Value of Distribution: 2005
Critical Resources for Bearing Consumers

Executive Summary

This white paper examines how innovative bearing consumers define distribution value and leverage that value today. Our research included one-on-one, in-depth interviews with a cross-section of bearing customers to discover how supplier requirements are changing in today's intense competitive landscape. Here's what we heard, loud and clear:

- The constraints of global competition in 2005 require bearing consumers to find critical leverage points *outside the plant walls* to address cost challenges and solve day-to-day operational problems, often with reduced capital, operating and labor expenditures.

- The specialist distributor, one with a core focus in bearings, is a strategic partner who brings new value every time he walks in the door. That's a key difference for separating the specialist from the generalist, for separating a value-producing engagement from a time-wasting sales call.

- Bearing consumers who follow best practice methods with benchmarks leverage their specialist distribution resources more strategically and effectively than those who use more traditional vendor management tools.

- Innovative bearing consumers are tapping into the service expertise, knowledge and experience of their specialist distributors at multiple levels to achieve lowest total cost, stabilize supply, improve processes and much more.

- Increasingly, the levers with the largest value return are knowledgeable vendor-specialists, who fulfill specific needs in six critical areas:

    1. Product Availability & Cost Control
    2. Process Improvement
    3. Service Reliability
    4. Benchmarking Assistance
    5. Measurable Value
    6. Intangible Value: "The Personal Touch"

Key takeaway: Leading bearing consumers are moving from transactional to strategic relationships with key suppliers today. These specialists are viewed as value generators, not cost loads. Traditional core distribution values (logistics, transaction processing, etc.) remain critical measures, but are part of a larger set of metrics. Knowledge-based services provided by bearing specialists – specialized product knowledge, knowledge of specific plant/production/process challenges, corporate procedures – raise the level of engagement to yield a higher return on investment.

Issue Background

The Bearing Specialists Association Special Task Force on Distribution Value set out to identify how Best-in-Class consumers of bearings define the value of services they receive from their bearing specialist distributors. We interviewed a cross section of industry innovators who oversee the purchase, specification and application of bearings, and who have direct responsibility for optimizing the results obtained from their distributors. Additionally, we researched key supply chain trends in 2005 to identify how the best manufacturing and process users of bearings address critical challenges.

Today's global competitive landscape is putting unprecedented demands on production/process managers and maintenance supervisors. While a global economic recovery has spurred a rise in production rates, plants and facilities are almost universally squeezed with fewer internal resources. Fewer maintenance and purchasing staff are managing a reduced operating budget and capital spend. Internal skill sets that traditionally provided a knowledge base for design, production, operating and maintenance support have been depleted over the past five years.

Plant/facility managers have had to find alternate and smarter ways to improve production reliability, labor efficiency, material optimization, warranty and service management across the asset base, including bearing usage. To address this challenge, most organizations have instituted some form of vendor management program as part of a larger continuous improvement initiative. These initiatives include supply chain optimization, vendor rationalization, asset lifecycle management, Six Sigma and lean process improvement efforts.

These industry and competitive forces have driven a few key trends:

- Corporate management is demanding hard-cost savings, yet often remains resistant to supply-chain innovations, such as outsourcing inventory management, that could significantly reduce transaction and holding costs. Plant managers, maintenance supervisors and purchasing professionals today are finding creative ways to meet tougher corporate requirements and operating environments.

- The ability to outsource services and skill sets traditionally managed in-house has in fact become a new and critical skill set for managers. These managers are increasingly evaluated on vendors' overall ability to perform, including emergency service, technical support and on-time delivery.

- Innovators use a broader set of evaluation tools to measure return from vendor relationships than they did just a few years ago. Total cost of ownership, total cost reduction and other metrics have become innovator vendor benchmarks.

- Innovators are integrating key suppliers into their organizations and leveraging this specialized knowledge to achieve continuous improvement goals. Gone are the days when a large pool of vendors was managed in an adversarial manner to achieve purchasing department goals.

Enduring & Changing Value of Distribution

The traditional core values of distribution haven't changed, but their relative importance clearly has as alternate channels, sourcing options and competitive pressures have mushroomed in recent years. Why?

