



Standard Operation Procedure

ISO TANK / ROAD TANKER RESTORATION [RUST REMOVAL] WITH SIMPLICITY FOGGER

When free iron is present in a stainless steel tank container's interior, the chromium oxide passive film is probably compromised. The tank's owner will surely want to be apprised of the tank's condition. This should begin with digital photos and discussion with the owner. Unapproved wipe-downs or spot removals of rust stains should never be performed as a means of finishing up a tank in a manner that is "good enough" to load. A tank wash operator should always give the tank owner the option to restore their tank's chromium oxide passive film. If the decision is made to overlook the tank's condition, it should be the tank owner's decision, and not tank wash personnel's.

At the tank owner's direction, the following procedures will assist in a successful restoration:

LIGHT RUST: Passivate. When rust appears to be light or superficial, where a simple wipe would remove the bulk of it, fog the tank with John-Henry [PASSIVE 8](#) or other nitric acid solution per [ASTM-A967](#) standards for stainless steel passivation. See usage rates below.

HEAVY RUST: Wash tank, rinse, and then fog with John-Henry [GO-pHER](#). Sometimes more than one event is necessary for maximum rust removal. See usage rates below.

NOTE: After washing, the tank may be heavily rusted and/or potentially pitted. After a John-Henry [GO-pHER](#) rust removal treatment, the next step may include buffing. After buffing, a very thin polymeric film may remain in the tank, preventing the passivation solution ([PASSIVE 8](#)) from penetrating it and doing its job. This "film" is akin to a waxed vehicle, where water beads up on the surface, not allowing it to come in contact with the paint. Hence, when the tank arrives back at the tank wash for passivation, it should be prepped with John-Henry [MAGNUM](#), or an equivalent aqueous solution high in waterborne solvent and emulsifiers. The tank is then rinsed, followed by a full passivation with John-Henry [PASSIVE 8](#).

CHEMICAL USAGES:

Light Rust: Use John-Henry [PASSIVE 8](#), undiluted, at the rate of 1.5 US gallons per 1,000 gallons tank capacity via Simplicity Fogger.

Heavy Rust: Use John-Henry [GO-pHER](#), 5 US gallons per tank container, via Simplicity Fogger.

Extra Heavy Rust: Use John-Henry [GO-pHER](#), 5 US gallons per tank container, up to 2 events via Simplicity Fogger, with strong rinses in between.

SAFETY & HANDLING

John-Henry [GO-pHER](#) and John-Henry [PASSIVE 8](#) solutions is acidic and highly corrosive.

Provide ample ventilation; avoid prolonged breathing of fumes and contact with skin, eyes, and clothing.

Personal protective gear should include a face shield and/or goggles, plastic coated gloves, and protective clothing.

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