

How often is the repair stopped? By Joel Levitt

Next time you are in the shop look around and ask around, how many jobs are interrupted due to the lack of something? The “something” could be a spare part (the most common), a special tool, a piece of equipment, a manual with critical settings, anything. Is this a common sort of occurrence?

We call all these things essential for the maintenance job -resources. There are other resources too, such as labor with certain skills, bays (places to work), certain capacity and size lifts, tire machines (in a fleet/mobile equipment garage) even space out in the yard. Anything needed to do a job is a resource. Missing any resource means that either the job has to be abandoned, the job is delayed, productivity is trashed or the mechanic will have to improvise to get the job done.

The last choice, improvisation is wonderful in a comedy club or the theater but potentially deadly at 65 miles an hour down a dark wintry interstate. Of course many improvisations work out quite well and we are rightly proud of our abilities in that vein.

If your shop is on top of things, you interrupt (due to a lack of a resource) jobs occasionally. Most interruptions occur when you are surprised by the extent of the damage you found after you started the job. Most jobs are scoped by the mechanic, service writer or planner and the materials are determined to either be in stock or they will be delivered in time. It is essential to get this right or you'll be spending most of your time spinning your wheels, working very hard and not getting a lot done.

Here is a list of the resources needed to do all different kinds of maintenance jobs on both mobile and stationary equipment.

- Person(s) with the right skill(s) to perform the job that has the physical and mental aptitude.
- Safe Job steps
- Correct parts, materials, supplies, consumables for the job
- Correct special tools
- Adequate equipment for lifting, bending, drilling, welding, etc.
- Identification of Hazard and mitigation including Personal Protective Equipment (PPE)
- Proper permits, lock outs (more important on factory equipment)
- Custody and control of the asset
- Safe access to assets (decontaminated, cooled down etc.), safe work platforms, and humane working conditions
- Up to date drawings and wiring diagrams and other information
- Proper waste handling and management

Scheduling is the key to smooth operation

One solution is to put the job and its resources into time. Creating a schedule is the basic tool of any shop manager to manage resources. The schedule displays the status of all the resources and moves the resources toward a particular time and place. Of course you have to have a list of all the resources needed by each job. The place for this is the repair or work order.

Author in front of a big dragline in Ft. McMurry, Alberta at Syncrude (mining and refining tar sand)



Of course it is not just making a schedule that makes the big difference. It is using the schedule as a reminder system on steroids. The schedule reminds people that if the job needs a man lift or a special ladder/platform (and you only have one) to be sure to not schedule them at the same time.

The schedule also alerts management that the unit to be serviced had better be available at the scheduled time. This reminder system extends to each of the resources mentioned previously. A great supervisor (or planner, scheduler, service writer, almost anyone) looks at the schedule and looks at the resource requirements and makes sure the resources converge on the job in time.

People think that planning (identifying the resources), coordination (making sure operations is in alignment about what jobs will be done when) and scheduling (putting everything in time) requires a huge bureaucracy. Actually it adds about 5% of the job duration and saves as much as 50% in execution time.

It is funny but as a percentage planning and scheduling saves more time on shorter jobs. If

you spend 30 minutes waiting for a tool on an 8 hour job that is one thing but the same 30 minutes on a 30 minute job is a very large loss.

The focus is on the basics. You can get 80% of the benefit from effective planning and scheduling from spending just 25% of the money. Focus on those elements that are causing you the most pain.

Are you weak on getting the unit when you are scheduled to fix it?

Is the problem written on the work order causing wasted steps?

Are parts an ongoing problem?

Do you have frequent shop floor conflict over specialized tools or specialized skills?

When you focus your solutions on your areas of pain while keeping the big picture in mind (of trying to identify resources and then making sure everything happens in time) your maintenance operation will run smoother. I promise!