experienced and trained engineers with decades of experience in the industry have the knowledge and experience to offer your organisation the very best solution for its industrial weighing requirements. We will supply the appropriate maintenance & traceable certificate for the calibration of scales or load cells in any industrial sector. We also distribute and install top leading brands of weighing equipment.















Oil & Gas - Power & Energy - Waste Management - Manufacturing - Food & Drink - Warehouse & Distribution

We maintain pallet wrappers



Dirt underneath the table can lead to:

- 1. The chain stiffening and coming off the retaining cogs
- 2. The drive motor burning out due to a stiffened chain because the motor has to work harder.
- 3. The drive shaft breaking because the motor has to work harder to turn the turntable.
- 4. Casters can be damaged or breakaway and interfere with the rotation of the turntable.

A badly maintained stretching unit will lead to:

- 1. Gradually increasing the consumption of film (practically impossible to detect)
- 2. Loss of load retention properties on the film on the pallet may cause the loss of load during transit.

Damaged rollers will lead to:

1. Use of thicker film by your staff to overcome film breakages which will dramatically increase your wrapping costs. I.e. 15 micron to 23 micron film is a 50% increase in material consumption

Have you ever experienced a breakdown then waited days or weeks for the engineer to arrive only to wait even longer for the spare parts to turn up. Then another long wait for the engineer to arrive.

A planned maintenance program will practically reduce this unnecessary and unforeseen cost and loss of production.

We offer, you chose

- 1. Emergency call outs (normal or priority response times available)
- 2. Yearly planned maintenance visits
- 3. Our Elite and Assured Maintenance program offers two 6 monthly visits per year and 10% off any spare parts required to keep your machines running in first class condition.
- 4. We have engineers sited to cover the whole of England, Wales and Southern Scotland.

We maintain strapping and shrink tunnels

STRAPPING MACHINE MAINTENANCE

Regular maintenance of the following components will help ensure the reliability, longevity, and safety of the arch strapping machine with conveyors:

Conveyor Belts, Strapping Head, Strap Feed System, Tensioning Mechanism, Sealing Mechanism, Control Panel and Electrical Components, Safety Guards and Emergency Stop Mechanisms, Roller Tracks and Guides, Frame and Structure. Pneumatic System (if applicable), Lubrication Points



SHRINK TUNNEL MAINTENANCE

This comprehensive list of components should be included in the maintenance program

Heating Elements, Sealing Bar or Blade, Conveyor System, Cooling System, Air Circulation System. Temperature Controls, Safety Features, Frame and Structure, Electrical Components Cutting Mechanism. Lubrication Points



STREAMLINE YOUR MANUAL PALLETISING OPERATION WITH A COBOT ON A MOBILE PALLETISING UNIT. IT CAN PICK & STACK WITHOUT AN OPERATOR

Advantages of a CoBot for pick & place applications

- Space-saving, lightweight design for exceptional packaging exibility
- Saves workers from repetitive work and heavy lifting and potential industrial claims
- Easily responds to peak seasons with 24/7 packaging and palletising operations
- Remove labour from a low value but essential task.
- Improve working conditions for employees.
- Reduce the size and cost of your workforce
- Fast and easy programming for redeployment or new stacking configurations
- Fast payback with none of the traditional robotic costs for programming, set-up, and dedicated work cells
- * Prices given are subject to Euro/Pound exchange rates

Estimated cost for entry level machine (subject to site survey)

Weekly finance cost over 3 years 388 .00

Total cost over 10 years 60528.00 (less tax relief)

Cost of labour over 10 years 236,600.00, (excluding in ation)

Estimated saving of £176,072.00 over 10 years

Estimated labour cost could look like this:

labour cost per week 400 + NIC = 455

Ignoring 3 weeks holiday sickness & coffee breaks

Watch video – https://focuspackaging.co.uk/robotic-palletising-arm-mounted-on-movable-base/

Please turn over

This is a pallet stacker capable of lifting between 10 and 16 kilo cartons or sacks and loading them on to pallets. The Collaborative Robot is mounted onto the console which can be moved either by pump truck or forklift truck. The base unit also acts as a pallet locator to help with their correct positioning. Vacuum suction heads are gauged dependent on the strength of suction required, self-generating vacuum or fed by an airline. It does not need to be caged off. Easy control panel to reprogram.

For loads over 16 to 30 kilos the CoBot Davit Lift is employed using a vacuum tube and vacuum pump to lift the load while the CoBot arm controls the operation of loading or unloading the pallet.

End of arm tool does not have to be vacuum based, it can also be mechanic/ electric/magnetic-anything you require to pick up the product.



