

# Poly Global

• Engineering Excellence •



"Our mission is to manufacture market-leading moulded components and innovative engineering solutions that facilitate crucial applications in critical industries across the world."





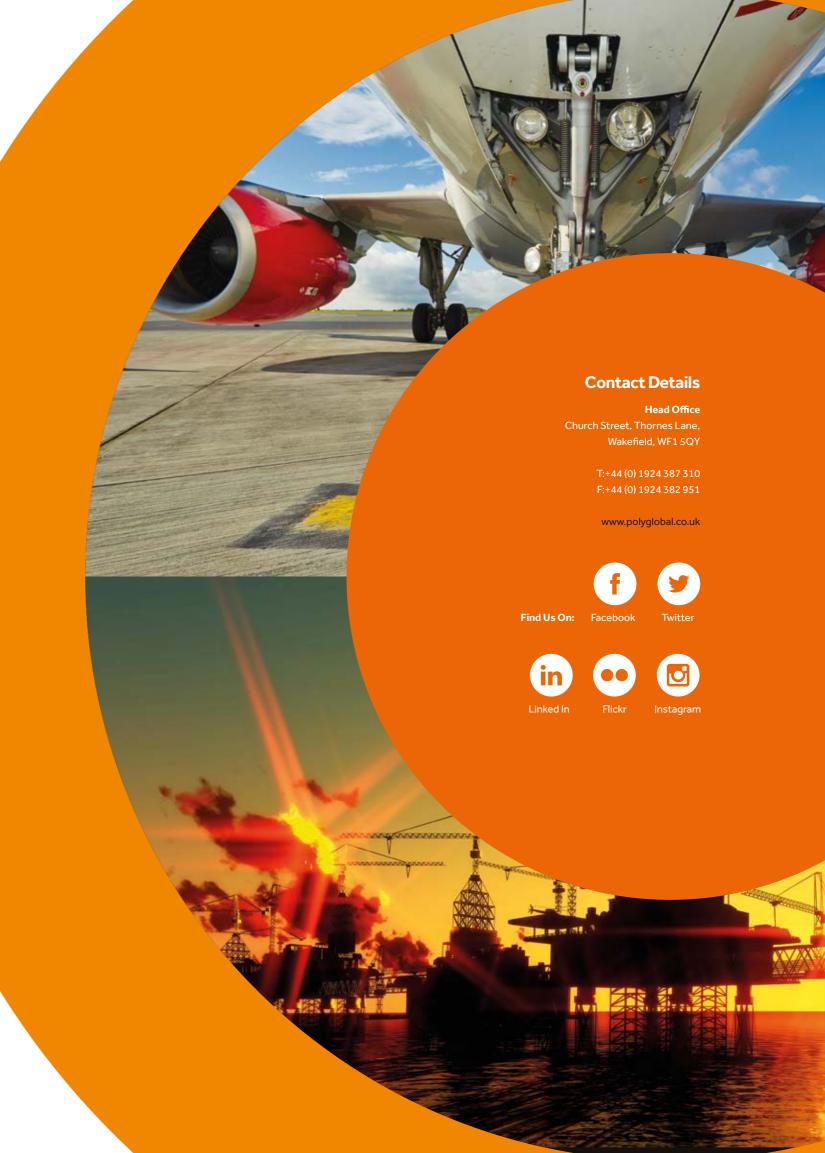




With over 30 years of experience and expertise, PolyGlobal has grown rapidly to ensure it can meet the demands of its markets. It continues to supply a number of industries and companies across the world.

Whilst PolyGlobal specialises in engineered plastic products, its in-house tooling and mould manufacturing processes support a vast range of cast and injection moulded solutions.

The skills and knowledge of the engineering and technical teams, ensures constant customer support from material choice through to product distribution.



Engineering Excellence



# **Tooling & Mould Manufacture**

PolyGlobal carries an extensive library of over 13 000 cast and injection moulds. These have been tailored to PolyGlobal's manufacturing techniques and produce moulded solutions that are optimised for their application and operating environment.



PolyGlobal has invested continuously in both its software and machining infrastructure to ensure it remains responsive to the diverse markets it supplies, ensuring full service solutions from mould design and manufacture to component production and delivery. Manufacturing tools in-house ensures they are tailored to the moulding material, specified to the moulding process and customised to meet the demands of the production volume.

announce of the second



and utilising the expertise of these finishing engineers, PolyGlobal can manufacture its solutions to tight tolerances and specifications.

