

# That Which Can Go Wrong, Will Go Wrong

The importance of harboring an effective maintenance program.

We were both exhausted, the plating company's vice president of operations and I were, after days on end of working to solve his problems. His operation was significantly behind on orders to one of his most important customers. Other customers were screaming for parts, calling several times each day for updates and even threatening to take their business elsewhere. His plant had been running around the clock, all week long. He was pushing his equipment and his team members to their limits in an effort to get ahead ... and then it happened.

As we stood side by side on the shop floor late one hectic night, his rack plating line stopped suddenly. Members of his team began rushing about in frantic attempts to identify the problem—and soon they did. A hydraulic hose necessary for the line to lift racks from tank to tank had failed in a catastrophic fashion, emptying a hydraulic reservoir of its contents and taking the machine down hard for at least a shift. What could be worse?

The answer came to us not long thereafter. The operation had two lines that it absolutely couldn't do without, and the hydraulic fluid that leaked from one of the two lines didn't end up on the floor. Instead we learned that the fluid

had leaked directly into the plating tank of the other critical line rendering the second line completely inoperable. Total. Nightmare.

This real world example demonstrates what I have come to realize in nearly two decades of working in and with finishing operations. Second only to shop floor leadership that truly

internalizes the key role that throughput plays in the success of a finisher, a fully effective maintenance program and staff is the most important factor separating world class finishers from average ones.

Thoughts go back to a plant leader who, when unplanned equipment downtime resulted from an equipment failure used to shake his head and say, "Murphy did it." In this case Murphy, the pretend culprit owing his identity to Murphy's Law—that which can go wrong will go wrong—caught the blame when really bad things happened and nobody wanted to take responsibility.

Leave Murphy's reputation intact, as the blame for the lack of an effective so-called preventive maintenance program should not be his. I add the words "so-called" to

accent my distaste for the term preventive maintenance in the first place. Aside from the fact that nobody seems to know if it should be pronounced "preventive" maintenance or "preventative" maintenance, (both are grammatically correct, by the way, though I use the former, shorter version in the interest of efficiency. Why add a syllable when one

doesn't have to?) what is preventive maintenance anyway? Shouldn't all maintenance be preventive? Unplanned repairs, fire-fighting and the activity surrounding a crisis related to failed equipment, often referred to as "maintenance," don't seem to me to be maintenance at all, but instead are examples of what can happen when we don't maintain equipment in an adequate manner.

Though I digress, the point should be clear: blaming dumb luck or misfortune for equipment downtime serves to trivialize not only its preventability, but its major adverse effects on the rest of the business. Consider that ineffective maintenance increases labor cost, as team members stand around or seek non-value added work to fill their time while equipment is down. Morale suffers when employees who are sent home on a Tuesday due to an equipment issue must return to work on a Saturday, when they could be enjoying a family picnic or a child's soccer game.

Poor maintenance and associated process control or equipment issues result in quality problems and late customer orders, jeopardizing customer satisfaction and long-term relationships.

Acute equipment failures, the solutions for which are outside the qualification of the maintenance staff, often require the attention of outside contractors, at emergency rates, adding cost and stretching out the time a piece of equipment is down.

Poorly maintained equipment presents environmental risk, such as the spill that can result from a failing process tank, or the potential effects of an upset to the waste treatment system.

More seriously, equipment not maintained in proper working order can pose a safety risk to team members.



**MATTHEW KIRCHNER**  
Managing Director, Profit360, LLC  
mkirchner@profit-360.com

**Blaming dumb luck or misfortune for equipment downtime serves to trivialize not only its preventability, but its major adverse effects on the rest of the business.**

All of these factors serve to highlight the critical importance of having the right person in the maintenance technician role, yet very few finishing operations do. Perhaps this stems from the wide range of aptitudes required of an individual in this role. An effective finishing operation maintenance technician requires a working knowledge of hydraulics, pneumatics, programmable logic controllers, industrial process control, electrical and mechanical systems, heating, ventilation and air conditioning and, in some cases, even robotics and engineering.

So it is that competent maintenance technicians likely aren't exactly knocking down the front door looking for employment. With the exodus of skilled trades people from manufacturing—in the form of retiring baby-boomers with their new-found confidence owing the rebound of the stock market from the crater in which it found itself late last decade—the shortage of maintenance technicians is becoming even more intense.

For the reasons noted previously, though, their scarcity should not dissuade a finishing operation leader from seeking a capable technician. If your operation already employs an effective technician, hold on to them for dear life. If not, recruiting an experienced technician is an option, though perhaps an even better one is encouraging an already trusted employee to advance their career by gaining necessary skills at a local technical school, many of which offer training in applicable disciplines.

If your operation lacks an adequate maintenance program or team, the time to act is now. ■■

#### LEARN MORE

##### Kirchner: The Complete Works

Can't get enough of management column writer Matt Kirchner? Read about what Disney World has to offer surface finishers, the lessons Subway teaches us about lean, the top 10 things you should never do at a trade show, and more. Check out our whole library of "Never Finished" columns.

[short.pfonline.com/NeverFin](http://short.pfonline.com/NeverFin)

## WWW.METCHEM.COM

Visit Our Website or

Call (216) 881-7900

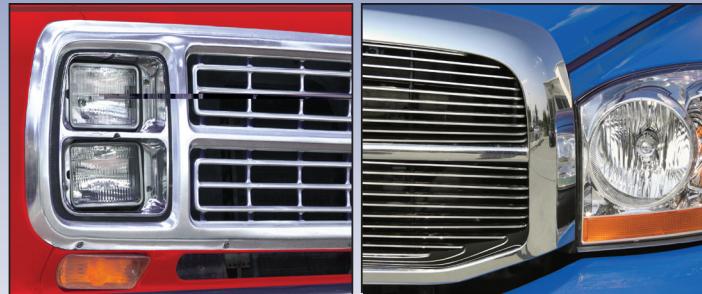
New and Used Waste Treatment Equipment, Plating Equipment, Filters, Filter Presses, Anode and Filter Bags and Cloths, Clarifiers, Sludge Dryers, Atmospheric and Thermal Evaporators

We

**BUY - SELL - RECONDITION**

**Used Equipment** "Since 1958"

# For 40 years, we've been changing plating industry expectations.



## DECORATIVE FINISHING EVOLUTION

Now we've brought our tradition of innovation to decorative finishing. Introducing our NiCOL™ and TriCOL™ product lines. Nickel and Trivalent Chromium plating will never be the same.

Change is a beautiful thing!

**COLUMBIA®**



**CHEMICAL**

*Celebrating 40 years*

100% Employee-Owned  
[www.columbiachemical.com](http://www.columbiachemical.com)

1000 Western Dr. • Brunswick, OH 44212 • 330-225-3200  
email: [info@columbiachemical.com](mailto:info@columbiachemical.com)