

CBI Channels and Segments:

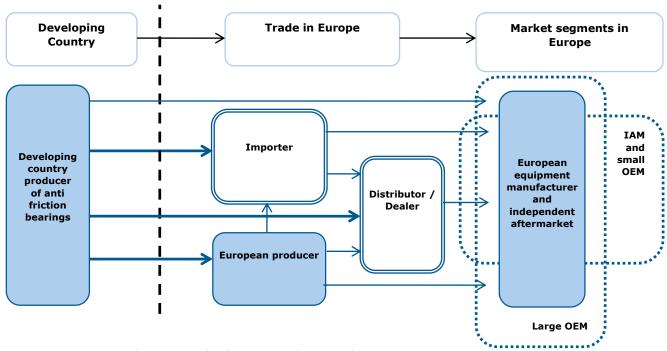
Motion, Drives, Control and Automation: Anti Friction Bearings in Europe

Introduction

Developing Country exporters are recommended to focus on the independent aftermarket (IAM) in Europe, especially those bearing distributors who support small to medium sized Original Equipment Manufacturers (OEMs). These distributors would be technically capable and are able to seek out applications which may require niche bearing solutions. Each of the market segments will provide opportunities, with the common theme and emphasis being on the sourcing of more competitive products. Bearing manufacturers will be looking for new component suppliers, bearing distributors are extending their range to offer "good, better, best" options for standard bearings (which may include own brands), importers are looking for new suppliers in response to increasing prices and poor service levels from China, and finally, OEMs are looking for more competitive suppliers.

Market channels

Figure 1: Trade structure for Anti Friction Bearings in Europe



Source: Peer group MDCA and interviews with industry experts (2013-2015)

Please refer to Annex I for the characteristics of the individual market players.

Changed supply structures offer opportunities for Developing Country producers who can offer smaller minimum order volumes

As OEM output has fallen in the Eurozone in the recent past, OEMs will increasingly use distributors for the supply of their bearings in the years to come. Instead of sourcing directly from bearing producers, buying from distributors enables them to keep their inventory levels at a lower level, resulting in a lower working capital. Distributors are able to provide a quicker response to demand in comparison with bearing manufacturers; in other words, they offer more flexibility than producers.

In the recent past, Chinese suppliers of anti-friction bearings have been erratic and have imposed inconsistent minimum order quantities, as evidenced in the state of their order books. Such inconsistency has driven OEMs and distributors to seek more reliable sources from other low-cost countries. This is a distinct opportunity for producers in Developing Countries who can offer smaller minimum order volumes and who can strike up relationships with European importers and distributors. At the same time it will not be easy to penetrate the European market. Developing Country exporters will need to produce sustainable quality products and will also need to be responsive in terms of their service levels.

Tips:

- Basically, for Developing Country exporters, it is necessary to improve production flexibility in order to be able to offer smaller minimum order volumes. This includes adaption of production lines to manufacture a greater range of sizes in a short time. This entails:
 - Larger stock of raw materials
 - o Faster changes (Single Minute Exchange of Dies).
 - o (Flexible) production cells.
 - o Flexible machining, quick changeover times.
- Also flexible logistic concepts must be considered.
 - Provide other INCOTERMS, e.g. delivered price (DDP), instead of traditional Ex Works or FOB, to show delivery commitment.
 - o Consider, develop and offer a consignment stock concept.
- Business Support Organisations in Developing Countries could provide INCOTERM trainings to Developing Country exporters. They should teach them to understand the logistics chain.
- Examine the range you can offer (the larger the better, in most cases).

Market segments

The market for anti-friction bearings can be divided into the OEM (Original Equipment Manufacturers) market and the Independent Aftermarket (IAM). As far as parts for anti-friction bearings are concerned, there is principally one segment: bearing manufacturers.

Figure 2: Segmentation Bearings from DCs to the IAM



Original Equipment Manufacturers

OEMs usually buy a range of bearings in medium to large volumes, depending upon their own finished products. Bearings are usually purchased according to a schedule: each buyer places one order per year, according to its own build forecast, and then calls for a certain number of bearings per month, thus effectively requiring their suppliers to provide just-in-time delivery. They may sometimes request specific packaging, in order to make it easier when the product reaches the production line. Roughly, this market accounts for about 40% of the total European market.

