



The Fine Tuning:

Choosing the Right Rotating Supplier for the Job

You take your industrial company seriously, especially because of the responsibility of each piece of equipment, whether turbines, pumps or compressors, rests in the hands of you and your supplier. Your company needs a reliable supplier to ensure product quality and timely arrival.

When it's time for inspection of the equipment, if parts need replacement, the supplier will stock high-quality items and offer their expertise pertaining to your concerns. And before a piece of equipment takes space in their warehouse, all rotating-related equipment should be tested and maintenance by qualified and thoroughly trained engineers.

Safety precaution is taken pretty seriously with all industrial equipment and the many parts. In this eBook, you will understand the types of rotating equipment, the process and importance of timely testing and repairing these machines and their parts, and why it's imperative to find the right, trustworthy supply company.

The Many Parts of Rotating Equipment

Rotating equipment make up many elements in our everyday life. Engines, compressors, gearboxes and fans all require mechanical moving parts. Because almost every operating machine moves in a rotation, it's important to understand the motive for each part.

Pumps are used in various industries from food and beverage to pharmaceutical. In the petroleum industry, the screw pump is the most common and durable pump because of its ability to pump gelatinous fluids. These pumps are also known for having leaks and lubrication issues after prolonged applications.

Turbines hold the power when it comes to rotating equipment. They assist with the movement of materials with their high power density and speed capabilities. Turbines are often found in part of large components such as fans or compressors.

Because of the heavy-duty workload, they can take quite a beating. The strain on the turbines usually cause loose vanes, impact damage, wear and tear on the blade and bulging shims that cause damage to the downstream blades.

Gearboxes come in many forms such as planetary, worm, helical and spur.

Spur and worm are responsible for reducing large amounts of speed.

Planetary gears provide a higher torque speed while helical gears are less noisy but tend to last longer than others. Should gearboxes become lubricated, imbalanced or have misalignment issues, they are quickly replaced. Gas compressors are composed of four elements; reciprocating, rotary screw, axial flow and centrifugal.

Axial flow diffuses the pressured gas. They have a large number of components compared to the other compressors, which is why it makes them a complex machine that needs to adhere to a strict maintenance schedule. Rotary screws are composed of two helical screws that force gas into a compression and eventually pressurizes the gas into a fine mist.

Reciprocating uses pistons to distribute high-pressure gas. This type of compressor has a long service life and reduced energy and maintenance cost.

Centrifugal compressor supports the use of petroleum, natural gas and chemical processing and can last up to ten years with high-speed operation under great care. Their components are susceptible to wear, which can lead to operational vibrations and higher temperatures and eventually lead to machine failure.

Blowers or fans come in various sizes from axial and mixed flow to centrifugal and are made to withstand high temperatures. While there is a difference between blowers and fans, they are



both used to move a collection of gases with other parts. Blowers produce a higher pressure to low volume, whereas fans push less flow and more volume.

As you can see, each piece plays a huge role in the movement and function of rotating equipment. Any element that is off kilter without proper inspection, can pose a threat to the functionality of the machine and the operator within direct reach.

Testing One, Two, Three

It requires the skill and expertise of an equipment specialist to carefully inspect each part in a rotating machine. Each machine maintenance operator complies a list of questions that point out the requirements for inspection. They'll check for minor repairs and adjustments and correct where needed. The prime responsibility is to troubleshoot construction equipment problems and review the key maintenance strategies that follow rotating equipment.

This inspection process includes checking all rotating equipment and their components to ensure they meet appropriate standards and provide a QA/QC (quality assurance/quality control) service and technical support post equipment shutdown.

These specialists also ensure that procedures and specifications are in place prior to maintenance to taking place and check the electrical wiring and assemblies for proper function and alignment. They manually record and document all procedures before and after checking the equipment and even before it leaves the warehouse of the supplier.

Sturdy alignment and functioning of all assemblies and subassemblies must be check during inspection or before shipment of rotating equipment.

Safety First

You can expect to deal with some pretty hefty and dangerous equipment in the field of engineering. But you're skilled and prepped to take those precautions so accidents don't cause personal injury.

Entanglement is an unfortunate injury that everyone falls risk to, whether at the workplace or not. Long hair and loose clothing are usually a recipe for entanglement, and people should follow a strict dress code when working with such equipment.

Another hazard that accompanies rotating equipment failure is that the inspector overlooks an important piece to the puzzle of inspection. While it may not happen often, a reputable company will ensure that every part that leaves their facility gets tested thoroughly.

It is vital that they follow all rules and instruction when assembling the equipment prior to sale and inspection. Faulty rotating equipment needs to be identified, isolated or taken out harm's way and reported immediately. When you make the final selection of that specific item for your rotating equipment, remember to address any concerns with your supplier.

A good company will put their customers first by asking you questions to ensure your safety.

