

Maximizing Your Equipment

By Jim Burke

These days the trick to maximizing your equipment is to know when to repair it and when to replace it



This Pistorius EMN double mitre saw is in good shape despite heavy use. For saws, the most common replacements involve motors, spindles, air cylinders, and electrical components. Since speed and accuracy are key factors for a saw, it should be replaced when it can no longer provide consistently fast, accurate cuts.

In today's business world, it's important to get the most out of your framing equipment. Sometimes that means getting the most out of your current equipment, and sometimes it means replacing it with newer models. Maintenance is usually a low priority, but when someone in your company tells you there's a problem with the machinery, it suddenly becomes much more important. The challenge is, how can you and your people make sure everything continues to run in tip-top shape while making sure that your business has the reliable equipment it needs to meet the demands of your business—now and in the future.

To some people, maintenance is an after-thought; to others it's a golden fix-it. In fact, maintenance simply means doing the right things to keep a machine running at its best. It's not a magic bullet, but it is a necessity for low-cost ownership of anything mechanical. A car needs oil changes, tire rotation, and minor adjustments over time.

Production framing equipment needs similar care. If routine care is overlooked too many times, mechanical things in your production line break down. And they can wear out prematurely. It's all too common to expect machines to last forever with good maintenance, and sometimes they seem to. But there are many times when you're simply better off replacing old equipment than to keep fixing what you have now.

If your production area has some slow periods from time to time, that's the perfect time to have someone come in to look over and adjust your machinery and make the minor repairs that need to be done. They can check up on the health of your equipment without being in the way of that big job that needed to get out the door yesterday. That someone could be a repair service technician from a private company like Ultramitre or from one of the manufacturers that sold you the equipment, such as ITW/AMP, Pistorius, Valiani, Wizard, Gunnar, or CTD. Any number of other companies have service technicians on the road. Call and find out when they can schedule service calls now, when their schedules are more open. When business gets going again, they won't be as available.

Keeping Things Going

So what kinds of things can you do to keep your machines running beyond the usual maintenance techniques? One very important step is to have your employees do an evaluation of all your machines. Make a list of what works well, what works poorly, and a wish list for replacement or repair. Include things like air guns, compressors, joiners, saws, mounting equipment, shrink-wrap equipment, carts or wagons, air line connections, and even work tables.

Once you have this evaluation in hand, you'll be better able to set priorities. If you have some downtime coming up, you can also use that period to schedule equipment maintenance. The evaluation will also help you see which pieces of equipment might be nearing the end of their useful life and those that are just in need of some repairs or even a tune-up.

Compressors

Do you have a few extra compressors laying around for spare parts? Maybe rebuilding one of those would be less expensive than buying a new one, and it could go into service whenever it's needed instead of using its parts to repair another on-line unit.

I recently rebuilt a compressor for a customer that had a blown pump. The rebuild with labor was half the cost of a new compressor. While the pump had run its course, the motor and tank were still viable. Pumps are easy to buy from supply houses and fairly easy to replace. This assumes that the compressor is at least 3hp and costs somewhere around \$800 or more to replace. A small portable compressor is generally not worth rebuilding because of component costs and labor.

Also check air line connections, making note of which ones are leaking. Fix those as quickly as possible to save money. Maybe your compressor has been running itself to death because it only has rubber hoses to supply air to all the equipment. Now could be a good time to create a header system with pipes.

Underpinners

Most joiners wear out their driver blades, air valves, foot pedals, or air cylinders. Sometimes computer-operated units burn up a mother board. The decision on whether to fix a joiner or replace it is usually a matter of age and the model you have. If your joiners are old style—manually operated and on their last legs—it might be cheaper and wiser in the long run to replace the unit(s) with modern computerized joiners rather than fix the old ones again. The newest computer-assisted joiners can increase production by 30 to 100 percent, depending on the equipment you've been using. A new machine could pay for itself in labor savings very quickly.



Compressors that are rated around 3hp or more are often worthwhile to rebuild, such as this one that was returned to service with a new pump.



Although they are well used, these Fletcher-Terry wall cutters can be cleaned up and rebuilt fairly quickly. Wall cutters most typically need bushings, springs, clamping handles, and other worn parts replaced. Wall cutters are well made, and the structural members would have to wear out before overall units would need replacement—or if newer and heavier models would be needed to handle larger production workloads.



A roller gluer, such as this Potdevin model, most commonly needs repair or replacement of motors and gearboxes. Sometimes the cast "ears" or feet on a machine can be broken, but these can be welded back on. And if an operator forgets to clean the machine after use, the glue can harden in the machine and will need to be chipped out.

