

# The value of OEM genuine parts vs. the cost of generic parts

Seven reasons why stocking and using OEM replacement parts makes financial and operational sense

By Corey Calla, director, lifecycle support team, Intelligrated



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Distribution center and warehouse operators invest heavily in capital projects to satisfy growing customer demand, but often neglect to adopt a lifecycle strategy to realize the true value of that asset over its useful life.

When it comes to unplanned downtime of missioncritical material handling systems, the results can be crippling. Operations come to an abrupt halt, order deadlines are missed and some of that hard-earned customer satisfaction and loyalty is lost.

With pressure to reduce operational costs, it may be tempting to cut corners with non-original equipment manufacturer (OEM) parts. These parts, however, are often risky and can cause expensive and stressful system failure.

In this white paper, we'll compare the value of a preventive maintenance program that includes a wellstocked inventory of OEM-engineered replacements to keep systems running longer, at lower cost and with better efficiency versus the true cost of cheaper "knockoffs" and examine the potential impact of each on operational performance and safety.

## The BIG seven:

#### A case for OEM genuine parts

- 1. Lower total cost of ownership
- 2. Designed and tested to exact equipment specifications
- 3. Revision control based on ongoing research and development
- 4. Compliance with original system and parts warranties
- 5. Expedited identification, ordering, and stocking assistance
- 6. Safety and risk management considerations
- 7. Access to OEM equipment experts

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#### 1: The true cost of ownership.

The "bottom line" and ROI are usually at the forefront of any business decision when it's time to make a parts purchase. Typically, OEM parts have a slightly higher price tag than generic parts. However, true total cost of ownership calculations must compare a part's purchase price, as well as the inherent risks associated with the installation, performance and impact that a non-OEM part can have on the entire system.

A genuine OEM part will install as designed with expert help only a phone call away. It will perform to specification, with no negative impact to ancillary parts. OEM warranted parts are designed to last, meeting the mean-time-between-failure (MTBF) expectations of the operator and manufacturer-recommended preventive maintenance programs.

While these hidden costs and risks may not be obvious at the time a replacement part is purchased, smart operators know that it is paramount to factor the total cost of ownership in any buying decision.

#### **2: Designed and tested not just to fit, but to function.**

OEM parts are engineered to exact equipment specifications to ensure form, fit and function. The parts are then tested for the actual application and use-cycles for which they were intended. All materials used in OEM production are specifically chosen to meet durometer hardness specifications, which is a requirement of high-friction applications where parts interface with one another. OEM engineering that comes with genuine parts results in a longer lifespan and reliable equipment performance, with predictable MTBF and repair/replacement cycles.

You can get lucky. Sometimes a generic part may be purchased and installed without any apparent issues. However, the non-OEM part may be a ticking time bomb because of inferior quality materials or hard-to-detect manufacturing imperfections that virtually guarantee early failure. For example, some non-OEM manufacturers substitute plastic for metal or use substandard metals, which can affect tolerance, strength and material compatibility.

## Hidden trap:

How "saving" money costs a lot

A retailer purchased generic O-bands for their motor driven roller (MDR) conveyor with a savings of \$1,500 on a comparable order of OEM parts. While they may have saved money up front, they quickly realized how hidden costs could accumulate when using inferior non-OEM parts. The generic O-bands stretched prematurely which lead to weak drive and caused carton control issues. The company, unable to correctly identify the problem, called in the OEM for support. The service team needed to make a trip to the facility, as well as extensive adjustments and repairs to bring the system back into spec. Final price of the mistake totaled almost \$50,000.

Damage to ancillary parts connected to or coming in contact with the inferior part along the way can be difficult to detect and correct. Don't let this happen to you!



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Copycat parts may also require modification and additional labor to fit, and once installed may not perform to the exact OEM equipment specifications. This can impact operational performance issues such as ancillary equipment outages. So be sure you are comparing "apples to apples" when it comes to non-OEM replacement parts.

Often vendors label their generic parts as an "exact replacement," which can be misleading as the components may not meet all the OEM lifecycle performance standards. For example, while a generic motor may have the correct horsepower, voltage and mounting, it may not run at the proper nominal RPM. Even if the motor appears to install and operate correctly, it could eventually cause production problems if it runs too fast or too slow.

An OEM part, on the other hand, is going to come with a performance guarantee of meeting the OEM system design and engineering specifications. So, aside from getting a superior replacement part, you can plan and prepare for future upkeep without hiccups in production time and output.

## Sorting out a real mess:

Generic sorter tubes lead to expensive replacement and repairs

Sliding shoe sorter replacement parts must meet precise specifications for reliable operation. A retailer had to learn this lesson the hard way in their largest fulfillment center, which spans 13 football fields in size. Sorter tubes were purchased from a generic supplier, and upon installation the maintenance team realized that the tubes fit loosely in the sorter and fell out easily - a problem that wouldn't happen with OEM tubes. Shoes were also not manufactured to the same tolerance, which caused added bouncing along the sorter tubes as cartons divert.

These parts, along with an out-of-spec I/O power supply, led to several critical performance failures and nearly \$80,000 in replacement and system repair costs. This situation and operational downtime could have been easily avoided with the decision to use OEM parts from the start. Don't let this happen to you!

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# **3:** The generic part may not be the same as the current OEM replacement.

OEM engineers make continuous design enhancements during the life of equipment and systems, and access to these revisions is only available through OEMs. You simply cannot rely on a non-OEM supplier to provide you with the latest version of a part. The risk associated with incompatibility is greatly increased with generic replacements or upgrades on missioncritical applications such as variable frequency drives or software and controls.