Supplying Trust, Quality, and Durability

So, when it's time to have an inspection on your rotating equipment or your company is purchasing from a supplier, you expect to have a well-oiled machine ready to do its job. But when it comes to choosing the right industrial supplier for your rotating equipment, it's important to know that not all companies are the same.

From customer service expertise to choosing the correct supplies, you want a company that will leave you satisfied with the purchase. Of course, you would most likely be attracted to the supplier who offers a better deal on your rotator equipment.

It's also important to find reputable reviews and to trust a company that has been in business for a long time. You want to choose the supplier that fits your needs. They provide the equipment and parts to fit your working environment.

A general supplier will most likely carry a wide range of parts but not have your desired part in their warehouse. A supplier that specializes in non-destructive testing (NDT) on the equipment is also a major plus when searching for the right company. NDT consists of a group analysis that evaluates a component without causing damage to the component.

Customer service is another factor in finding the right industrial supplier. Excellent and efficient customer service will assist with finding the best equipment and offer solutions and suggestions.

More importantly, these customer service representatives should have the knowledge and expertise to help you along, even with online purchases.

With a lot of industrial company's nowadays, online ordering makes it simple to shop around and see what's available firsthand. A reputable company provides the convenience of shopping online and over the phone.

As a company, you want your equipment shipped on time, especially if the item is ordered in urgency.



Reliable delivery is also a top priority with a reputable company. When you order your goods, you want to trust that your items will be handled with care, arrive on time, and include your entire order. Damaged goods and items that are on backorder at the last minute are not reliable signs in a company. Word of mouth is a great way to weed out the unreliable companies as well.

When someone brags about a supplier, whether in an online review or face-to-face conversation, this gives you a good indication of the kind of supplier you need and want.

In conclusion, a reputable equipment supplier will mirror all of the above qualities to ensure safety, trust and efficiency at all costs for your company.



The DXP Assurance

Originally founded in 1908, DXP Enterprises stands behind our many abilities to identify with various companies, focusing on technical, product knowledge and MROP supply management. From agricultural to food and beverage, DXP Enterprises knows the demographic to provide reliable solutions for many industrial-related needs.

We respond to malfunction by analyzing the cause and effect and work together to solve the issue. When you're seeking out the right industrial supply company, DXP Enterprises offers safety and technical expertise when you need it.

We pride ourselves on the continuous training that offers our fully-committed staff, excellent customer service and the broad spectrum of products that cover all industrial needs. With a large customer service department, we are able to divide each professionally to focus on the specifics of the customer needs. Each department is skilled and trained to focus on the specific industrial needs.

A variety of pumps make up the world we live in today and DXP recognizes the importance of care and maintenance of each product. We offer prevention and prediction care through a program called SmartServ. This in-depth care follows strict guidelines from our professionals and shows you how to reduce downtime for maximum efficiency in your field.

Upon return, DXP Enterprises also tracks the issues that cause failure within the unit. We offer solutions while carefully documenting issues to prevent future malfunction with your unit.

Exceptional Price

Oftentimes you find a price that is too good to be true. And it most likely it is. DXP will not compromise quality for cost, and in the engineering field, you cannot afford to do this.

We know that costs shouldn't waver when it comes to your high-quality rotating equipment. That's why we've made a way for our customers to educate themselves with tools and literature to answer any questions regarding their concerns or product inquiry.

Efficient Speed

Delivered on time and known for having 24/7 around-the-clock care, DPX Enterprises strives to get your equipment to you without waiting and focus on the needs of your company. And just so you have more than basic product knowledge, our tech experts ensure you are getting exactly what you need before you order.

With over thousands of top-tier MROP products at one of the many locations across the globe, there's no shortage of skilled professionals to give sound advice specifically to your industry.

Award-winning Expertise

With over a century of experience under our belt and identified all over the world, our engineering staff is equipped to service all pump needs. In order to provide custom packages, we use updated technology to ensure that your needs are met.

Our factory-trained technicians are required to adhere to thorough training in order to perform even the toughest repairs. All technicians and staff are also required to participate in ongoing safety training and are fully insured.

Because of DXP's dedication and success in helping companies, we are recognized on all platforms and all over the world.

The Houston Chronicle Top 100 Leading
Companies of 2008 and 2009. They also
recognized DXP as one of the best places to
work with the "Top Workplace" of 2013.



It's no surprise that a company that has provided industrial equipment for over 100 years to be praised for our careful safety techniques and high-quality service day in and day out. In 2007, Bloomberg Businessweek named us "Hot 100 Growing Companies." Because DXP Enterprises has such a high reputation for being reliable, trustworthy, and makes you our top priority, you can expect that your rotating equipment needs will be met at the checkout, no matter the question or concern.

DXP Enterprises strives to provide top-of-the-line industrial products for the growing industrial. There is no shortage of knowledge and training when it comes to the safety of your company.



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