

SAFETY CRITICAL PARTS APPROVAL (ABOVE AND BELOW GROUND)



HIGH SPECIFICATION SEALS | HIGH PERFORMANCE | SPECIALIST SERVICES

Fluid sealing solutions for the RAIL INDUSTRY



S1
ALSTOM
APPROVED

QUALITY AND SERVICE GUARANTEED

Total Sealing Solutions

Founded in 1972, M Barnwell Services is a family business and prides itself on providing expert industry knowledge, technical expertise, products and services to over 5000 customers globally – quickly and reliably. Our range fluid sealing products include O Rings, Oil Seals / Rotary Shaft Seals, Hydraulic and Pneumatic Seals, Gaskets, Fasteners, Sealing Kits, Special Rubber Mouldings and many more.

We aim to work in partnership with you to reduce your supplier base, inventory and long-term costs. Applying our unique product knowledge to your specific needs, we will always offer the right sealing solution for your industry and application.

M Barnwell Services range of services include:

- ❖ Stocking/Supplying a vast and diverse product range – over 35,000 stock lines
- ❖ An efficient logistical capability offering International coverage
- ❖ Industry leading bespoke Branding and Packaging technology
- ❖ Full documentation service and manufacturer guarantees
- ❖ Strategic partnerships with large Blue Chip customers and leading worldwide brands
- ❖ Seal Maker and Clean Room services that are tailor-made to the customer's needs
- ❖ A dedicated Export Department – providing sealing solutions to over 60 countries

Sealing Solutions For: Bogies, Gearbox, Spring Type Actuators, Auto Couplers, Spring Tread Brake Units, Hydrostatic Pumps and Motors, Air Blast Circuit Breakers, Air Brake Valves, Door Gear and Seal Kits for Actuators.

Rail Products



M Barnwell Services offers a diverse selection of top-tier rail seals and related products to cater to various sectors within the industry, encompassing passenger services, rolling stock, maintenance, and rail infrastructure.



Anti-Vibration Mounts

Anti-Vibration Mounts, or rubber mounts, are essential for reducing vibrations in industrial machinery and vehicles. Made primarily from natural rubber, they can achieve at least 70% vibration reduction, with some applications exceeding 90%. Our standard AV mount range includes Machine Mounts/Feet, Cylindrical Bobbins, Failsafe Mounts, Rubber Buffers, Marine Engine Mounts, and custom solutions to meet your needs.



Bonded Seals

Dowty Seals, or Bonded Seals by M Barnwell Services, are trusted for high-pressure sealing, especially under bolt heads and threaded components. They offer reliable sealing for Pipe Couplings and various connectors where precision sealing of gases, oils, and fluids is crucial. Our Mild Steel / Stainless Steel range delivers exceptional burst pressure resistance with a minimum tensile strength of 540 MN/m² (35 tons f/in² UTS).



Custom Seals

Seals can be designed and manufactured to customer-specific requirements and moulded in almost infinite shapes, sizes and profiles. Our skilled team oversees the entire production process, from prototyping to testing and final part production to meet the requirements for every type of sealing environment and application. We provide comprehensive batch traceability and documentation in collaboration with our manufacturing partners. These parts are available in various finishes and find applications in pumps, valves, and more.



Fasteners

M Barnwell Services offers a wide range of Special Fasteners and Hot Forged Bolting products. Our Fasteners come in various sizes, materials, and finishes, including Threaded Rods, Hexagon Nuts, Lock Nuts, Studbolts, Bolts, Setscrews, Washers, Header Plugs, Modified Stock, and Bolt Blanks.



Gaskets, Packings & Sheet Materials

We provide gaskets for diverse industries, utilising various manufacturing techniques including Die Cut, Water Jet Cut, Laser Cut, Moulded, and Kiss Cut. Our range encompasses specialised products like Automotive Gaskets, Armco Iron Gaskets, Camlock Gaskets, Compressor Gaskets, EGR Valve Gaskets, FDA Gaskets, Gasket Sealants, Gland Packing/Compression Packing, IDF Gaskets, Manway Gaskets, Pipeline Flange Gaskets, PTFE Joint Sealant Tape, and Spiral Wound Gaskets. Furthermore, we offer tailored, bespoke gaskets and customised components designed to perfectly meet your specific application needs.



