Benchmarking Metal Finishing

Over the past 3 years, working with the Metal Finishing Strategic Goals Program, the NMFRC has developed and honed a technique that can be applied to your shop. This methodology shows mathematically, how your shop compares to others. You can use this information to identify problem areas and save money. Our tool: **Benchmarking Metal Finishing**.

The NMFRC has collected data from hundreds of metal finishing companies of all types and sizes across the U.S. that includes both job and captive shops. Using this extensive database and our mathematical models, the NMFRC can generate a detailed benchmarking report for any metal finisher.

Benchmarking is a service that we provide free of charge. Companies involved with the Strategic Goals Program automatically are enrolled in this service. Other U.S. companies are also welcome to take part. To participate, you provide some basic data. Your data are entered into our model and we generate and mail to you a customized benchmarking report. This report will clearly show you where potential operating cost savings exist. If you have an environmental management system (EMS) or are considering implementing one, the benchmarking report can also be used to help track your progress.

Attached is the benchmarking data form. Please complete the form and mail (or fax) it by October 21, 2002 to:

NMFRC
Technical Offices
10507 Walter Thompson Drive
Vienna, VA 22181

FAX: 703-255-2248

If you have any questions, contact George Cushnie via email (Geoc@nmfrc.org) or by phone (703-255-2240).

I. Contact and Company Information

Your Name:		e-mail:	
Company Name:		Phone:	
Company Address:		FAX:	
City, State Zip:			
Type of Facility:	( ) Job Shop ( ) Captive Shop		

II. Accounting for Changes in Production

Please provide data for each production factor.

Production Factor	2001
Metal finishing sales:	$
Number of labor hours for people working in the metal finishing shop*:	hrs.

*Do not count sales and administrative staff, only persons working directly in the metal finishing shop.

III. Water and Wastewater

	2001
Does your facility discharge any metal finishing process wastewater? If no, go to Part IV.	( ) Yes ( ) No
Volume of metal finishing process wastewater discharged:	gal.
Average concentration of metals in wastewater discharge:	
Cadmium	mg/l
Chromium	mg/l
Copper	mg/l
Cyanide	mg/l
Lead	mg/l
Nickel	mg/l
Silver	mg/l
Zinc	mg/l

IV. Wastewater Treatment Sludge

	2001
Total amount of wastewater treatment sludge generated:	lbs.
Total amount of hazardous wastewater treatment sludge that is shipped off-site for land disposal:	lbs.
Total amount of wastewater treatment sludge that is shipped off-site for recycle/recovery:	lbs.
Average water content of wastewater treatment sludge:	%
Sludge dewatering technology used (filter press, sludge dryer, etc.):	

V. Organic Chemical Emissions to Air

	2001
Quantity of organic air emissions.	lbs.

Examples: trichloroethylene (TCE), toluene, and methyl ethyl ketone (MEK). You may find this information on your TRI report.

VI. Energy Use

Energy Source	2001
Electricity use:	kWh
Natural gas use:	therms
Fuel oil/propane use:	gals.

Above energy use data covers (check one):
( ) metal finishing operations only or ( ) entire facility.

VII. Resource Utilization & Compliance-Related Unit Costs

The following information is used to calculate environmental-related costs for your facility.

During **2001**, how much did you pay for -
- one thousand gallons of water: _____ $/1000 gal. (include water and sewer charges)
- one unit of electricity: _____ $/kWh.
- one unit of natural gas: _____ $/therms (or $/CCF).
- one pound of sludge sent to a landfill or for recycle: _____ $/lb. (include transportation, disposal/recycle)

VIII. Production Processes

What percentage, if any, of your year **2001** metal finishing sales are attributable to the following two product categories:

Fasteners: _____ % Automotive parts (except fasteners):_____ %

Enter the percentage of your metal finishing sales that was derived from each process during year **2001**:

Zinc Rack	%	Silver Plating	%	Chromating	%
Zinc Barrel	%	Other Precious Metals Plating	%	Black Oxide	%
Decorative Chrome Plating	%	Tin or Tin/Lead Plating	%	Other Conversion Coating (like phosphating)	%
Nickel Electroplating	%	Other Plating: _____	%	Other Aqueous Finishing Processes (like passivation)	%
Electroless Nickel Plating	%	Anodizing (non-Cr)	%	Paint or Power Coat	%
Cadmium Plating	%	Galvanizing	%	Electropolishing:	%
Hard Chrome Plating	%	Plating Gravure Rolls	%	Other: _____ _____	%

Note: The sum of all process percentages should equal 100%.

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Or FAX to: 703-255-2248

Please use the space below to send us comments or questions.