



Load, Speed
and Environment

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The life of a bearing is affected by its environment, the load it must carry, the speed it operates at, plus how much these vary across its service life. Plastic bearings are affected in different ways to metal bearings by these different conditions.

The diagram below shows the suitability of plastic bearings in situations where load, speed and environment are all factors. Each factor is shown as a different coloured circle. Where they intersect the operating conditions include more than one factor, for example, an environment where harsh chemicals are used and there is a high load on the bearing. The suitability of a bearing when exposed to one or more factor is shown as 'High', 'Medium' or 'Low' on the diagram.

High

High Suitability. Under this single condition a plastic bearing will operate efficiently and achieve a good life.

Medium

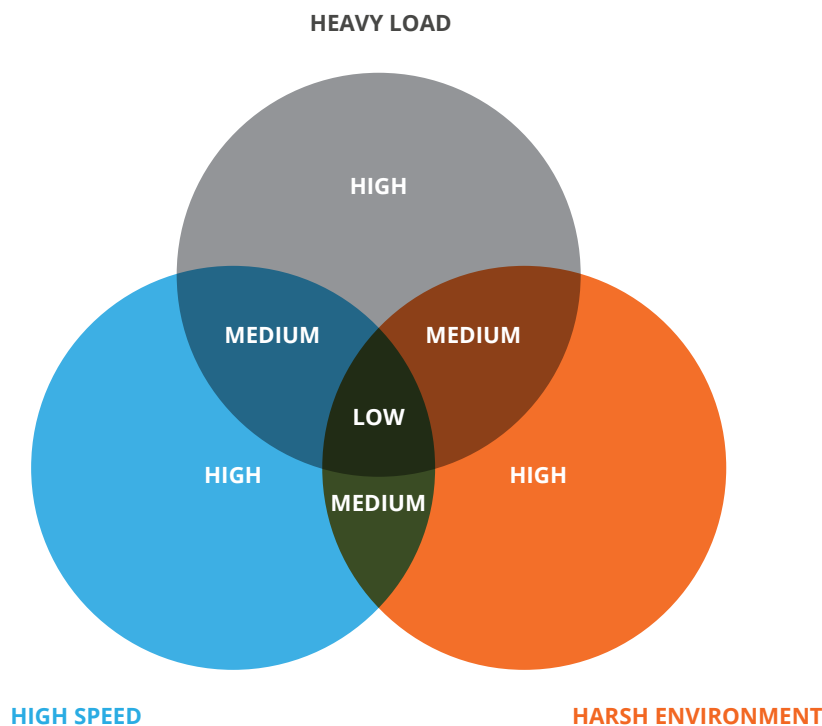
Medium Suitability. Under this combination of conditions a plastic bearing will operate efficiently but the wear rates will be higher and the bearing life less certain.

Low

Low Suitability. This combination of factors will affect both efficiency and life.

A plastic bearing can carry heavy loads, reach high speeds and is suitable for many specialist and severe environments. However, as shown in the diagram, if an application is exposed to more than one of these factors, the potential life of the bearing can be affected. In these instances we are happy to discuss your requirements and recommend a solution. Many application requirements can be met by carefully choosing an appropriate material and product for the purpose.

If you have any questions on the life and wear rates of our products please contact us.





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