BUSINESS spotlight

BY LINDA CASATELLI

Environmental Regulations: A Double-Edged Sword for Metal Finishers

Successfully facing regulatory pressures means turning challenges into opportunities.

Servicing the automotive industry has been a challenge for surface finishers for many years now as the industry faces increasing loss of revenue while market share continues to erode to foreign competitors. This fierce competition has made cost cutting a way of life. Simultaneously, the increasing number and stringent nature of environmental regulations have placed an additional strain on the automotive industry as a whole and, in turn, on surface finishers serving the industry. Compliance with new regulations means additional costs and may also mean changes in procedure and equipment used.

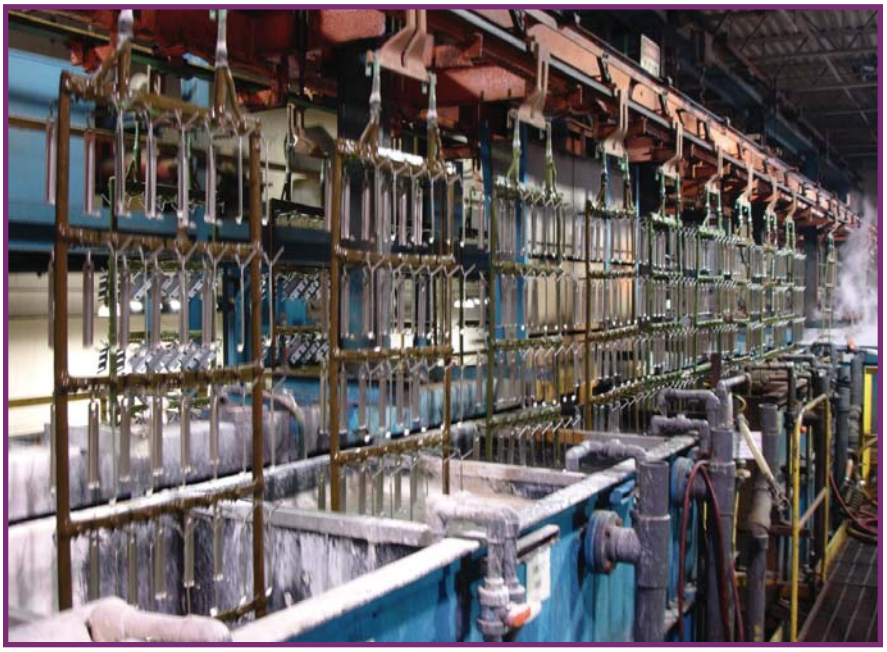
Historically speaking, the drivers for many of these regulations began in Europe and Asia with their new environmental directives aimed at the automotive (and electronics) industry. How does this affect metal finishers? Simply put: RoHS (Restriction of Hazardous Substances) restricts the content of certain toxic metals, including lead mercury, hexavalent chromium, cadmium, and certain organic compounds; and the ELV (End-of-Life Vehicle) Directive limits the amount of polluting metals that may be contained in vehicles to minimize the pollution hazards caused by the recycling of their components, primarily the hexavalent chromium content in automotive components. When car components are recycled, the hexavalent chromium becomes sludge and must be disposed of separately at significant additional cost. It did not take long before the United States Environmental Protection Agency followed suit.

In the face of all this, the $64,000 question is: How are surface finishers coping with the pressure? Some see it merely as a constant challenge, while others view it as an opportunity to refocus their business, convert to newer and more efficient processes, and/or expand into new market areas. Following are several examples of how finishers are responding.