Call us to discuss your palletising requirements



Benefits of collaborative automation

Improved working environment – Industry 4.0 improves working conditions and safety within your production process or plant. Automation will reduce health and safety risks, eliminate manual handling and reduce the risk of repetitive strain injury.

Increased competitiveness, sales and profit - Automation enables you to become more competitive. As the production process becomes more automated, human content is reduced, product quality improves, rejects reduce or stop, and the cost per part goes down due to increased production speeds.

No labour crisis - Finding labour for mundane, repetitive tasks is becoming more complicated and is likely to become more difficult. Unemployment in the UK is currently at the lowest it's lowest ever been since July 1975, many factories are struggling to find factory workers, especially for heavy manual, repetitive work. Automation can eliminate the need for staff to perform these types of tasks.

Increased production capacity - With the benefits of automation installed, your production process has become more streamlined and efficient with lower running costs and faster production speeds and better quality. Automation increases your production capacity as machines can be set to work 24/7 unmanned. Automated machines do not have breaks, sick leave or holidays, if they are only running during regular shift hours, this alone can often lead to a production increase of 140% plus. Automated machinery can also run faster and produce better-made products with fewer defects than a manual production line. It is these collective features that will expand your factories production capacity.

Consistency & compliance - Automated manufacturing is more consistent and accurate in production quality. To win in the market, your product quality must be better than your competitors and remain there. The only way to achieve this is with automation. During the production process or at the end of it, automated inspection systems can be installed, using sensors and vision systems to check products for defects and non-compliance. This enables faulty products to be rejected or even not made in the first case, thereby eliminating costly product recalls or free replacements.

After employing automation, the benefits gained often recover the cost of the installation within months.

COLLABORATIVE ROBOTS (known as COBOTS)

We can automate almost anything.

Reduces labour costs per unit of production

Guaranteed levels of output. No coffee lunch tea breaks holiday or sickness

PAYLOADS: 3kg | 5kg | 10kg | 16kg
 REACH: 500mm | 850mm | 1300mm | 900mm

• Applications. In line, production, assembly | EOL heavier items, lift & palletise

- 1. Can work safely alongside operatives without guarding or work by itself unattended
- 2. Robust and high quality construction. Easy to program
- 3. The compact and highly exible arm makes it ideal for applications where access is restricted i.e. machine tending. It has +/- 360 degrees rotation on all axes.



Attachments for most industries

Glue dispensing & welding. Injection moulding. Screw driving. uality inspection. Laboratory analysis. Picking & Palletising. Machine tending. Industrial assembly. Pick & place. + Much more

* Prices given are subject to Euro/Pound exchange rates

Estimated cost of mid-range CoBot with working head (subject to site survey)

Weekly finance cost over 3 years 207.00

Total cost over 10 years 32,292.00 (less tax relief)

Cost of labour over 10 years 236,600.00, (excluding in ation)

Estimated saving of £204,308.00 over 10 years (if it replaces an operative)

Estimated labour cost could look like this:

labour cost per week 400 + NIC = 455 Ignoring 3 weeks holiday sickness & coffee breaks

Watch video - https://vimeo.com/366254089/b628984d32

Please turn over

- 1. We can automate almost anything.
- 2. Consistently higher levels of output with next to zero scrap/waste.
- 3. Ideal for short runs because of very fast programming times.
- 4. Lower your production costs while increasing productivity at the same time.
- 5. Small footprint, easy to move to a different workstation.
- 6. Fast payback (ROI)



Machine tending

Watch video - https://vimeo.com/434045823

A selection of the many attachments available



Gripper



Suction pads



Screwdriver



Buffing/ Polishing



Soldering



Camera for recording. and counting.

Visit our website for more information and links to case studies

https://focuspackaging.co.uk/collaborative-robots-cobots/

Benefits of the Autonomous Collaborative Box Frector

- Low maintenance compared to traditional box erectors that are very complicated
- Smaller footprint compared to traditional box erectors
- The robot can operate with no safety fencing, working with humans
- Boxes are always opened perfectly with fast cycles
- Capable of erecting all box sizes
- Increases productivity
- The speed of delivery is variable, at high speeds it will be necessary to put guarding around it.
- Reduces staff hours and repetitive strain on employees



Please turn over

Use the link to watch a short video showing how a Cobot picks up a case at from the dispenser, opens and positions it so the bottom aps are ready for sealing, and passes them over a pressure-sensitive tape sealing head.