Bearing purchasers and end-users are being squeezed from all sides. The rising cost of raw materials is pushing production costs steadily up, while customers downstream steadfastly resist attempts to pass those costs along in higher prices for products that use bearings or production processes that involve bearing replacement. This research identifies how certain distribution functions retain their importance today. Other distribution services, sometimes called "value-added," have become key tools to help bearing customers meet today's tough requirements.

- Best-in-Class bearing consumers clearly differentiate in their ability to extract the service-oriented skill sets of their distributors to compensate for fewer internal resources. In short, they look beyond "traditional" distribution functions – sourcing, inventory, credit, sales/fulfillment, technical support – to obtain more complex and deeper value-producing capabilities. The relationships are deeper, better, and more cost-effective than more traditional approaches.

The functions and value a distributor provides is unique in the mix of product and service capabilities delivered to the market. At the very foundation of distribution value is its logistical function as a conduit of products from manufacturer to end user. Traditionally, the time-place functions of distribution dominate any discussion of value: Get the right product to the right place at the right time at the right price.

Shifting Distribution Functions & Value

Traditional Services	"New" Higher-Value Services
On-time delivery	Inventory management systems
Local inventory	Kitting/Packaging
Quality (Product)	Quality (Process/service)
Sourcing	Application assistance
Transaction processing	Training
Post-sale technical support	Information technology capabilities
	Troubleshooting/Problem solving
	Emergency service capabilities
	Pre-sale design/technical assistance
	Total cost saving process capabilities

Distribution has always been unique in the delivery of a combination of products and services to provide solutions to customers. But the combination of services to achieve this basic goal has always had an almost infinite number of variables, depending on very

specific customer operating environments, conditions, and even cultures. There is a wide array of pre-sale, sale and post-sale functions and services that are generally bundled with the sale of product.

Our research indicates core distribution functions continue to be necessary and high-value services, but there is increasing focus on what is often termed value-added services, as outlined in the graphic below.

As the next section details, innovators are altering the way they measure their vendors and revising vendor requirements to incorporate a broader mix of the above services and functions to yield a higher total value contribution.

Six Key Findings: Innovator Practices

In light of the dramatic changes outlined above, we asked a cross section of bearing consumers to identify key competitive challenges today. This section expands six key findings that surfaced as a result of this research. We've included some of what industry innovators told us in their own words about defining distribution value today.

1. **Product Availability & Cost Control.** The most critical issues bearing customers face in 2005 are concerns over price increases and product availability. Demand planning is quickly becoming a dominant issue. Bearing specialist distributors are uniquely positioned in volatile economic and market conditions to be effective advocates for customers and channel information managers to assure a secure, stable supply of product through their select manufacturers.

2. **Process Improvement.** Bearing specialists help customers drive process improvements from both ends of the equation—they bring technical expertise to optimize production and maintenance operations, and they bring supply-chain expertise to streamline purchasing and inventory processes. Bearing specialists have long been at the forefront of value-added supply chain innovations such as vendor-managed inventory, and bearing purchasers want help implementing new supply chain efficiencies.

    > *We've significantly downsized our maintenance staff. We need distributors who can troubleshoot our maintenance issues, and know our operations well enough to know how to be part of the team and come up with the best solution. We still demand hard cost savings and documentation of the savings they produce, but increasingly they are finding new areas where they can help us.*

Case study: Building long term value

Getting the most from a supplier relationship is a long-term process, with many later benefits building on the work of the past. The vice president of operations for a building products manufacturer said his company's 7-year sole-source relationship with a key bearing distributor continues to grow in value.

"Our bearing vendor pretty much created the first round of changes in our storeroom management procedures. They brought in shelving, bar coding, personnel—they were very instrumental in bringing those best practices to us," he said. "They've suggested a variety of small improvements that add up across multiple locations. Most of it is assistance with maintenance and using the proper equipment in the right situation. Over the years they have done exceptional work bringing in significant cost reduction in technical services, as well."

The company measures its suppliers on on-time delivery and fill-rate. It also measures value-added savings on a mill-by-mill basis to see how much value the distributor brought to a location on a quarterly and annual basis as reflected in process improvements and cost reductions.