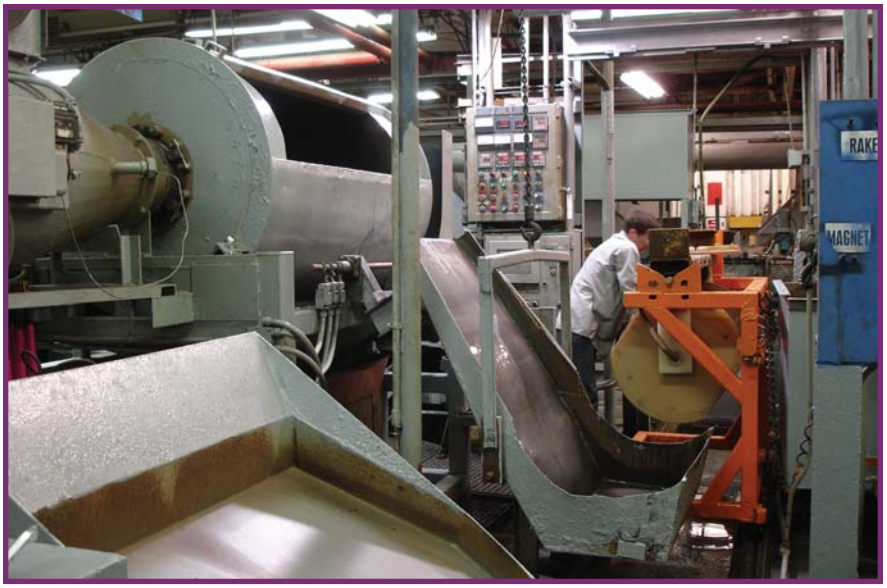
Professional Plating (an Endries company) has been serving the automotive industry for more than 27 years. The Brillion, Wis.–based firm provides Tier 2 suppliers with e-coating, plating, and powder coating services. Whereas many companies have seen their business move offshore, Professional Plating has seen its business grow over the past three years. Not because the company is unaware of the constant downward pricing pressure, but because it has focused on quality and service rather than price. "We do not want to partake in commodity finishing," noted Larry Dietz, general manager. "Our goal is to provide more value and more services to set us apart and not play in the commodity game."

Finishers heavily leveraged in the automotive sector are especially impacted. For Cadon Plating in Wyandotte, Mich., the automotive sector also represents a significant percentage of its business (95%), so increasing environmental regulations are an ongoing challenge. The main issue is the additional cost of the new trivalent chromates, which are seven to eight times more expensive as the older versions. "Besides additional cost, the new trivalent chromate can be more difficult to use and monitor," noted Al Ensign, vice president and general manager.

Others, including Cadillac Plating



Cadillac Plating responds to customer resistance to increased costs by educating clients on the specifics of the zinc coating process.



By specializing in a variety of finishing processes—electroplating, mechanical plating, and dip-spin coating—Cadon Plating strives to remain successful.

(Warren, Mich.), attest to the cost factor as it relates to regulations. "It is not a challenge to meet the new requirements, but rather the increased cost that causes concern," said M. Ahmed, vice president. Cadillac Plating, which is also a large supplier to the automotive industry with 99% of its business in that sector, has found that automotive customers are extremely reluctant to pay additional costs. After all, automotive suppliers are also under price/margin pressures. Because competition is so fierce, surface finishers that raise prices often risk losing customers. Unfortunately, this creates a dilemma: risk losing business in the short term, or risk going out of business in the long term because of the decrease in profitability. One of the solutions for Cadillac has been to educate the customer so they understand that zinc coating is a costly process. In addition, Cadillac has met the challenge with process innovation and automation, and a focus on quality and service.

For many finishers, maintaining profitability in the face of pricing pressures may actually entail increased spending. Bob Burger, CEO of KC Jones Plating in Hazel Park, Mich., believes the new trivalent finishes not only mean additional cost but also new, upgraded equipment to process the parts. "We now have to run two separate lines to accommodate both old parts and the new ones, which is even more expensive," he said. In addition to its primary plating facility, KC Jones Plating operates an adhesives and sealants plant in Warren, Mich., and a subsidiary, C & R Plating in Columbia City, Ind. According to Burger, automotive customers represent 85% and 35% of the business in Michigan and Indiana, respectively.

Interestingly, some finishers say they have not been greatly impacted by some of the regulatory pressures others face—at least not yet. Addison, Ill.–based SWD, Inc., is one of them. "We deal in black oxide, which is not affected by the current regulations," said Rick Delawder, president. That is one of the reasons why his firm—which also offers zinc-phosphate coatings—tries to keep on top of the upcoming regulations. Ultimately, Delawder feels that it is almost inevitable that one day his products may also come under regulatory scrutiny.