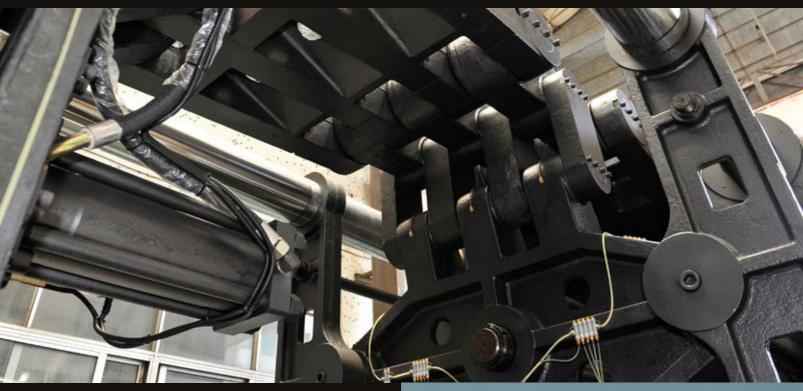


# **Injection Moulding**

PolyGlobal's injection moulding division allows it to create a vast range of solutions from disposables to precision components. It's injection moulded components are used heavily across all industrial sectors due to the diversity of the base materials it offers, including Polyurethane, Nylon, Polypropylene, TPE and TPR, and the variety in size and shape that can be moulded.

Injection moulding is extremely versatile, reliable and efficient. During the moulding process, moulds are subjected to extremely high pressure, facilitating much more detailed and complex parts then other moulding and manufacturing processes are capable of.





# **Cast Moulding**

Coupled with the expertise of PolyGlobal's tooling and finishing engineers, its cast moulding division offers substantial manufacturing capabilities that facilitate bespoke mouldings at increasingly higher weight and size specifications.

The experience and capabilities of this PolyGlobal department has led to a flexible and responsive approach, providing efficient prototyping and cost effective solutions for low-medium volume production.

PolyGobal's cast moulding offers enhanced levels of material bonding for integral industry applications such as roller and wheel coatings and continues to provide a critical service to the main industry sectors. It provides a range of material options that allows PolyGlobal to help identify the most suitable choice for the solution's operating environment, including ester based materials for heavy load bearing applications and ether based materials for water based environments.

'Material options include Polyurethane, Rubber, Nylon, Polypropylene, and TPE.'



'Manufacturing polyurethane rods, blocks and sheets in a range of shore hardness, colour and size.'

#### **Market Sectors**

As an experienced and innovative solution provider, PolyGlobal serves customers in the most critical industries across the world.

# Agricultural

Working alongside OEMs, PolyGlobal has developed designs and specifications to minimise crop damage, increase yield and drive superior performance. PolyGlobal's solutions are integral in a diverse market sector, providing products to a range of plant equipment including graders, handlers and root crop machinery.

- Star Wheels
- Destoning Wheels
- Screening Wheels
- Harvesting Wheels
- Spacers, Discs & Rings
- Trommel Drive Wheels
- Drive Rollers
- Drive Shoes & Discs
- Scrapers
- Bushes, Buffers & Nozzles

# Aerospace

PolyGlobal has provided baggage handling solutions to the leading airports in the world; working to facilitate and improve the flow of luggage that keeps our airports moving. Bespoke components, sheets and pads work to facilitate production systems and protect essential components and assemblies.

- Aircraft Chocks
- Material Handling Solutions

- Dunnage SolutionsTrunnion Rollers
- Conveyor Rollers & System Solutions
- Wear Pads
- Bump Stops
- Rubbing Strips



# Construction

PolyGlobal supplies drilling, mining, excavating and general construction customers with a varied range of products that are utilised in the toughest of environments and require extreme levels of abrasion resistance. The demand of this market has dictated the need to produce components that can withstand extreme physical displacement but still maintain high levels of integrity and accuracy.

- Impact Bars
- Cable Pulleys
- Diaphragms, Seals & Bellows
- Blast Guns & Nozzles
- Non Return Valves
- Shock Absorbers & Buffers
- Mining Components & Riblocks
- Protection Covers & Wear Pads
- Snow Plough & Road Roller Scraper Blades
- Protection Sheets



Damping solutions are essential to reduce track vibrations and PolyGlobal works alongside a number of leading clients to deliver a smooth and safe transport system across the UK. Worldwide, PolyGlobal continues Britain's heritage for railway engineering by manufacturing components that are used on both new build projects and maintenance contracts.

- Motion & Insulation Caps
- Retaining & Wedge Blocks
- Torque Bungs & Shock Absorbers
- Material Handling Solutions
- Packing Blocks & Dunnage Solutions
- Rollers & Roller Coverings
- Scrapers
- Sealing Solutions
- Bespoke Moulded Components
- Rods, Tubes & Blocks



#### Offshore & Marine

PolyGlobal's products are utilised across the world in both subsea and seabed applications. Fundamentally, PolyGlobal provides protection and handling solutions for pipes and cables to prevent damage from flex fatigue, abrasion and impact.