The accrued knowledge of the customer's operations has enabled the distributor to spread best practices throughout multiple production facilities, which the interviewee considers a critical benefit. "We expect that organization to leverage themselves across our organization. We are single-sourced, so we expect them to bring best practices. We leverage that by having them participate in maintenance teams in our mills."

3. **Service Reliability.** Excellence in performance over a period of time is the foundation on which bearing supply relationships are built. An outstanding record of performance in the basic "blocking and tackling" of distribution—getting the right product into the customer's hands when he or she needs it, day in and day out, and being responsive when questions or problems arise—emerged as one of the most important factors in determining which distributor a customer will choose for a strategic partner.

4. **Benchmarking Assistance.** Competitive pressures and fewer internal resources at most companies today mandate the need to adopt supply chain best practices as a means to work smarter. Bearing specialists bring their customers a unique breadth of application experience as well as the most innovative methods other companies are using to optimize bearing life cycles, including application assistance, specification, purchase, inventory, use, maintenance, recycling and disposal.

> *From a maintenance-management perspective, my biggest concern is leveraging best practices across our business. How best do we do that? One of the metrics we look at is overall maintenance cost. Our mills with the lowest maintenance cost are our best-run mills. So that's a key metric for overall efficiency. There's a variety of ways [our bearings distributors] can and have helped us, especially with questions such as, are we using the right product in the right situation? What should be our inventory levels? What's critical and what's not critical? They can share best practices without breaking confidentiality.*

5. **Measurable Value.** The need to quantify and track supplier performance is driving bearing purchasers to apply hard metrics to service indicators such as on-time deliveries, fill rates, lead time, inventory as a percentage of sales, cost savings due to inventory rationalization and so forth. Well-defined value documentation of hard and soft cost savings is a requirement of most contracts and service agreements.

   We use PQA (pursuit of quality assurance) metrics to measure any kind of variance. Any rejects, the supplier needs to review, justify and resolve those issues. Quarterly we do an audit with a more macro view. We meet and go through the audit with the supplier. It's up to them to resolve and eliminate rejects so they don't happen again. It's continuous improvement, basically.

6. **Intangible Value: "The Personal Touch."** Bearing purchasers look to their bearing specialist distributors for more than measurable performance. What keeps them coming back is the "intangible" value brought by expert salespeople and other support team members who not only are technical experts in their product area, but also take a personal interest in knowing and anticipating their customers' needs and leading the search for the latest, most effective solutions.

Case study: An Engaged Partnership

Producing automotive parts on a just-in-time (JIT) basis leaves no room for downtime. The company, which uses bearings in both OEM and MRO applications, looks to its bearing specialist for assurance that the parts it needs will always be in stock.

"Equipment reliability—maximizing uptime—is my most critical issue," he said. "We're a JIT facility that's leaned-out to where we can't be down for anything. Bearings play a large role in our equipment, so we pay attention to the basics, maintenance and lubrication, and we have sacrificial bearings that we know will be short-lived and we change them out as needed."

He said he looks to his bearing partner for technical support to help him anticipate possible problems, going into the factory and looking at new production machinery, making a list of critical spare parts and making sure those parts are on the shelf.

"Last Saturday we lost a linear bearing that took us down for 16 hours. The bearing comes from Germany, and we didn't have any on our shelf. Hopefully, this year my bearing supplier will be more aware of our needs and more proactive, to help us maximize uptime."

The company's bearing distributor manages its central stores department, and the knowledge of the company's operations is their greatest strength. "I don't own those people. I consign inventory from them, and they manage other consigning vendors for our MRO supplies. They bring the experience and knowledge we need to be more cost-efficient."

The company doesn't use hard metrics to measure the distributor's service performance, but performance is pretty easy to measure, he said. "I look at, how many times do I walk up to the window and they don't have what I want?"

The bearing distributor sits in on the company's process-optimization team meetings to stay on top of emergent issues in maintenance, process engineering and equipment engineering. "I involve them in problems and challenge them to help me find a better way," he said. "I'm always looking for the best technology, the best bearing for the application. They do go out and try to find a solution for me."