Watch video - https://focuspackaging.co.uk/autonomous-collaborative-case-erector

The opening of corrugated cases is a labour intensive low value and long winded expensive task. An estimated cost could look like this, labour/week 400 + NIC = 455 = an hourly rate of 11.38 ignoring 3 weeks holiday sickness & coffee breaks

- 1/ **Opening by hand** is very slow and inefficient, with the surrounding area being taken up by opened cases which then, have to be transported, by hand to their point of need when required.
- 2/ An alternative, is the **manual opening with a semi-automatic flap closer** and a small conveyor and base taping unit. Advantage, far faster than by the hand opening only, cartons on demand, frees up oor space. May open up other cost savings because of the conveyor belt.
- 3/ Then there is the **fully automatic case opener**, its sophisticated, its expensive with a large foot –print. It needs to be opening quite a lot of cartons to make it cost effective. It will also require a conveyor to spirit the cases away. Advantage no labour required.
- 4/ The Alpha CoBot Case Erecting System is the forth way forward, it does not require labour. Each Alpha CoBot Case Erecting System is designed to accommodate the size of the carton and to fit it in to the existing packing area. It is built by Focus Packaging. Scope: It will supply the correct number of cartons at the required rate. It will open the case, erect it, close the base aps and tape them together and place the case where it is required for filling. Advantages, No labour involved, small foot print, no maintenance. When finished, the CoBot arm part, can be used elsewhere if required, for a different operation. Takes only minutes to reprogram.

* Prices given are subject to Euro/Pound exchange rates

Estimated cost for entry level machine (subject to site survey)
Weekly finance cost over 3 years 398.00

Total cost over 10 years 62,088.00 (less tax relief)

Cost of labour over 10 years 236,600.00, (excluding in ation)

Estimated saving of £174,512.00 over 10 years

Estimated labour cost could look like this: labour cost per week 400 + NIC = 455 Ignoring 3 weeks holiday sickness & coffee breaks

MiR range carrying up to 1000 kgs load, INTERNAL PALLET TRANSPORTER AND TRACTOR

Automating of repetitive internal logistics and material handling frees up labour.

Minimise the use and risks of fork lift trucks.

- Optimises your internal transportation of goods and pallets to allow employees to focus on higher value activities. Available in four sizes.
- Efficient transportation of payloads up to 1000 kgs with high speed and safety.
- Manoeuvres safely and efficiently around people and obstacles in all dynamic environments.
- Requires no changes to existing layout facilities.
- Extremely exible and can be redeployed for different tasks with customised top modules.
- User-friendly interface that can be programmed without prior experience.
- MiR 100 and 200 are clean room CE certified.
 MiR 200 also ESD certified.





Watch video - https://focuspackaging.co.uk/mir-load-pallet-transporter

Please turn over

Advantages of MiR

Reduces Labour Costs.

- Labour not required
- Can work 24/7 independently in any conditions or environment.
- Operatives can be redeployed to higher value tasks.

Elimination of Human Error

- MiRs do not get annoyed, they do what they must do and that's all.
- Repetitive and annoying task no longer an issue.
- Eliminates, damage to the company's architecture and products.

Enhance workplace safety

- Movements are smooth, predictable, and controlled which reduces the risk of harming employees.
- Less accidents, lower absenteeism, lower insurance cost, lower total labour cost, etc.
- Fitted with safety devices that prevent collisions and cameras that allow it to see and avoid moving objects.

Improved inventory accuracy and traceability

- Does not make mistakes they locate a given material in a given position.
- Annual stock taking no longer necessary.
- They can meet the logistics and economic constraints of sensitive industries in the production processes ensuring real-time traceability at every stage of manufacturing.

DRIVERLESS GUIDED FORKLIFT TRUCK

- No driver = no accidents
- Increased productivity
- Improved working environment
- Short payback times
- Easy to integrate
- uick and easy installation

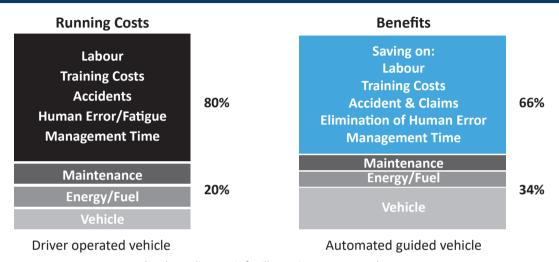
Automating your company's in-house transport by means of an automated guided vehicle from Global AGV you can **reduce the amount of manual processes**, **improve the working environment** and **increase your company's productivity.** An AGV contributes to reducing your costs as it runs with **low energy consumption**. Therefore, you will achieve substantial labour cost savings if you use an automated guided vehicle, which can run 24 hours a day.

The driverless truck navigates with a laser system following predetermined driving routes and emits laser beams that are re ected by the surroundings and received again, allowing the AGV to constantly manoeuvre around any obstacles.



