

Removing oxidation, oil and shop dust from copper plumbing fittings

OVERVIEW

Cleaning oxide and other soils from copper fittings prior to brazing is essential. All cleaning involves one or more processes: direct mechanical energy such as scrubbing or spraying, use of chemicals, heating, and time. Ultrasonic energy, a form of mechanical energy, generates controlled, high-magnitude pressure fluctuations in liquids that produce a consistent, high level of cleanliness in a short amount of time. Ultrasonic cleaning also is able to penetrate minute crevices that conventional methods cannot, and by incorporating precision controls, a more consistent, repeatable cleaning process is possible.

How to Clean Plumbing Fittings

- Fill the tank with the proper chemistry and program optimal operating temperature.
- Ensure that the fitting to be cleaned does not trap any air. If all surfaces are not wetted with liquid, the ultrasonic energy won't act effectively.
- Activate the ultrasonic energy by turning the system on.
- When the cycle ends, remove the cleaned fitting and ensure that it is completely drained and free of all soils.
- Thoroughly rinse the fitting of solution using hot tap water.
- Dry the plumbing fitting using forced air.



Equipment Recommendations

An appropriately sized Bransonic® Model MH is a highly effective tool for removing oxide layers and other soils from copper plumbing fittings. It features our rugged industrial-style 40 kHz transducer and is simple to operate:

- Fill the bath with a solution of 10% Branson Oxide Remover (OR) solution.
- Turn on the heater and set the ultrasonic cycle time.
- The unit's sweep frequency ultrasonics eliminates any dead zones, ensuring complete, consistent precision cleaning every time.

Recommended Plumbing Fittings Cleaning Process

The chart below indicates recommendations for using the Bransonic Model MH ultrasonic cleaning unit to precision-clean oxide layers and other soils from plumbing fittings prior to brazing.

SPECIFICATIONS

| Process Stage | Chemical | Ultrasonic Frequency (kHz) | Handling | Temp. (°F) | Dwell Time (minutes) |
|---------------|-----------------|----------------------------|----------|------------|----------------------|
| WASH | 10% Branson OR | 40 | basket | 140 | 5 |
| RINSE | clean tap water | N/A | basket | warm | N/A |
| DRY | forced hot air | N/A | basket | ambient | until dry |

With the Branson Model MH, you are assured of the same level of cleanliness every time, using a preset configuration programmed by the engineer. The Model MH process requires only that the operator place the plumbing fitting using the appropriate accessory in the bath and start the program.

At the end of the cycle, it is best to rinse to remove the Branson Oxide Remover (OR) solution from the plumbing fitting. Dry using forced hot air. There's no need for brushing or manual washing with the Bransonic MH ultrasonic cleaner.

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