Onshore rollers and pipe handling products are also provided by PolyGlobal.

- Bend Restrictors
- Bend Stiffeners
- Cones, Jointing Pieces & Sleeves
- Bumpers, Shock Absorbers & Dock Gate Stops
- Pipe Clamps & Piggy Back Clamps
- Bullnose Coverings
- Chafe & Flange Protectors
- Material & Pipe Handling Solutions
- Rollers, Diablo Rollers, Sheave Wheel Coatings & Roller Coverings
- Scrapers

# Manufacturing

The vast and diverse manufacturing sector uses products from a range of solution groups. PolyGlobal's responsive lead times, for both seal and component production, are essential to ensure downtime is minimised. Flexible solutions are required to meet the varied operating environments and conditions that this sector produces, including FDA (food safe), oil or chemical resistance and enhanced load bearing materials.

- Soft Touch & Non Crush Wheels
- Ball Valves

- Feed Wheels & Rollers
- Material Handling Solutions
- Packing Blocks & Dunnage Solutions
- Hydraulic & Pneumatic Seals
- Plunger & Ram Seals
- Rollers & Roller Coverings
- Scrapers
- Rods, Tubes & Blocks



#### **Automotive**

The bespoke tooling, intricate moulding and closely controlled quality systems provided by PolyGlobal means it supplies a number of leading automotive companies with operational parts and factory-floor protection and handling solutions. Working alongside renowned distributors, PolyGlobal manufactures aftermarket parts and replacements such as shock absorbers and buffers.

- Shock Absorbing Bushes
- Snubbing Discs
- Damping Blocks
- Anti-Roll Bar & Mounting Bushes
- Wear Pads, Bump Stops & Rubbing Strips
- Exhaust Couplings
- Material Handling Solutions
- Dunnage Solutions
- Bellows & Sealing Solutions
- Bespoke Moulded Components

# Renewables

The global demand for renewable energy supplies continues to grow with fast paced technological developments helping to provide more efficient and effective results. The substantial investment in R&D within this field has necessitated PolyGlobal's development of antistatic and flame retardant material options that provide protection, damping and sealing solutions.

- Pole Covers
- Anti-vibration Buffers
- Bushes
- Washers & Drive Shaft Pads
- Material Handling Solutions
- Packing Blocks
- Metal Bonding & Coatings
- Sealing Solutions
- Internal Rollers





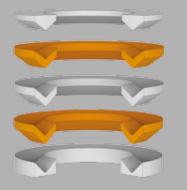
PolyGlobal's seals are an essential industry solution protecting integral machinery and equipment across the world's most critical sectors. Offering a range of profiles and sealing specifications including energised, twinset and cup seals, products for rod & piston applications and a selection of wiper options, PolyGlobal's specialist engineering division provides bespoke and standard seals from new and existing design

Whilst operating in environments of extreme temperature or pressure, PolyGlobal's hydraulic seals, scrapers and wipers work to inhibit leakage of fluid from the cylinder, prevent fluid flow across the cylinder head, and protect the cylinder from contamination of dirt and moisture. Its pneumati solutions provide advanced performance in dynamic, air-powered applications where high speeds, as well as reciprocating and rotary

PolyGlobal's materials have excellent wear and abrasion resistance due to their outstanding mechanical properties. They exhibit oil, chemical and hydraulic resistance to meet the demands of their working environments. The quality of these components is paramount to ensure that the reliability and lifespan of the products and technologies they are used in is maximised, downtime is minimised and performance is appared.

# Vee Pack Sets

From profile development to seal production, PolyGlobal offers advanced capabilities for this specialised sealing solution. Manufactured with various ring configurations and specifications, these solutions provide rod or piston sealing in medium to heavy duty applications.





## **Material Handling**

The movement of products, components, raw materials, equipment and baggage, is facilitated by PolyGlobal's material handling solutions. These solutions play an integral role on production lines and transport systems across the world by securing and optimising operations and delivering efficient performance.



# **Material Processing**

PolyGlobal's material processing solutions have provided advanced performance results in a number of applications across the world. These components and products are utilised across all industry sectors from agriculture to manufacturing by accelerating performance and working efficiently to prepare, refine and transform materials.





# Cord, Tube & Conveyor Belting

PolyGlobal offers a range of cord and tube, mainly serving the manufacturing, food and pharmaceutical industries.