Implications and Recommendations for Action

A recent study quantifying the value of distribution[1] offers an important insight into a shift in perspective on the value of distribution in 2005 and beyond: "Quantifying the value-added services offered by a distributor means to determine a numerical value and express these services in terms of this value. Another reason to quantify is to compare the cost versus benefit of these services. This quantification not only provides a definition of the cost of providing these services and the direct savings associated with their existence, but also the indirect savings in cost, time, effort and synergy."

- Companies that aren't effectively leveraging the value of their bearing distributors to optimize their production/process capabilities, in terms of both direct and indirect savings, are at risk of losing a significant competitive advantage to competitors who are.

- Our study strongly suggests a shift is occurring among bearing consumers in the way they manage their vendor relationships and measure value in both direct and indirect cost savings. The challenge is to find the appropriate metrics – the right tools – to quantify more qualitative measures of distribution value today.

- Are you obtaining an optimal return from your distributor relationships? Evaluate your current supply chain, and ways you can more effectively leverage the expertise that this study indicates bearing specialists consistently offer as a differentiator.

- Identify the critical localized specialist resources that yield high value to compensate for diminished internal resources.

- As most bearing consumers are in early stages of implementing more sophisticated supplier management programs, there is an opportunity to develop better evaluation tools in partnership with bearing specialist distributors to focus on total cost of ownership. Develop tools to better measure direct and indirect cost savings from supplier relationships.

Methodology

This report has been distilled from research conducted by a third-party research firm contracted by the Bearing Specialists Association's Value of Distribution Task Force. The research methodology was developed to identify key customer issues in 2005 and how bearing specialist distributors deliver value in addressing these concerns.

The primary goal of this research is to provide customers of bearing products with insight into how their peers, particularly those identified as innovators within their professions, perceive the critical issues in their industry and how to effectively leverage the value that bearing specialist distributors can deliver.

[1] Quantifying the Value of Authorized Distribution: An Outlook on the Electronic Industry Authorized Distribution Channel, Texas A&M University for the National Electronic Distributors Association, 2004.

The secondary goal of this research is to provide bearing specialist distributors and manufacturers with insight into what leading customers are thinking today. This paper can serve as the basis for further discussion between all members of the supply chain to find opportunities to provide additional value and develop stronger partnerships in the future.

A key component of this research centered on in-depth phone interviews with a cross-section of bearing customers by job function/responsibility, including:

- corporate management
- plant management
- maintenance management
- maintenance professionals
- purchasing/procurement professionals

Industry segments included original equipment (OEM) and maintenance, repair and operating (MRO) customers of various bearing products across a broad cross-section of industries, including discrete and process manufacturing, mining and construction. Specific sub-segments include forest products and paper, food processing, industrial products and machine tool manufacturing, high-tech manufacturing, raw material processing, construction and equipment repair facilities.

A final note: This research was structured to be qualitative by design. Rather than conduct a broad-based survey to yield a list of relative value points in play today, we specifically wanted to go beyond a simple ranking of distribution value and service factors.

We wanted to access what experienced customers of bearings are doing to manage the volatile challenges across many sectors of U.S. industry. Those individuals who make direct and indirect purchases of bearing products generously provided a wealth of information. The interviews were conducted with the explicit understanding that neither the person or companies would be identified. In short, we wanted the truth – their professional views and knowledge about their industry, their internal and external competitive challenges, their supply chain challenges, and their vendor relationships.

Additional interviews for this research included more in-depth telephone and personal interviews with distributors and manufacturers across a range of product sectors to gain additional insight into supply-chain issues.

The Value of Distribution: 2005, Critical Resources for Bearing Distributors was prepared by the Value of Distribution Task Force of the Bearing Specialists Association. The Task Force was chaired by Chuck Kitchen, Interstate Bearing Systems. Members of the Task Force included: William H. Allen, Jr., Allied Bearings Supply, Co., Inc.; Thomas Armold, Applied Industrial Technologies; David Mayer, Kaman Industrial Technologies Corp.; Rob Hamilton, Koyo Corporation of U.S.A.; Kevin Donaher, Loctite Industrial Div. Henkel Technologies; Jan Lindhe, SKF Canada Limited; Randy Bowen, SKF Service Division; Robert Daniel, The Timken Corporation; and Scott A. MacPherson, US Bearings & Drives.