And if you do buy a new one, sell the old one. Everyone intends to keep their old equipment around as spares just in case. The “just in case” almost never happens, and you will be taking up valuable floor space. On the other hand, if your machine deserves to be rebuilt and you can't do it yourself, call your distributor or manufacturer to see if it can be rebuilt in the factory. With the slowdown in business, the work might be able to be turned around faster than you think right now.

Double Miter Saws

Most times you should rebuild a saw by installing new air cylinders, spindles, belts, or pivot bearings. If the castings are still good (no cracks or breaks), then it is generally better to rebuild the saw—assuming that you use heavy-duty models like Pistorius, CTD, ITW/AMP, Brevetti, Cassese, etc. Maybe the measuring scales are hard to read. Replace them. Every company has replacement parts for its saws. Are there knobs that are missing? Special screws that are lost? Replace them with factory original parts.

If a saw has been a thorn in your side because it hasn't been making accurate cuts, then trade it in for a new one. Accuracy and speed are the keys to the efficient operation of a production saw. If your saw is not performing as it should and all your attempts to correct the problem haven't worked, then replace it. Not doing so is costing you money. Slow, inaccurate equipment costs you time and money in the long run. It could be time for an upgrade to a bigger faster saw. Perhaps you don't have the best saw for your production needs. Check into which saw would be right for your business, either as an addition or as replacement for your present one.

Mounting Equipment

If you use a heated vacuum press for mounting, check out the heating elements, the clamps that hold the top down tight, and the lifting cylinders. If you have hot spots in the platen (and it's causing problems), you might need to replace the heat source. The hold-down clamps can be adjusted, but if that doesn't work, replacing them isn't too difficult. Just get replacement parts from the manufacturer. The same holds true for lift cylinders. Rods to prop up the top aren't acceptable at a production facility, and it's easy enough to buy new cylinders.

Roller glue systems or heated laminator-rollers can also be rebuilt or replaced. Make sure they are working properly before the busy season starts. Roller gluers are expensive to replace, so if you have a broken casting or a minor problem on your present system, get it welded, brazed, or whatever it takes to put the unit back in working order. It is almost always less expensive to repair a break than to replace the whole unit. On the other hand, if your mounting department has been holding up



Because of heavy use, this Gunnar CMC could use a new cutting surface and nylon feet for the cutting head. As with other machines, CMCs need to be maintained for proper cutting. Production facility staff should be able to do most of the repairs needed by these machines. If problems with the electronics arise, however, a call to the vendor is usually in order.



Computerized joiners, such as this ITW AMP unit, typically last a very long time when maintained. The most common items that need repair or replacement are clamp pads, air valves, foot pedals, and nail register ("L") blocks. Replacement with a new model is most common for underpinners that aren't fast enough or aren't automated.

production because it is too slow, now would be a good time to review what you can do to speed things up. Perhaps a new piece of equipment is just the answer to your mounting problems. A mounting machine you don't have at the moment could cure your slowdown.

CMCs and Wall Cutters

CMC machines have become a necessity in production facilities everywhere. Do you still have an older, slower machine that barely keeps up with your production needs? It could be time to upgrade to newer and faster units that are now available. If your cutter(s) work just fine, you're probably having regular maintenance done. If not, a CMC needs a review like everything else. Do you have a replacement foot for any that wear out? Do

you stock adequate blades so you don't run out? Do you carry spare belts and cables if needed? With CMCs you know very quickly if something isn't working correctly, so it's more a matter of keeping on top of any problems on a weekly basis.

Wall cutters can also wear out. They can be rebuilt by replacing bushings, bearings, and handles, but in the end they wear out. Today there are more models to choose from, with more features, automation, and flexibility than ever. The new style cutters also appear to be heavier for more production capabilities. They cut more types of board and thicker materials than ever before.

Equipment Planning

Now is also a good time to evaluate your equipment and make decisions on future purchases or repairs. By reviewing now, you might be giving yourself some extra time to prepare. Be efficient. Get air guns rebuilt if you find them laying around and not working. Replace small items that are needed on any machinery that plays a key role in your production. Plan for what you will need later. Buy now if you can afford it when deals abound. Or you can schedule to buy later when the need is greater and sales have picked up.

Equipment Layout and Review

Floor plans can be redesigned and new equipment layouts can be implemented during slow times. Moving tables and equipment from place to place might be easier during such periods. Don't forget that getting the most out of your floorspace can be as important as making the most of your equipment.

Check out every aspect of your operation. Do it as though you were going to move your business to another building. This will give you new insight. Do you have too much old equipment around not being used? Do you have materials stockpiled that don't get used? Do you have assets that can be sold because you never use them? Obviously, this can go far beyond equipment, but it's important to look closely at your equipment needs because of the capital cost and the strong impact that breakdowns can have on your business. ■

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