Build a cost-effective parts inventory

Save yourself time and money by building the right maintenance parts inventory for your operations. Just follow these seven steps

By MARK NEIDICH

If you think the cost of an inventory is all parts and supplies, think again. Parts are 30% of equipment maintenance costs (not including operating costs). Labor constitutes most of the balance, although miscellaneous costs may be as high as 10%.

These figures do not reflect average downtime of equipment, the time spent getting replacement parts when breakdowns occur or other data which would indicate the effectiveness of the inventory control system.

The carrying costs of an average inventory are about 34% of the total inventory value.

1. Understand the carrying costs

The figures in the chart at left will vary somewhat, depending on your fleet. Accounting figures estimate that it will take between 11% to 15% of a company's annual parts expenditure to support the employee costs. If the annual inventory is $2,500, expect those costs to total from $300 to $375. This includes ordering, receiving, pick-ups and delivery.

UNDERSTAND CARRYING COSTS

The breakdown of a typical inventory carrying cost is below:

Cost of storage, rent, building depreciation, maintenance & repair	4%
Cost of inventory supplies, shelves, bins, record, taxes	1%
Cost of insurance	2%
Employee costs, salaries	11%
Obsolescence, damaged or nonreturnable parts, pilferage, time spent returning parts for credit and warranty claims	5%
Money costs, lack of return on inventory and control investments that otherwise produce income (opportunity costs)	10%

Support dollars for shelves, heating, lighting, telephone and vehicle should be 25% of the on-shelf inventory. For a $2,500 annual parts inventory, turned over six times per year, this would give $416 on-shelf maximum ($2,500/6).

2. Choose the right parts

New parts — Factory manufactured parts are usually the highest quality, best fit, longest warranted and most expensive. Aftermarket manufactured parts can be as good as factory manufactured ones, but are often the equivalent of rebuilt parts, and sometimes worse.

Rebuilt parts — These parts have been reconditioned and tested. They are 30% to 50% less expensive than new parts. In most cases, you can get good service from such parts, but they have been used and therefore, to a certain extent, are fatigued. Although they are less expensive than new parts, the service life is considerably less.

The cost to consider here is the repeat labor cost of installation associated with the shorter component service life. One rule of thumb seems to cover most rebuilt parts: They make sense when you can expect to get 75% of the original life out of the rebuilt unit, but at 50% or more below the cost of a new one.

A major drawback of a major use or rebuilt part is that the components don't wear at the same rate, thus increasing the frequency of unscheduled repairs, since the unpredictability of the parts makes scheduled maintenance difficult.

Premanufactured parts — These are rebuilt parts, repaired to original factory specifications. They cost more than rebuilt, but less than new. Again, labor costs are a significant consideration.

Your goal should be to plan for scheduled repairs, thus saving the extra cost inherent in unscheduled repairs. Good quality parts replacement helps you reach your goal. Poor quality parts means more frequent failures and low equipment availability.

3. Understand price vs. cost

Too often, price and cost are used interchangeably and in error. *Price* is what we pay in dollars to acquire a product or service. *Cost* takes into consideration all the factors that add up to return on investment. We can spend a varying number of dollars on similar types of products, but real costs have a wide variation depending on the benefits we receive in terms of life, economy and quality of performance.

Ease of installation and frequency of service, labor required and safety are only a few of the considerations in determining cost. In essence, if we are to justify the high initial price of a product, we will have to do so on the basis of its cost.

4. Balance inventory vs. downtime

Anything that can be done to reduce the spare parts inventory without sacrificing equipment availability reduces your costs. However, as equipment availability increases, inventory costs rise sharply. If a large inventory is aimed at having many vehicles available, cost reductions just won't happen (although downtime costs drop and maintenance and labor costs remain about the same).

Parts should be replaced in inventory to minimize equipment downtime. Because of the cost of warehousing and maintaining our inventory, the best theoretical policy would be no inventory at all. But this is unrealistic because we know we can't get parts instantly.

5. Buy wisely

There are several categories of discounts available to fleets. Most owner/operators don't know what sort of discount they can reasonably hope for or how favorable each one is.

Fleet — This is the best price small operators can obtain with no inventory. It usually runs 5% off walk-in prices.

Jobber — If you are going to stock some inventory, this category will give you 15% off.

Distributor — This price is 25% to 35% off counter, but will constitute a $2,500 to $3,000 monthly purchase of inventory.

Manufacturer — Purchase from the manufacturer usually is only possible when it is a fairly small company, but the manufacturer can offer 50% to 75% savings. This would be vehicle parts only. Small equipment manufacturers' parts usually will be higher than aftermarket suppliers.

Basic Items to Stock

Oils:

Engine — Universal fleet oil 15W-40. Uses from small four-cycle to heavy truck.

Automatic transmission fluid — Dextron III/Mercon Universal ATF.

Hydraulic — Hydra/Trans Universal in all AW32 through AW68 and tractor transmission oil.

Note: Most small equipment hydraulic systems call for engine oil 10W-30, 10W-40 or a synthetic.

Miscellaneous supplies: Nuts, bolts, washers, pin clips, clamps, electrical terminals, wire tape.

Parts: Relative to your brand of equipment, your dealer will be able to help you in the most commonly used parts to stock.

Note: Small equipment — backpack blowers, string trimmers, hedge trimmers, etc. are units that you can double-up on to allow rotation for repair and maintenance. Also, this will give you extra equipment for weather-related increased production.

6. Control your inventory

All inventories need some type of control system. The simplest system would be to restock when the bin is empty. This system works poorly because it leaves you without parts when you most need them.

Establish an economical quantity that works for your operations. This will reduce the cost of purchase-order transactions, while also leaving you with inventory.

7. Understand volume

Look at the item cost vs. the inventory volume. Fast-moving items will account for 65% of your inventory. This is where you should concentrate your purchases and management to reduce downtime or out-of-service units (which are often caused by inexpensive parts).

Although oil filters and lubricants are not considered parts inventory, they are part of the purchased inventory and vital to your truck and equipment operation. It is these items that will give you purchasing power at a warehouse distributor and allow you to start price negotiations to reduce your cost on all items purchased there.

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