OEM customers can also count on suppliers to manage obsolescence. They are notified when a part is no longer available and a recommendation will be made for a replacement. Being able to replace an obsolete part before it fails, or at least to have a plan in place when a failure occurs, is a good preventive maintenance strategy.

## **Environmental factors:**

# Conditions can influence OEM parts specifications

Sometimes environmental factors or local conditions can lead to specific installed parts specifications that only an OEM engineered part can meet. For example, high humidity locations may demand sealing, material changes or other protection of sensitive parts. A low humidity environment may require shielding from static electricity. Generic suppliers would have no specific operational knowledge in order to meet these location-specific parts requirements.

#### 4: Buyers beware! Your generic part might come with a "warranty," but it stops there.

Generic brand warranties can be deceiving. Most non-OEM parts carry a replacement only warranty, which will not cover damage caused to other components in the system.

In contrast, OEMs offer comprehensive warranties with replacement and spare parts; providing more coverage and security. Warranty compliance often requires the use of OEM replacement parts to prevent damage to ancillary parts and systems. If you use nonproprietary generic parts, you may be voiding the system manufacturer's warranty.

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#### 5: The right part at the right time.

Worse than relying on inferior parts is having no parts. When a company is on a tight deadline to source a replacement or spare part, the OEM is well prepared with order histories and installation information, so they know what the client needs instantly.

As a specialized provider of parts for your system, they know what spares to stock in inventory and in what quantities. Reputable OEM service teams can reconcile your recommended spare parts list with your current inventory, provide lead time for just-in-time parts manufacturing and deliver and offer trained technicians to install the parts.

Proper asset management with a customized inventory plan ensures that your parts will be easy to find, order, receive and install with minimum downtime. OEM support engineers and customer support specialists understand the application of each part, and can help you troubleshoot system issues and identify ancillary parts that may be causing problems. The OEM is not just a parts supplier that simply puts items in a box and ships them – they can act as a an extension of your staff, providing you with all of the information you need to make an educated and prioritized parts purchase that fits budget constraints and system characteristics.

Sometimes the situation is too critical to wait for an overnight shipment. The OEM has the ability to see other customers who may have that critical component in stock and coordinate a local transaction to restore production much faster. Lastly, your OEM maintains shipping records for purchased inventory and can notify you of recalls that affect your existing stock. Your OEM loses this visibility when ordering from a local source or generic manufacturer.



# 6: Don't risk an accident due to a poor performing non-OEM part.

Faulty or out-of-spec generic parts can compromise machinery and lead to safety concerns for the operators. Bad or poor performing electrical parts can lead to control failure, open circuits, fire hazards and other potentially dangerous operating conditions. Avoiding a workplace incident also erases the cost of litigation from workplace injuries. By making it your operational maintenance policy to only stock and use reliable OEM-warranted parts, you increase the overall safety of your facility and contribute to positive risk management for workers.

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#### 7: Gain access to the experts.

Dealing with OEMs directly is the best way to handle part replacement and general maintenance needs. By continuing your relationship with the OEM, you can tightly control maintenance and labor costs. Most OEMs have technical support available 24X7 to guide you to the best solution possible and ensure you never take on a problem alone. OEMs will assist in lifecycle planning and provide information so a company can identify "critical spares" in order to balance appropriate part budgets. Instructions can also be provided on how to replace parts and repair equipment in-house, saving time and maintenance costs. Other services available through an OEM include parts and operational assessments, preventive maintenance services and field service to help avoid problems before they manifest as an emergency and affect the business. Oftentimes, more is needed than just a spare part, and that is when the advantage of working with an OEM is clear.

#### **OEM spare parts:** The smart investment

Maintenance managers and purchasing staff can choose either OEM or alternative spares. While the spare generic part may be marketed as "meeting OEM standards" and present an attractive potential cost savings, these same parts may not meet OEM specifications, current engineering requirements, and could even jeopardize warranty compliance.

When it comes to cost reduction, genuine OEM spare parts is not a smart place to cut corners. Remember, built into the pricing structure of OEM parts is warranty, system compatibility and obsolescence avoidance. Investing in OEM mission-critical parts inventory combined with a proactive maintenance program means uptime reliability, lifecycle management, risk avoidance and safety.

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#### The BIG seven reasons why OEM genuine spare parts are the smart choice

**Cost of ownership** – An OEM part will install as intended, perform true to its specified function and provide more predictable operation over time for a lower total cost of ownership.

**Functionality** – Don't be fooled by claims like "meets OEM standards." Go for the genuine OEM part that has been manufactured with exact specifications to both fit AND function as intended.

**Current revisions** – Revisions of parts, control systems and software occur often. Non-OEM parts don't take this into consideration. Make sure you're getting the most up-to-date parts for ongoing performance enhancements.

**Warranty** – Most non-OEM parts have limited warranties, or none at all. OEM parts have comprehensive warranties for the part and knowledgeable staff to provide assistance in warranty processes – and will ensure you stay in compliance with warranty conditions. **Don't get stuck looking for parts** – OEMs know which spare parts to stock, and have them readily available to ship when they are needed.

**Safety** – Faulty knockoff parts can cause damage and increase risk to the facility and operators. Use OEM parts and prevent accidents before they happen.

**Plan for success** – Emergencies cost money. Work with the OEM for planned maintenance and rest assured that you always have the right part with the right advice ready when you need it.

To speak to an Intelligrated OEM support engineer, call 1.877.315.3400.