

## Designing an efficient, timely spare parts program

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When it comes to spare parts two things come to mind, the first one being is the site holding adequate stock levels, the second are they using genuine OEM spares.

### Is it Right and Do We Have Enough?

The efficient running of any site is in part directly related to the correct and adequate holding of stock. A plant's efficiency can be put at risk or compromised due to poor inventory control and the use of non-genuine OEM parts. With the cost of lost production often in the tens of thousands per hour it is more than expedient to keep a close eye on stock levels.

Many sites now run critical preventative maintenance and spares programs in an effort to anticipate part usage and to avoid unexpected surprises. The last thing you want to find out in an emergency or shutdown situation is that the part is not on the shelf or that it is the wrong part.!

The procurement of spares can at times be a difficult task, especially where accurate part information is unavailable (typically more of an issue when the equipment is quite old and records have not been adequately updated). This can result in longer lead times or the incorrect parts being ordered or supplied. The problem is further exacerbated by the number of suppliers any given site has to deal with. These can sometimes be in the hundreds, as a result, poor documentation and labelling can cause increased delays in the warehouse processor tracking the goods, particularly at remote sites.



Figure 1 Installation assistance

In an effort to take the headache out of part supply for maintenance planners and procurement staff, some OEM's have taken the lead and developed site-specific spares lists. These lists simplify the purchasing process, reducing both the risk of receiving the incorrect item and the time taken to procure the part. These lists generally contain information outlining Operational, Strategic and Emergency spares with recommended stock levels and standard lead times. With the current demand in the resources sector at an all time high, lead times on critical items can blow out from weeks to months, this is not something you want to find out at the last minute.

With a host of different suppliers providing parts into any given site, maintenance and procurement staff need to effectively plan their part requirements, ensuring that the plant continues to run at its optimum.

### Is it Worth the Risk?

The question is often asked, "What's the difference?" especially if they are made to the same specifications.

In today's market there are a multitude of suppliers who offer non-genuine spares for a broad range of equipment.

As the age old saying goes, "*you get what you pay for, you pay peanuts you get monkey's*", the same is also true of spares. The pirated part is cheaper for a reason, the quality of the part and the materials used are more than likely of a sub-standard specification, leading to reduced life and potential failure. Many sites who have been convinced to experiment with pirated parts have over time come back to using the genuine OEM article.



Figure 2 On-Site audit

With increased pressure to reduce operating costs, the first place the accountants will look is at their spare parts supply, and this is where the pirates wave their flag. Claims that the parts are manufactured to the same standards and specifications as the genuine OEM article or that they are sourced from the same factory are untrue.

Poor quality sub standard parts that wear out at a much faster rate, and on some occasions lead to a reduction in recovery, often quickly erode what may be initially gained by procuring the part at a lower cost. Even a 1% drop in recovery can have a major impact on the overall bottom line.

Other factors to be considered are the potential cost that may arise from the failure of non-genuine parts, as any damage caused to the equipment would negate any warranty. Also with today's stringent OH&S laws mine managers may find themselves liable if someone is injured as a result of the failure of a sub-standard part.

### The spares wrap up

To keep a site running at its optimum level requires many things to be working in sync. One such thing that has been seen time and again is that **good inventory control** coupled with the **use of genuine OEM parts** can go a long way to reducing a sites exposure to unnecessary down time.

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