The requirements of these industries means food approved, reinforced and bonded materials are available, and bespoke profiles can be manufactured to provide new solutions or match existing usage. PolyGlobal supplies conveyor belting that is tailored to the application by offering a range of material properties that provide extreme levels of abrasion, oil and chemical resistance and offer food approved certification.

#### Baggage Handling

Small and large airports across the world are underpinned by successful baggage handling systems. Working alongside engineering partners and deliverance companies, PolyGlobal has provided bespoke solutions to help support the transportation of transfer and arrival baggage. Alongside rollers, non-marking and durable centring devices such as polyurethane buffer and cushioning pads maintain and control the directional flow of luggage along the conveyor systems.

'PolyGlobal's solutions play an integral role on production lines and transport systems across the world.'

#### Rollers, Wheels & Coatings

PolyGlobal's rollers are used in a number of applications across a range of industry sectors. With the manufacturing and tooling capabilities offered by PolyGlobal, a variety of solutions, from small nylon products utilised as skateboard wheels through to larger transport solutions that facilitate offshore piping and tank wheels for water treatment works, are provided.

PolyGlobal's materials offer high abrasion resistance providing excellent performance as transfer rollers, guide wheels and drive rollers. Polyurethane roller coatings are offered in both ester and ether grades to ensure durability and longevity in both oil and water-based environments. By providing a full range of shore hardness' and offering shot blasting, bonding, and machining, PolyGlobal offers a full service roller solution.

#### Star Wheels

PolyGlobal is a world renowned star wheel manufacturer. Predominantly used in the recycling, waste management and agriculture industries, star wheels are also referred to as de-stoning, screening or harvesting wheels. Whilst material options include Polyurethane, Rubber & Polypropylene, PolyGlobal manufactures star wheels in a range of shore hardness's and colours to suit a number of requirements and operations, and supplies leading OEMs across the world. As moulds are tooled and machined in-house, PolyGlobal works alongside customers to enhance and develop product designs to optimise operations. In extremely abrasive applications such as aggregate screening, PolyGlobal's star wheels continue to lead performance.

#### Scrapers

Polyurethane scraper blades, supplied as replacements or new components, are manufactured to be extremely hard wearing and are highly resistant to abrasion. These properties, coupled with the bespoke moulding capabilities afforded by PolyGlobal, means they are utilised in a number of industry sectors. Within the agricultural sector, scraper blades are used as yard, tractor or slurry scrapers and in the utilities industries as snow plough blades and water treatment scrapers. Further, PolyGlobal's municipal and highways customers have benefitted from the advance performance of PolyGlobal's scrapers as snow plough and road roller blades. Beyond these markets, they are used extensively by manufacturers on production lines to clean conveyor belts and maintain efficient operation.

## Nozzles

Dispensing and processing nozzles are predominantly supplied to manufacturing and pharmaceutical companies.
PolyGlobal's range of materials exhibit excellent resistance to impingement wear, meaning its nozzles are used to dispense both liquids and abrasives.

#### **Moulding Bags**

PolyGlobal is a leading international manufacturer of polyurethane isostatic moulding bags. Working to support press operators and original equipment manufacturers, PolyGlobal is able to supply bespoke moulding bags to suit an array of applications through its in-house tooling and engineering department. PolyGlobal supplies an extensive moulding bag range for SIMAC isostatic presses.

## **Damping Solutions**

PolyGlobal's damping solutions are utilised to dissipate energy and provide numerous operational benefits. Working extensively across all critical industries, PolyGlobal's solution improve comfort, reduce noise and increase the safety and longevity of their parent products.



#### **Protection Solutions**

PolyGlobal's range of materials and capabilities offer full service solutions by tailoring designs to the specific environment and application of the product. Its protection solutions shield and secure important products and components, avoiding damage, increasing longevity and minimising costs.





#### Bushes

PolyGlobal is an essential supplier to the automotive industry, manufacturing suspension bushes that provide market-leading performance and unrivalled durability. PolyGlobal's bushes offer a damping solution that reduces noise, ensures ride quality and improves vehicular handling.

The flexibility in moulding material allows bushes to be supplied in a range of hardness's that are tailored to the vehicle and the operating requirements. Polyurethane bushes offer enhanced durability due to the characteristics of the material, and outperform more traditional options by ensuring extremely high levels of abrasion resistance.

# Buffers

As a world-leading buffer supplier,
PolyGlobal offers a library of existing buffer
solutions. PolyGlobal's buffer materials
provide excellent resistance to solvents,
oils, and chemicals, and remain elastic and
resistant to fracture in a greater range
of specifications than traditional buffer
options. These characteristics are ideal for
buffers that need to resist high impact or
repeated impingement.