Hydraulic and Pneumatic Seals

M Barnwell Services is a trusted supplier of durable Hydraulic and Pneumatic seals used by major OEMs across various industries. Our seals come in Metric and Imperial sizes and a range of materials. With over 8,000 seals in stock, we serve over 5,000 global customers monthly. Popular products include Rod Seals, Piston Seals, Cast Iron Piston Rings, Wiper Seals, Static Seals, Guide Rings, and Diaphragms.



Inflatable Seals

These custom-made seals are crafted from various materials like Silicone (VMQ), low out-gassing Viton™ (FKM), and Ethylene Propylene (EPDM). We also offer FDA-approved compounds for Inflatable Seals tailored to the Pharmaceutical and Food industries. Our range of Inflatable rubber seals is the ideal choice when you need a strong, clean seal to safeguard against dust, moisture, and contamination. Each seal profile expands upon inflation, and all seals undergo a pressure test to 1 bar to ensure compatibility with diverse applications.



Mechanical Seals

Mechanical Seals effectively seal rotating shafts by employing two perpendicular lapped faces. One face is affixed to the equipment casing or vessel, while the other is attached to the rotating shaft, thus moving with it. These seals minimise frictional heat and wear by maintaining a lubricant film between the seal faces, resembling thrust bearings. They offer durability and high quality, leading to reduced wear, less heat generation, lower energy consumption, decreased maintenance needs, better control of shaft leakage, and ultimately cost savings.



Retaining Rings, Snap Rings and Circlips

Our extensive range of retainers encompasses diverse designs and high-quality materials. We provide standard phosphate spring steel clips from stock and can promptly supply Grade 420 Stainless Steel, Phosphor Bronze, and special plated finishes. For added convenience, we offer Internal and External kits, containing popular product sizes readily available. Alternatively, we can tailor bespoke kits, including pincers, to meet your specific requirements.



Rotary Shaft Seals/Oil Seals

We offer a comprehensive selection of oil seal designs, including A Types (R21, SC, SM), AS Types (R23, TC, BASL), and B Types (R4, BB, B1). Oil Seal Styles comprise Rubber Covered, Metal Cased, and Totally Metal Enclosed options, available in both Metric and Imperial sizes and various materials such as Nitrile (NBR), Viton® (FKM/FPM), Silicone (VMQ), Leather, PTFE, Polyacrylic (ACM), and Neoprene (CR).



Sealing Kits & Selection Boxes

We continuously broaden our assortment of selection boxes and kits in response to customer needs. If you can't find the specific product you need in our current offerings, please reach out to us. We're happy to create customised sealing kits tailored to your requirements.



O Rings

Our extensive O Rings material range includes Perfluoroelastomer (FFKM), Nitrile (NBR), Hydrogenated Nitrile (HNBR), Kalrez®, Viton™ (FKM/FPM) in various formulations (A, B, GF, GLT, GFLT, ETP), Ethylene Propylene (EPDM), Silicone (VMQ), Polytetrafluoroethylene (PTFE), Fluorosilicone (FVMQ), and Medical Grade materials. These materials can be customized to meet both imperial (BS1806, ISO 3601) and metric (BS4518) sizes, shore hardness specifications, and various international, national, and industry standards and approvals.



Shaft Repair Kits

Available in both Inch and Metric sizes with various materials and coatings. These sleeves are a swift and efficient solution for repairing worn or damaged shafts, avoiding the need for costly disassembly and regrinding. We also offer specialised SKF Speedi-Sleeves to address crankshaft wear issues, providing a cost-effective alternative to costly re-machining or crankshaft replacement.



Special Mouldings and Extrusions

We offer both compression and injection molding services to meet your requirements, whether you need one piece or over a million, regardless of material or part complexity. In addition to our standard stock range, we provide a variety of materials and profiles for extrusions, including O Ring Cord, and can create custom profiles to suit your specific needs.



Springs

Quality takes precedence, underscored by ISO 9001, AS9100, Nadcap, and TS16949 accreditations. Our services include both standard and tailored solutions for designing and crafting custom and prototype springs. We work with a range of materials, such as Carbon Steel, Stainless Steel, Phosphor Bronze, and Inconel. From laser-cut prototypes to full-scale production, our comprehensive service blends technology and quality to create versatile and robust products.