SUPPORT FOR INDUSTRY

The key to coping with the emerging regulations, finishers and industry observers say, is to stay abreast of the regulations coming down the road and preparing for them. Many surface finishers are fortunate in that the National Association for Surface Finishing (NASF) offers both abundant and valuable help and assistance. One of the organization's key programs is the yearly Washington Forum, which focuses on environmental regulations that are on the horizon and what those regulations could mean for surface finishers. In addition, there are numerous regional and local meetings that provide information on upcoming legislation.

Another element is the lobbying efforts that the association conducts before legislation becomes set in stone. It has developed good relations with both OSHA and the EPA over the years, which has helped to modify upcoming regulations and lighten the burden on surface finishers. When OSHA was working to lower the chrome pel limit from 50 micrograms per cubic meter, it originally aimed to make the new level one microgram. NASF spent more than a million dollars to fight that limit and succeeded in getting it set at 5 micrograms per cubic meter.

"While that limit is still high, we considered it a victory," said Ray Lucas, current NASF president and head of Valley Chrome Plating, a Clovis Calif.–based finishing firm. Lower than five might have meant mandatory scrubbers or hepafiltration, and that would have created a tremendous burden, especially on the smaller members, observers say.

Air emissions and waste removal are constant topics under review by the EPA. The Policy Group has expended considerable time educating the EPA on what emissions were expected during surface finishing processes so that reasonable limits could be enacted in future legislation. One of these efforts resulted in a revision of the definition of solid waste.

"Currently, wastewater sludge is considered hazardous waste, which incurs considerable expense for disposal," noted Jeff Hannapel, a principal with The Policy Group, the Washington, D.C.–based advocacy group serving the interests of the metal finishing industry while edu-

cating lawmakers. The revision not only allows recycling of such sludge, but has removed the hazardous label to make it easier and cheaper to recycle.

Another effort involved perfluoralkyl sulfonate (PFAS)—an ingredient in 3M's Scotchgard that found its way into groundwater. PFAS is also used as a fume suppressant by metal finishers during the manufacture of trivalent chromium. Due to the efforts of The Policy Group, the metal finishing industry was allowed temporary use for five years.

Finally, The Policy Group is involved in the Future Finishing Project, which identifies technical, regulatory, and economic trends so that the surface finishing industry can prepare for future developments. Moreover, the firm provides ongoing communications via monthly Washington newsletters, website updates, and articles in the trade press.

SHORT-TERM OUTLOOK

While both environmental mandates and competitive pressures will continue to challenge finishers—particularly those based in North America—many believe prepared, business-savvy finishers can not only survive but thrive. (Surface finishers have noted that compliance with the environmental regulations account for approximately 25% of their budget.) On the environmental front, one of the keys to success is preparedness. In other words, staying attuned to upcoming legislation and preparing for it before it becomes compulsory.

Cadon Plating is currently providing trivalent chromates, but feels that one day these, too, will become an issue. Company principals cited a survey claiming that the trivalents oxidize back into the chromates that currently face regulatory scrutiny. What might be the solution? "Organic finishes," Ensign noted. Cadon presently offers two such products via supply partnerships with Magni and Metal Coatings International. Both products are described as "zinc-rich paint that is chrome free."

Professional Plating made a $1.5 million wastewater expansion in 2001—years ahead of the rush toward more stringent compliance measures.

For Cadon Plating, which specializes in a variety of finishing processes—electroplating, mechanical plating, and dip-spin coating—success lies in the constant pursuit of efficiency and quality. The company claims it was one of the first platers in the country to achieve the TS16949 certification—the next step up after QS90000. This certification forces companies to look more closely at everything they do, with the goal of improving each facet of the process. Moreover, through its diverse service offerings, the company promotes one-stop-shop services to customers.

Others are also thinking proactively. "Our company has been progressively growing by looking ahead and meeting needs before they arise," Professional Plating's Dietz added. "The association has helped us to do that." In a clear example of anticipating change, Dietz noted that Professional Plating made a $1.5 million wastewater expansion in 2001—years ahead of expected increases in capacity and well ahead of any efficiency concerns. The company is also currently pursuing F019 delisting and working with the State of Wisconsin on becoming part of its DNR Green Tier Program for Environmental Stewardship.

Looking even further ahead to a brighter future, Professional Plating is adding 42,000 ft^2 to its 85,000 ft^2 facility and investing $1.7 million in new plating equipment along with the building space. "We are looking past any economic slowdown to come out way ahead on the other side," Dietz said.

BIO

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