PolyGlobal offers specialist material and additive options including flame retardant, antistatic and FDA specifications. These facilitate additional applications in the renewable, offshore and manufacturing industries.

'PolyGlobal's solutions improve comfort, reduce noise and increase the safety and longevity of their parent products.'

#### Shock Absorbers

PolyGlobal's components play an integral role in the construction industry as drilling and mining shock absorbers. These dampen substantial and consistent vibrations produced during the drilling process, preventing mechanical failure and maximising performance.

The characteristics and dynamic properties of rubber and polyurethane shock absorbers, coupled with high load bearing capacities, provide excellent performance results. Vibrations are absorbed and the energy dissipated as insignificant heat changes. In the rail industry, PolyGlobal's shock absorbing solutions work to improve comfort, reduce noise and increase safety by absorbing track vibrations. Also supplied to a number of other critical sectors, these solutions provide excellent durability and enhance the lifetime of the parent machines.

# Dunnage

PolyGlobal provides dunnage systems to manufacturing and automotive production lines across the world, by working with its customers to develop effective, bespoke solutions that provide optimised results.

PolyGlobal's dunnage and material handling solutions are utilised to secure and protect parts and assemblies during the manufacturing or delivery process. As a non-marking material, polyurethane dunnage offers cost effective protection for painted and non-painted assemblies and is especially effective in extreme wear environments where heavy loading or impacts occur over a significant period.

# Bonding & Encapsulated Products

In a number of protection applications, including roller and clamp coatings, engineering plastics are bonded to metal components to provide an enhanced solution. Utilised extensively by manufacturers and automotive production lines, bonded solutions prevent direct metal contact and can be tailored to the specifics of the operating environment resulting in more effective and durable solutions.

The flexibility in specification of the coated or bonded material ensures optimised performance and protection of both the bonded component and operating parts. Direct bonding during the moulding process provides durable and cost effective products which are able to operate in dynamic and extreme applications.

#### Ramps, Clamps & Pipe Protection

PolyGlobal provides a number of clamping solutions including piggy back and cable clamps. These clamping solutions are utilised both on and offshore, and installed above and below the water line, to group, secure and protect pipe and cable lines across the world. Within the offshore industry, PolyGlobal's bend restrictors and stiffeners are utilised along with clamping products to provide essential protection of critical flowlines.

As a maintenance and utilities solution, PolyGlobal manufactures Hose Ramps to protect and support pipe and hose lines. These can be manufactured to bespoke specifications using PolyGlobal's engineering department.

# Environmental Policy

At PolyGlobal our commitment to responsible environmental action is one of our main company priorities. We continually strive to improve our performance in all our environmental operations and activities, and where possible we have worked with our business partners to achieve this goal.

Our primary considerations in this respect are:

- Energy usage
- Wasto roduction
- Pawmatorial

# Our practises and policies to address these considerations:

- We adopt the highest environmental and Health & Safety practises across the company to reduce risks and hazards for employees, visitors and customers.
- We optimise our operations so that we work efficiently with raw materials and energy.
- We include environmental and ethical considerations when discussing and comparing all capital in portmost decisions.
- We develop solutions to any potential direct and significant environmental problem.
- We develop guidelines and train our employees in codes of practice that encourage successful implementation of these policies.
- We continually monitor all programmes to ensure they remain in line with existing legislation and are cost-effective and role specific.
- We expect similar environmental standards from ou suppliers and contractors.

#### Materials & Energy Usage

Our experience, design software and production technology allows us to optimise raw material usage. Where possible, we take additional steps to ensure we are working responsibly:

- Our waste material is reused where possible.
- Any waste material that is not able to be reused is recycled.
- Packaging materials are reused.
- Any remaining waste material is recycled.

Non production material and office waste is again minimised and recycled.



We have always had an inherent focus on quality, not only in the finished product but in selecting our raw materials and throughout the production process. All PolyGlobal employees, across all management and operating levels and departments, share in this responsibility. We therefore commit ourselves to exceed the expectations of our customers in the quality of our products.

Our policies ensure that the training of our employees remains dynamic and at the forefront of our market. The expertise of our staff ensures strict quality standards are met in all aspects of our work and our experience allows us to develop product design so that it facilitates successful and consistent production.

Our commitment to quality is exemplified through our BS ENISO 9001:2008 certification.





Church Street, Thornes Lane Wakefield, WF15QY

T:+44 (0) 1924 387 310 F:+44 (0) 1924 382 951

www.polyglobal.co.uk

Company Reg. No. 01961972 (England)