

Design and manufacture of innovative plastic bearing solutions





BNL is the world leader in specialist plastic bearing solutions. We are experts in the integration of product features, adding value and providing whole system cost reductions to give you a competitive advantage.

We focus on providing you with a bespoke design to achieve your objectives; whether these are labour-saving or cost-down initiatives, product innovation or increased market share.

Our integrated designs add value whilst reducing component count, assembly operations and product weight, by combining multiple components and functions into a single moulded part. Clips, flanges, mounting features, cable-management, tyres, gears and shafts are just some of the many attributes that can be integrated into our plastic bearing designs.

More than just a bearing, our engineered solutions provide energy efficiencies, cost savings, improved performance and longer product life.



Innovation Through Collaboration

We work with you to meet your objectives – whether they are market share, improved product life, operational efficiency or energy savings.

By combining your experience of your application and our expertise in plastic bearing technology, we can produce an innovative solution to achieve your goals.



Cost Reduction

Our integrated designs combine different components to reduce expenditure on bought-in-parts, assembly operations, freight services and storage costs.

Plastic bearings have unique characteristics which make them ideally suited to a wide range of industries:

- They are lightweight
- They are chemical and corrosion resistant
- They are non-magnetic
- They have low inertia
- They do not require lubrication
- They can be anti-static or static-dissipative

BNL plastic bearings are uniquely developed to be high-quality and long-lasting.

Our bearings are fully moulded which maintains the fine crystalline layer on the surface area of the bearing race-ways that significantly improves wear resistance, increasing the efficiency and life of our products.



Simplify Installation and Maintenance

Lubrication-free, our plastic bearings minimise your maintenance processes by eradicating the need to re-apply or clean up lubricants. Installation and maintenance is quicker and easier using the clips and fixings designed and moulded into our plastic bearing solutions, eliminating fiddly and expensive nuts, bolts and screws.

Longer Life

To increase performance and longevity, our bearings are engineered with fully moulded tracks including a fine, crystalline layer that provides exceptional wear resistance. Machined bearings remove this layer exposing a softer structure beneath that will wear more quickly.

Some of the many industries and applications that benefit from BNL's plastic bearing technology include:

Automotive

For an industry where weight and speed equate to performance, our low-friction, lightweight components provide cost-effective solutions. Our steering column designs integrate retainers and clips, simplifying assembly and lowering the whole system cost.



LCD Screen Processing

The high temperature and harsh chemical production process for LCD products prohibits the use of metal bearings. Our bearings combine specialist plastic materials and glass balls to maintain performance and life in these demanding environments.



CCTV Pan & Tilt Mechanisms

By simplifying the design of these complex products, we are able to produce lightweight, compact mechanisms, which enable easier installation, lower component costs and streamline the production process.



Photocopiers & Printers

Integrating bearings, pulleys, gears, shafts and brackets, achieves significant cost-reductions, enabling business machine manufacturers to maintain their competitive advantage with lighter, smaller and more energy efficient products.



ATMs & Cash-Handling

To provide maximum performance even when space is at a premium, many of the leading ATM manufacturers utilise BNL technology. Low-friction and lubrication-free, our plastic bearing solutions integrate multiple components such as shafts, gears and tyres into the bearing assemblies, saving space, weight and power consumption.



Food Processing

Our plastic bearings provide safe and long-lasting solutions in food processing applications. Lubrication-free, you can be sure that food products will not be contaminated. Corrosion and chemical resistant, they can withstand frequent wash-downs without deterioration.



Specialist Environments

Using careful material choice we can ensure efficient operation of your product in even the harshest environments. Our plastic bearing solutions resist water and chemical attack, withstand frequent wash downs with cleaning agents and endure exposure to the elements. Non-magnetic and anti-static, our bearings will not cause interference with magnetic resonance and electrical systems.

Energy Efficiency

Significantly lighter than metal alternatives our lubrication-free, low-friction products rotate smoothly and easily, needing less power to start-up and operate. Providing a lighter and more efficient solution allows a smaller motor to be used, making the entire product more lightweight and economical.

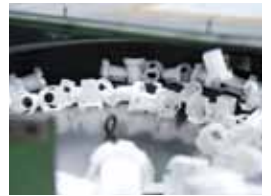


Working with BNL provides you with expert product development support, high quality design and manufacture, plus the benefit of knowledge gained over decades of plastic bearing innovation.

To ensure you always profit from leading-edge technology and production methods, the BNL New Technology Centre proactively researches and develops our capabilities, improving our understanding of plastic bearing design and manufacture.

