



## Do you perform photoengraving?

### Would you like to improve this process in the following areas?

- **Meet environmental compliance regulations.** Eliminate hazardous waste and hazardous air pollutant emissions. Eliminate hazardous material storage and record-keeping. Media areas are hazardous waste and air programs.
- **Improve workers' safety and health.** Eliminate exposure to hazardous photographic chemicals and hazardous waste.
- **Increase productivity.** Reduce labor time for engraving by half.
- **Save money.** Reduce labor costs, hazardous waste disposal costs, record-keeping, storage, and training costs.



Laser Engraver

*The replacement of chemical photoengraving processes with a laser engraver can double productivity while eliminating the use of photographic hazardous materials, hazardous waste, and hazardous air emissions. A typical photoengraving shop uses a three-step process to photoengrave images onto metal. This includes photographing and developing the photo-ready original, transferring the image onto a photosensitive plate, developing the plate, and then sealing the engraved image. The automated laser engraver etches the image onto the work piece directly without using any photographic process. The laser engraver can engrave on plastic, wood, aluminum, glass, plexiglas, and brass in half the time with the same quality as the photochemical process. Hazardous materials are not used, and hazardous wastes and hazardous air pollutants are not generated. Any associated satellite accumulation areas, hazardous material/waste training, record keeping and weekly inspections can be discontinued. **This equipment is available through the Navy Pollution Prevention Equipment Program.***

### How can you achieve these improvements?

Use a laser engraver.

### How does this system work?

The laser engraver etches directly onto the work piece without any photochemical processes.

### How will this system save you money?

Reduces costs associated with labor, hazardous wastes, satellite accumulation areas, record-keeping, training, and weekly inspections.



How can this technology eliminate or reduce pollution?

This technology eliminates wastes traditionally generated by photoengraving processes. Implementation will result in the following pollution reductions:

- Eliminate hazardous material use.
- Eliminate hazardous waste generation.
- Eliminate hazardous air pollutant generation.

Which processes can benefit most from this technology?

All facilities that perform photoengraving processes.

How can this technology reduce regulatory compliance concerns?

Use of a laser engraver eliminates hazardous waste and hazardous air emissions. Implementation will result in the following regulatory compliance benefits:

- Reduction in hazardous waste helps facility meet the requirement of waste minimization under RCRA, 40 CFR 262.41 (a)(6).
- May help facilities reduce their generator status and lessen the tasks required to comply under RCRA, 40 CFR 262 (i.e., record-keeping, reporting, inspections, transportation, accumulation time, and emergency response measures).
- Eliminates the need for satellite accumulation areas.



#### Achieving Environmental Compliance Through Pollution Prevention

Every day the Navy faces the challenge of operating and maintaining the fleet while complying with environmental regulations. This burden can be reduced by using pollution prevention technologies and methods to reduce compliance requirements. This fact sheet is one in a series designed to encourage activities to use pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

For additional information, contact:

“Currents” article. (Web: <http://navair.alc.daps.mil/communication/magazine/summer2000/J2000HI01.html>)

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