Main characteristics

- Most OEMs purchase directly from bearing manufacturers. OEMs want to control the quality and performance of their
 own products, so they often prefer to buy from bearing manufacturers directly to ensure this. The prices are often
 preferential. Of course they also receive a high degree of engineering support from the manufacturers, who employ
 engineers who may be industry sector specific (food, steel, mining, petrochemical, etc.)
- Some large OEM customers prefer to be serviced by distributors, importers or wholesalers. This is because they may
 use a large range of bearings but perhaps in smaller volumes. Distributors can also provide quick response to
 demand. This enables the OEM to reduce stocks as they depend on the distributor to keep the forecasted
 requirements.
- Whilst price is very important, the quality of the bearing is even more important. Of course each application places differing demands on the bearings used. The OEM may prefer a specific brand for critical applications, whereas for less critical applications, the brand consideration may not be so important. A customer of tailor-made ball bearings stated that "our sourcing decisions for bearings are based on quality, design or engineering support, price, warranty, availability and on-time delivery. Without question, quality is the most important criterion. Saving a few dollars in this area would surely risk our industry reputation, if our quality expectations slipped." The following business case involving the selection process of one large OEM, John Deere, is provided as an indication of common business practices.
- In recent years, order volumes for bearings have declined in response to decreasing market demand. As the economic situation is not expected to improve in the coming years, OEMs might be likely to examine their supply structure. Following the examination of the supply chain, OEMs might decide to utilise or increase the level of service

provided by distributors. Another possibility is that bearing manufacturers might decide to become even more flexible in their logistical capabilities to serve this market, despite falling demand, in order to maintain market share. Should the bearing manufacturers be unwilling to provide smaller quantities, this would open an opportunity for importers to supply either directly or through country-specific distributors.

From practice - the selection of a bearing supplier

John Deere is a global leader in the supply of equipment for the agricultural, construction and forestry industries. Its competitors are from Japan, Korea, India, China, Eastern Europe and Russia. All of these companies buy bearings at a global market price. While costs are important to Deere, other factors are far more important, including, but not limited to, the quality of the product and the delivery and reliability of the supplier. John Deere imposes rigorous testing and certification requirements as conditions for the approval of bearings products and manufacturers. When Deere changes suppliers, the decision is based on at least five criteria, one of which is cost. The approval process for bearings comprises print reviews, inspections, lab tests and field tests to determine performance and to predict the reliability of a candidate bearing. A candidate part must be assessed as being equal to or better than the base-line part that Deere is considering. This process typically takes between one and three years.

IAM and small OEM

The industrial aftermarket for bearings in Europe, amounts to more than €2 billion per year and covers the sales of bearings as replacement parts. Small OEMs are mostly also served through this channel, as they require local inventory and service.

Main characteristics

- An aftermarket customer will require a wide variety of mostly standard bearings in small volumes. Consequently, prices charged to IAM customers would normally be higher than the prices charged to OEM customers in general.
- Large pan-European distributors account for a substantial part of aftersales. However they may not always be considered to be the best prospect for Developing Country exporters. Some are seriously considering own brand products, which they will run alongside the major brands as a "price fighting" option to attract or keep their customers. All of these companies provide a range of other products, which include power transmission products, fluid power, oil seals and tools. Examples of such companies are Eriks, Brammer, Bianchi, Dexis and IPH.
- Europe has hundreds of medium-sized distributors and importers who operate on a national basis or in a limited number of countries, such as Hayley, Ludwig Meister, Sanistal, Sefi and Giner.
- Importers and distributors sell bearings on both exclusive and non-exclusive terms.
- There are great variations between the way major manufacturers may price products to the importer, distributor and OEM. It is a very complex system and has no real and definite pattern. The most effective way for a Developing Country manufacturer is to price products at competitive net prices.
- Importers and distributors serving the aftermarket are starting to implement a brand strategy which provides a "good, better, best" option for their customers. Good means a cheap bearing of an unknown brand, better means a bearing of an own brand, and best means a bearing of a premium brand.
- Some of the larger distributor companies already are adopting a "good, better, best" brand strategy for bearings and it is most likely that the other distributors will follow this example in the near future. To achieve this, they will seek own brand or price fighter ranges of bearings which sit alongside the major brands. This enables customers to decide whether they want to pay the premium price or a budget price, in accordance with the application of criticality of the plant.

Bearing manufacturers

- There are two types of bearing manufacturers in Europe global producers who have their headquarters and the
 engineering and technical centres of excellence in Europe and who are manufacturing on most continents and in
 many countries (for example SKF, Schaeffler, NSK, NTN-SNR), and smaller producers some of whom are niche
 bearing producers (for example Cooper, Nadella, RKB, Fersa and ZKL).
- Most bearings are produced in Germany, Italy, France, Slovakia or Sweden.
- Both types of manufacturers can offer opportunities for bearing component producers (rings, rollers, balls and cages).
- Only the smaller manufacturers are likely to subcontract complete bearing assemblies.
- Historically, European bearing producers had separate sales divisions for the OEM and the aftermarket. In recent
 years, they have restructured into industry sectors, such as automotive, paper, wind energy etc. As a result of this
 market focus, the 'time-to-market' for innovations/adoptions has been dramatically reduced. This trend is expected to
 continue in the next few years, which will widen the technology gap between Europe and Developing Countries.
 Exporters from developing countries should therefore continue to move upward in the value chain and invest in R&D
 and engineering in order to keep pace.