We recognise that to achieve a competitive advantage, you need innovative solutions that are also cost-effective. We use advanced production techniques to mould different materials simultaneously or accurately mould different parts in the same tool, reducing component count, assembly and additional tool investment.

Our ISO 9001, ISO 14001 and TS 16949 certification reflects our commitment to upholding stringent quality standards and environmental regulations, ensuring we deliver quality and value from concept to production.

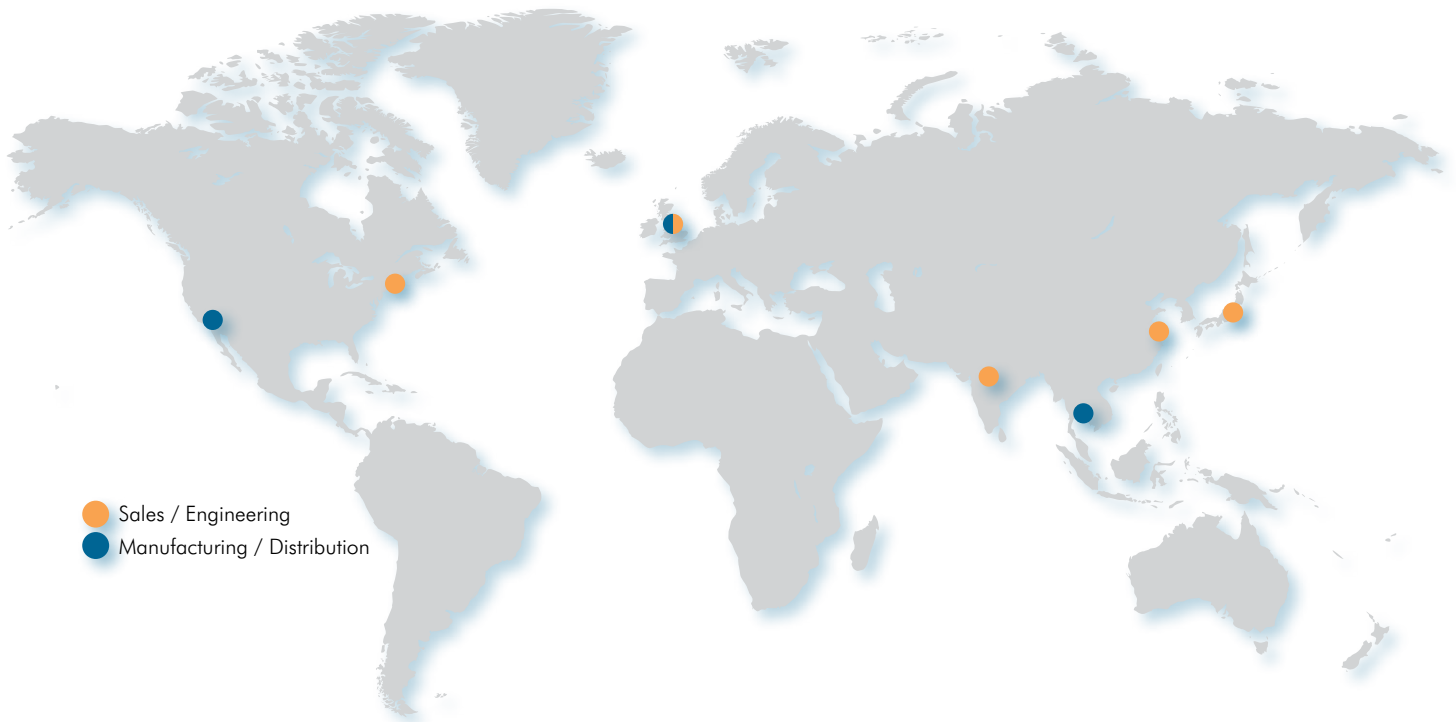


Value Added Design

By enhancing the value of your product, we not only reduce costs, but can increase its performance, quality, innovation and competitiveness. We combine the functions of your product into our plastic bearing design, providing an effective solution whilst minimising the components and operations needed to produce it.

Competitive Advantage

Our tailored plastic bearing solutions will help you realise your goals – whether they are based on product innovation or efficiency, BNL will work with you to realise the full potential of your project or product. By taking full advantage of our plastic bearing expertise and unique technologies and techniques, we will ensure you out-pace your competition.



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- Manufacturing / Distribution

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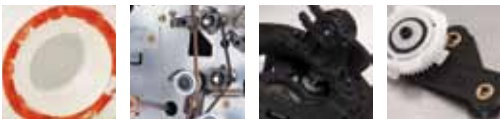
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