

# Enerox Burnishing Compound AM

Enerox Burnishing Compound AM is a mildly alkaline, concentrated liquid burnishing compound. It can be used with most standard mass finishing equipment, to process steel, brass, copper, zinc, and aluminum. Enerox Burnishing Compound AM is suited to processing a variety of parts.

## Features & Benefits

For use with vibratory and barrel mass finishing equipment	Wide range of applications with or without media
Contains a unique blend of conditioning agents	Provides excellent lubricity for superior burnishing

## Physical Data

Appearance	Viscous, yellow colored clear liquid
Odor	Slight
Foaming tendency	Moderate in cold water at suggested use
pH	Approx.9.0
Solubility	Complete

## Operating Conditions

Recommended application vibratory bowls & tubs horizontal & oblique tumbling barrels

	Range	Optimum
Concentration	0.5 – 2.5% v/v	1.0% v/v
Temperature	Ambient	Ambient
Media (optional)	Ceramic, plastic, or c.h. steel	As required
Ratio of media to parts	10:1 20:1	As required
Time	30 minutes – 2 hours	As required

Note: Each specific mass finishing application has its own unique operating parameters and conditions. The optimum cycle can be developed by evaluating the effects of media (if

required), concentration of Enerox Burnishing Compound AM, time of process, and mechanical action of the mass finishing equipment being used.

### Equipment

Any mass finishing equipment, suitable to the process, may be used. Regular maintenance procedure should include lubricating as per manufacturer's recommendations and periodic confirmation of correct rotational or vibratory speed

### Recommended process cycles horizontal & oblique barrels

1. **Optional Soak Clean:** To remove heavy oil and grease buildup. An appropriate Enerox or Ultrex soak cleaner, may be used. Parts can be precleaned in a separate heated soak cleaning tank. Or, tumble cleaned in the barrel itself: combining enough warm water and the cleaner.
2. \*Cold Water Rinse
3. Transfer parts to cleaned mass finishing barrel. Add media if required.
4. Add enough water to slightly below the surface of parts and optional media. The optimum amount of water and media are determined by trial evaluation.
5. Add the required amount of Enerox Burnishing Compound AM.
6. If an oblique barrel is used, start the process run.
7. If a horizontal barrel is used, place the sealing gasket over the door, affix the lid, and tighten it. Rotate 1 revolution. Check for leaks and adjust seal as required.
8. Process for the required time.
9. Oblique barrel: When the run is completed, tilt the barrel to drain the load. Briefly rinse the parts.
10. Horizontal barrel: When the run is completed stop the barrel. Slowly and carefully open the ventilation valve, to bleed any pressure that may have built up during the process run. Only after this has been done can the barrel be safely opened. Replace the gasket with a screen. Replace the lid and rotate to drain the solution. Briefly rinse the parts.
11. The processed parts can be prepared for additional mass finishing, such as burnishing, using the same equipment, or transferred to the next appropriate finishing step.

- \* It may necessary to descale or deburr before burnishing. Your Hubbard-Hall sales representative or the Technical Center will be glad to recommend an effective processing cycle for the finishing requirement.

Recommended process cycles vibratory bowl & tub

1. Optional Soak Clean: To remove heavy oil and grease buildup. An appropriate Enerox or Ultrex soak cleaner, may be used. Parts should be precleaned in a separate soak cleaner tank
2. \*Cold Water Rinse
3. Lubricate the media by adding water and Enerox Burnishing Compound AM. Run the vibratory bowl or tub for a short time. This procedure will also prevent the load from seizing or congealing.
4. Add parts to the previously conditioned vibratory equipment.
5. Process for required time. Add water and Enerox Burnishing Compound AM as needed during the cycle.
6. Rinse the load.
7. Remove and transfer to next finishing operation. Or, prepare for additional mass finishing, such as burnishing, using the same equipment.

- \* It may be necessary to deburr or descale before burnishing. Your Hubbard-Hall sales representative or the Technical Center will be glad to recommend effective processing for the finishing requirement.

Product consumption

Enerox Burnishing Compound AM is best utilized as an addition of fresh, concentrated product for each process run of parts. This insures optimum, active material to work on the metal surface. For extended process cycles, replenishment additions of Enerox Burnishing

Compound AM will maintain the desired levels of components for optimum burnishing effect. As indicated in the Recommended Application section, trial evaluations are suggested before the optimum concentration of Enerox Burnishing Compound AM is established.

Process suggestions



In horizontal and oblique barrels, the slide zone is very critical to obtain the most efficient action on parts. Therefore, ratio of parts to media and water level will influence the effect of Enerox Burnishing Compound AM. By comparison, the mechanical action in horizontal barrels tends to shorten process time versus the oblique barrel. For either equipment, the rotation speed can be adjusted to provide the best tumbling suited to the desired cycle time.

Round and tub vibratory bowls are readily compatible with Enerox Burnishing Compound AM. The media and parts are in constant motion, typically providing shorter cycle times versus barrel equipment.

The size and shape of media is critical toward action on the metal surface, and to prevent lodging. New media should be conditioned for the specified break in to remove sharp edges. Older media that becomes glazed and rounded, may require replacement.

In vibratory systems, a diluted working solution of Enerox Burnishing Compound AM can be prepared and metered in continuously at a flow rate of approximately 1 gal of working solution/hour/cu ft of equipment volume. Low concentrations of burnishing compound contribute to scratching of the surface, resulting in a mottled or hazy finish after plating. High concentrations of burnishing compound result in low luster and higher than desired RMS values.

**Product profile**

Caustic	No
Phosphate	No
Silicate	No
Soap	No

**Hazard classification**

DOT Classification	Not D.O.T Regulated
DOT Shipping Name	N/A
UN Number	N/A

**Waste Disposal**

Enerox Burnishing Compound AM and it's working solutions are alkaline. They may be neutralized with acid to meet local POTW or municipal effluent discharge requirements. Sludges and oils should be separated out before discharge. Spent Enerox Burnishing Compound AM solutions may contain dissolved metals from the mass finishing process. Therefore, additional treatment of the solution may be required to meet discharge requirements.



## Caution

Please read and understand the Enerox Burnishing Compound AM Safety Data Sheet before handling and using this product.

WARRANTY: THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.

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## Our people. Your problem solvers.

For more information on this process please call us at  
1-800-648-3412  
or [techservice@hubbardhall.com](mailto:techservice@hubbardhall.com)