Watch Video - https://focuspackaging.co.uk/driverless-guided-forklift-truck

Please turn over



The above diagram is for illustration purposes only

Dangers of driver operated fork lifts eliminated by the AGV

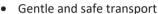
There are reputed to be over 8,000 reported accidents involving the use of forklift trucks in the UK each year and some of these result in fatalities. The majority of these accidents are caused by the lack of sufficient training of the operator, operator error, a lack of knowledge about the equipment and the working environment, bad truck maintenance, poor lighting conditions, inadequate gangways and unsuitable premises in which forklift trucks are used. In fact, slightly more pedestrians are injured as the result of a forklift accident than the operators themselves. No driver = no accidents.

Example - Subject to exchange rates and interest rates, to lease purchase this machine over 3 years is 699 euros

Laser Guided Vehicle (LGV) FOR INDOR PALLET TRANSPORTATION

This is an automatic laser guided vehicle with covering forks suitable for moving pallets within the factory. In low position, the forks cover the rear wheels just like an electrical pallet truck. **FEATURES**

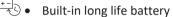




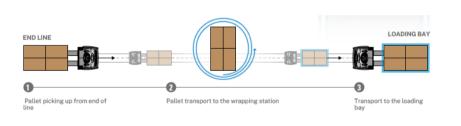


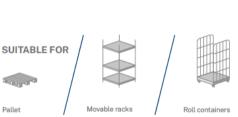






PRE PROGRAMMED Vehicle track-and-trace





PRODUCTIVITY





SUSTAINABILIV



FLEXIBILITY

Watch video - https://vimeo.com/558587306

Reduces Labour Costs.

- Labour not required
- Can work 24/7 independently in any conditions or environment.
- Operatives can be redeployed to higher value tasks.

Elimination of Human Error

- LGVs do not get annoyed, they do what they must do and that's all.
- Repetitive and annoying task no longer an issue.
- Eliminates, damage to the company's architecture and products.

Enhance workplace safety

- Movements are smooth, predictable, and controlled which reduces the risk of harming employees.
- Less accidents, lower absenteeism, lower insurance cost, lower total labour cost, etc.
- Fitted with safety devices that prevent collisions and cameras that allow it to see and avoid moving objects.

Improved inventory accuracy and traceability

- Does not make mistakes they locate a given material in a given position.
- Annual stock taking no longer necessary.
- They can meet the logistics and economic constraints of sensitive industries in the production processes ensuring real-time traceability at every stage of manufacturing.

WE DESIGN. BUILD AND INSTALL END OF LINE PACKING SOLUTIONS TO SUIT INDIVIDUAL NEEDS FOR SMEs.

It is in every company's best interest to get its product off the production lines quick as possible and through the factory door to the customer at the least possible cost. The area of focus is Erecting the carton, presenting it to be loaded, loading the carton, sealing the carton, loading it on to a pallet and presenting to the pallet wrapper for dispatching when wrapped.

To achieve this we will survey and provide all the advice and support needed to help you create your ideal end of line packing solution.

We will:

- Provide innovative and cost-effective solutions to manufacturing problems.
- Design, build, manufacture and install a bespoke handling systems which includes Cobots, end of arm tooling and vision systems.
- The vision system enables a robot to see and identify various objects and perform its function.

Renefits

- Automated functionality allows them to operate around the clock and on weekends as well as with hazardous materials and in challenging environments.
- Frees personnel to perform more important tasks.

Increases productivity and profitability while eliminating labour-intensive activities that might cause physical strain or potential injury to







https://vimeo.com/showcase/7991704



END OF LINE STACKING, TRANSPORTING AND WRAPPING OF CARTONS WITHOUT HUMAN INVOLVEMENT

Enhanced Safety

The key thing to mention here is that robots can perform tasks which would pose a danger to humans. This applies to tasks that use harmful chemicals or heavy machinery, capable of causing serious damage to human workers. It is not often realised that by automating repetitive tasks, robots can remove the threat of repetitive strain injury (also known as RPI or work-related upper limb disorder).

Faster Return on Investment

Collaborative robots cost much less than industrial robots and, in some cases, the payback period could be as short as half a year. Due to their highly-versatile nature and easily programmable setup, they can be quickly deployed in almost any application meaning you get the most value out of them in terms of usage and financial yield.

High Precision

Cobots are highly regarded for their precision and repeatability. Modern robots are capable of achieving placement errors as small as 0.03 mm, and when you consider how quickly these machines operate, the need for robotic process automation becomes apparent. It is not possible operatives to work consistently at high speed with this level of accuracy. Increased productivity with far fewer rejects and sales returns will increase profits. As cobots keep track of their productivity stock-taking can become a thing of the past.