Tanker Seals

By utilising the finest pure materials, we achieve low compression set and adhere to ISO3302-1 tolerances. We offer a variety of profiles, including Square, Round, Rectangular, and custom options. Our products find applications in sealing tank lids, hatches (Main, Butterworth, Inspection), road tankers, various chemicals, product tankers, and rail tank cars. Extruding both the inner and outer jackets in the same facility enhances control and flexibility for specific chemical and liquid compatibility.



Washers

We offer a wide array of dimensions and materials, including Elastomer, Thermoplastic, Fibre, Steel, Copper, Stainless Steel, Aluminium, Brass, and Cork. We offer various types of washers, including Flat Washers (Form A to G, Hardened, Chamfered, Heavy Duty), Spring Washers, Toothed & Serrated Washers (External Toothed, Internal Toothed, External Serrated, Internal Serrated, For Countersunk Screws), Tab Washers (External and Internal, Long and short, Single long tab), Tapered Washers (D, Square, U and I Shape), and Construction Washers.



On-Site Consultation

If you're uncertain about where to begin, tackling a substantial project, or dealing with a task that demands additional expertise, we strongly encourage you to explore our On-Site Consultation Service. In addition to the guidance offered by our sales team, we provide on-site consultations with our skilled engineers who possess extensive experience in the fluid sealing industry. They will visit your property, machine, or project, discuss your needs, gather samples, and take measurements.

Following the consultation, we will furnish you with a list of suggestions and recommendations, including a ballpark estimate of product costs to address, resolve, or complete your property, machine, or project. While our on-site consultation service is entirely complimentary, there may be a nominal charge for services like creating plans and tools. We particularly recommend this service for emergencies, large-scale projects, or commercial endeavors.



Sample Identification

When facing uncertainty or complexity regarding a specific fluid sealing product or its application, our Sample Identification Service is your reliable guide. Drawing from over 50 years of expertise in fluid sealing, our dedicated inspection and testing team employs advanced tools to analyse material composition and recommend suitable replacements from our extensive stock, tailored to the precise size and shape requirements.

This indispensable service has evolved to play a pivotal role in enhancing process safety management across various industries, encompassing petrochemical, petroleum refining, green energy, and offshore drilling.





FLUID SEALING SPECIALISTS FOR OVER 50 YEARS | £5.1 MILLION INVENTORY

HQ & CENTRAL WAREHOUSE

80 Reginald Road
Smethwick
Birmingham
West Midlands
B67 5AS
Tel +44 (0)121 429 8011
Fax +44 (0)121 434 3016
sales@barnwell.co.uk

BRISTOL

Unit 5 Windmill Business Park
Windmill Road
Clevedon
Bristol
BS21 6SR
Tel +44 (0)117 982 5245
bristol@barnwell.co.uk

DARTFORD

Unit 7 Schooner Park
Crossways Business Park
Dartford
Kent
DA2 6NW
Tel +44 (0)1322 293 024
Fax +44 (0)1322 272 099
dartford@barnwell.co.uk

GLASGOW

14-16 Murray Place
Righead Industrial Estate
Bellshill
Lanarkshire
ML4 3LP
Tel +44 (0)1698 749 666
Fax +44 (0)1698 749 888
scotland@barnwell.co.uk

MANCHESTER

Unit 36/37 Westbrook Trading Estate
Westbrook Road
Trafford Park
Manchester
M17 1AY
Tel +44 (0)161 888 2330
Fax +44 (0)161 888 2296
manchester@barnwell.co.uk

EXPORT

80 Reginald Road
Smethwick
West Midlands
B67 5AS
Tel +44 (0)121 429 8011
Fax +44 (0)121 434 3016
export@barnwell.co.uk



Copyright © 2023 M.Barnwell Services Limited. All rights reserved. E & OE. Pictures representation only. Items in this publication may not necessarily be manufactured under a registered ISO 9001 management system. © All Trademarks acknowledged.

TEL: +44(0)121 429 8011

WWW.BARNWELL.CO.UK

SALES@BARNWELL.CO.UK