• Exporters from developing countries should seek opportunities to examine the latest-generation products available to the various industry sectors by visiting trade fairs, examining the websites of European competitors and reading online trade news.

From practice - the price structure of bearings in Europe

In Europe, there is a complex pricing structure for bearings, which includes multiple price lists (issued by many, but not all manufacturers) for the same products. For example there are often 'Selling List Prices' and 'Distributor List Prices'. In some cases, these 'Lists' are not correlated with each other in any way. At other times, the various 'Lists' do not correspond with regard to the percentages of individual items or product groups.

Typically, extremely high % discounts are quoted from an extremely high "Selling List Price", whereas the wholesaler, and sometimes the distributor will be receiving far lower manufacturer discounts from the far lower "Distributor List Price". On fast moving 'commodity' bearings such as popular metric ball bearings, the discounts offered from the "Selling List Price" may be massive, in the high 90%s. However, the wholesaler or distributor buying at prices from the "Distributor List Prices" will actually still gain similar or only slightly lower, margin percentages on less popular ranges.

Demand for cost-effective bearings has increased since 2008

The economic slowdown in Europe has combined with the mature nature of the product and the pressure exerted by foreign imports to squeeze the profit margins of many companies. Companies serving the aftermarket have been examining the products they buy, as well as the applications for which these products are being used, to evaluate the possibility of reducing their costs by brand swapping.

At the same time, there has been more acceptability of brands from Developing Countries and a general acknowledgement that quality has and is improving from suppliers from those countries.

As a result of this trend, distributors and importers serving the aftermarket are starting to implement a brand strategy which provides a "good, better, best" option for their customers. Over the next few years, distributors and importers will increasingly include an own brand and a cheap unknown brand in their offer. Developing Country exporters have clear opportunities to supply these 'good' or 'better' ranges.

Tips:

- Improve your attractiveness to potential European buyers:
 - Benchmark your own product quality against other manufacturers. This may well enable you to offer a price which is commensurate with the quality you provide.
 - \circ Be prepared to offer an own brand.
 - o Look for niche product areas where opportunities for profit may be higher
- Perform market research: For Europe, list distributors/importers who do not offer a three-tier range yet. Contact them.

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Annex 1: Details of market players

Large OEM

Large OEMs can be considered as targets for Developing Country exporters of bearings. The volumes would normally be attractive and are often scheduled by the customer so that the Developing Country exporters can plan their production to suit requirements.

- Large OEMs are producers of modules or final products, such as machines.
- They buy parts and components and assemble these in a module (subassembly) or in a final product.
 - They buy products in large volumes (many thousands of pieces) directly from European producers (and sometimes also from Developing Country producers).
 - o They buy products in low volumes from intermediaries.
- Quality is carefully considered when selecting a bearing supplier
- New suppliers may have their products tried and tested before being approved.

Importer

- Importers are the most attractive targets for Developing Country exporters, because they often buy in relatively large volumes on a scheduled basis.
- Importers buy products in bulk but sell in smaller quantities in their local area or region.
- They add value to the product by providing marketing, quality assurance, sourcing and technical knowledge, stock keeping, fast delivery and aftersales service.
- The importers' customers are distributors, OEMs and IAM customers.
- The importer is more interested in the finish, feel, packaging and performance of the bearing, but not in the chemical composition of the material or in the production process.
- Main buying criteria are price (including freight costs) and order lead times.

Distributor / Dealer

- Distributors can be considered to be target as long as they have the volumes to support imports from other continents.
- Distributors generally deal with smaller volumes than importers, which is the main reason why they are less interesting than importers for Developing Country exporters.
- Distributors will support the manufacturer's brand, e.g. marketing, technical support, stock keeping, fast delivery and aftersales service.
- The distributor's customers are OEMs and IAM customers.
- They will supply a range of products, alongside bearings, to give their customers the opportunity to reduce their supply base.
- Main buying criteria are price (including freight) and order lead times.
- Distributors buy from manufacturers and importers. The larger ones will import directly where volumes allow.

European producer of bearings

- These companies offer strong potential for bearing component manufacturers, but also potentially for some complete bearing assembly providers.
- Probably the best method for Developing Country producers is to become a domestic supplier to known global OEM
 customers, in order to get their products approved. They could then seek a direct relationship with these companies'
 facilities in Europe.
 - In such cases, the Developing Country producer is often required to source the bearing steel from approved suppliers.
 - A company supplying some of the leading bearing manufacturers will be subject to audits and will need to apply very tight quality control procedures.

Some smaller manufacturers are more willing to buy complete bearings which will be branded in their name and packaged to their specifications.