There are many examples of how Cobots can increase productivity, One compelling case is that when fitted with a modern Vision Systems as an inspection tool, cobots are capable of identifying up to 100 products per second. A result of robots being extremely precise is that human error is reduced – meaning less waste is produced and more time is spent producing goods that pass quality inspections.



END OF LINE STACKING. TRANSPORTING AND WRAPPING OF CARTONS WITHOUT HUMAN INVOLVEMENT

Current features

Up till now the stacking of pallets, moving them and finally placing them onto a pallet wrapping machine, involved three men working independently. With the advent of industry 4.0, all of these functions can be connected, and the chain made to work autonomously.

New features

A CoBot stacker with a Driverless Fork Lift Truck and an Alpha 508 Super Plus, state of the art pallet wrapper, can communicate with each other. When linked together, they can remove cartons from the conveyor system, stack them on to a pallet. The loaded pallet is then collected by the driverless Forklift Truck, taken to a pallet wrapper, then starts the machine which then applies the film, cuts it, and adheres the loase end to the load wall. When the cycle is completed, the Driverless Forklift Truck will pick the load from the turntable and place it in the dispatch bay. Each machine's program is linked together to work in harmony, forming a completely automated and integrated chain. Capable of working 24/7



The CoBot stacker will unload the conveyor belt stack the cartons on to a pallet as programmed. It removes repetitive strain injury and the need for an operative.



With built-in sensors and full safety features, the Driverless Forklift Truck will collect a loaded pallet, deliver it to a pallet wrapper, start the pallet wrapper, when wrapped, it will collect the load it and deliver it on to the loading bay.



The Alpha 508 Super Plus is a state-of-the-art fully automatic pallet wrapper that applies the film, wraps the load, cuts the film and stick the tail to the side of the load. The cycle will be started by the driverless FLT. When wrapped the Driverless FLT collects the pallet and takes it to the loading bay.

https://vimeo.com/showcase/8014534

PALLET AND PACKING CONVEYOR SYSTEMS. We can automate your production line.

Features

- Power conveyors
- Motorised roller conveyor
- Gravity Rollers
- Flexible Conveyor
- Belt under roller conveyor
- Corner turn unit
- Lift gate section
- Switch junction
- Vertical & rotating blade stop
- Pallet Handling
- Turntable
- Up to 1500kgs



Watch Video - https://vimeo.com/367024937/fb86e451dd



SOME FUNDAMENTAL QUESTIONS ABOUT AUTOMATION

1. What is Artificial Intelligence (AI)?

Al refers to a computer's ability to perform tasks and make decisions that would historically require human intelligence.

2. What is Industry 4.0?

Industry 4.0 is the fourth industrial revolution. It is characterized by interconnectivity through the Internet of Things (IoT), access to real-time data, and cyber-physical systems. Industry 4.0 offers a comprehensive, interlinked approach to manufacturing that connects the physical with the digital for better collaboration and access across departments, partners, vendors, and processes.

3. What are the benefits of automation and Industry 4.0?

a. Improved working environment and safety	e. Increased production capacity with 24/7 operations
b. Reduces dependency on direct labour	f. Consistent compliance and quality control
c. Attracts and retains younger workforce, enables collaboration	g. Increased overall factory productivity and efficiency
d. Increased competitiveness, sales, and profits	

4. Is it expensive?

Internal Logistics Automation Our driverless guided forklifts (MIR, AGV/FLT) can automate in-house transport to reduce manual processes, improve the working environment, and increase productivity. They run 24/7 with low energy consumption, reducing labour costs. Equipped with cameras, computer vision, AI algorithms, sensors and lidar, they can safely navigate around obstacles to their required destinations.

5. Do I need training?

Cobots, MIRs & AGVs are so easy to program, that your factory personnel become the best programmers on the production floor.

Conclusion

The advantages of automation often outweigh the disadvantages, but each case needs careful consideration.

Not automating without assessing the benefits could mean missing out on significant advantages in productivity, quality, safety and competitiveness.







sheeting, bags and liners, layflat tubing 5 colour printing Stretch and shrink wrap LDPE, polyolefin and PVC

Dolays, pallet liners and shrink covers,











Design and sampling Regular, diecut and dividers 5 colour printing Stock holding Just in time deliveries

Pallet wrap







Hand and machine Cast and blown, over 500 stock lines Pre stretched, standard, power stretch, perforated, fibre type film **Printing**

Tapes







PVC and PP, plain and printed Kraft water activated tapes, reinforced and printed Electric water activated tape dispenser

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