



Critical Spares

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Planning for necessary raw materials and tooling is critical for meeting production schedules in our shops. Just as important is planning to have the critical maintenance spares needed to keep our production assets up and running.

In the absence of the immediately needed spare part, downtime results and our revenues decline.

In the presence of too many spares, the organization wastes capital, as well as time, by sorting through spares to look for the needed item. In the area of managing spare parts, abundance can be a competitive disadvantage.

Management of spares is an area that has received little consideration. Setup reduction, 5-S and lean initiatives all seem to have management's attention. But spare parts can affect a business in a number of ways: 1) keeping a company competitive by assuring high rates of uptime; 2) diversion of resources from the company's key activities; and 3) cost to obtain and maintain the spare parts in inventory.

In today's electronically interconnected and overnight-delivery world, it makes sense to divide a company's spares into two categories: those that are within an acceptable delivery window (say 24-hour) and those that are not.

Principle Number 1: If items are available in 24 hours or less, they should not be held in the spare parts inventory at your shop. It is easy (and typical) to look at such items on an individual basis and justify having one or two of them around "just in case." However, it is the accumulation of hundreds of these one or two "just in case" exceptions that is filling our shelves and racks, covering our benches and draining liquidity from our business.

Take a quick survey of only one shelf of your shop's spares. How many of the items can be obtained within 24 hours? How much are they worth? How long have they been in your inventory? How much do they cost your business each month in liquidity and lost opportunity?

We have been using the Pareto Principle (the 80:20 Rule) in our shops for process problem solving. Why not apply this principle to help determine the significant few must-have spares from the less significant many that slow us down and clog our aisles?

The payoff in reducing spares to only the significant few will reward your business in two ways: First, you will tie up fewer dollars for the spares themselves, and second, you will spend less on storing, tracking, finding, moving and avoiding them. These expenses can easily cost your company between 10 and 40 percent of the spares' value each year.

Don't throw out the baby with the bathwater. It doesn't take much

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brainpower to reduce the value of spares inventory to zero. Just reduce the spare parts inventory until you have none. That is *not* the objective. Having critical spares is a key enabler of keeping your company's productive assets functioning and delivering products on time. Having the right spares is a crucial advantage. But how do you know what the right spares are or should be?

Principle Number 2: Create a process to manage your spares.

A process can be as simple as a paper and pencil list, or it can be a sophisticated software tracking system. At a minimum, it will have to identify the spare, its location, its value and its turnover or history (frequency of need), so that you can decide whether or not to replace it immediately upon use or before.

That process should also consider your approach to your business. If you run your shop with just-in-time (JIT) techniques, you may find that such a strategy for spares works for

you. But be certain to build in some room for coping with the unexpected.

Maybe you already have very close relationships with a few key vendors or suppliers, so a vendor-managed spares program might be your solution. Lean is another technique that you could employ. One can certainly see how replacing a spare is a one-piece flow.

Principle Number 3: Match the authority and responsibility with whoever owns your critical spares program.

If your maintenance supervisor is measured by downtime and your purchasing manager is measured by dollars spent, there will be a constant battle over which spares to buy, when to buy them and whether or not they should be kept on site or at the vendor's. Agreed-upon metrics are essential to successfully manage this function.

Machine uptime is the way that our shops convert raw materials into customers' dollars paid to

our businesses. A critical spares program that intelligently manages risk, while ensuring equipment uptime without breaking the bank of liquidity, is something that merits our re-examination.

In the area of managing spare parts, abundance can be a competitive disadvantage.

Not all spares need to be on site. Not all spares need to be on order. But those showstopper spares that can shut us down when they are not available need to be covered by a plan that minimizes downtime and expense for our companies and ensures customer deliveries.

In your company, who owns that plan? When was it last evaluated? Is it still aligned with your current business and operational plan?

Why Join PMPA?

B E N C H M A R K I N G

Measuring your company's performance against "best in class" producers of precision machined products is essential in charting the future direction of your business. PMPA offers cost-effective tools to help manage this critical business function.