

## ***ArmaKleen Technical Service Report Summary***

**Cleaning Trial Type:** Aqueous cleaning

**Industry:** Aerospace remanufacture

**Segment:** 26 Fabricated Metal Products

**Soil:** Cosmoline-like grease, rust

**Substrate:** Steel

**Description of Part(s):** Steel rotors

**Customer objective:** The customer was looking to improve their cleaning performance, automate their cleaning process, reduce their cleaning costs and eliminate hazardous chemicals and waste.

**Cleaner used:**

- 5% by volume ArmaKleen™ 4 in 1 Cleaner
- 12.5% by volume ArmaKleen™ Rust Remover

**Machine used:**

1. Spray Under Immersion Washer (Graymills T12, Graymills T24, SK 81.8 w/SUI)
2. Agitating Immersion Washer (SK 81.8, Graymills T12, Graymills T24)
3. Ultrasonic Washer (SK 6315)

**Temperature used:** 160°F

**Time required:** 5 – 20 minutes

**Post Cleaning:** Parts cleaned in ArmaKleen™ 4 in 1 were left unrinsed and allowed to air dry. Parts cleaned in ArmaKleen™ Rust Remover were fresh water rinsed followed by air pressure drying.

**Recommendation to Customer:** The ArmaKleen Technical Center recommended using 5% by volume ArmaKleen™ 4 in 1 Cleaner at 160°F in a Spray Under Immersion Washer for a minimum of 10 minutes for removing the Cosmoline-like grease.

The ArmaKleen™ Technical Center recommended using 12.5% by volume ArmaKleen™ Rust Remover at 160°F in an Agitating Immersion Washer for a minimum of 5 minutes for the removal of rust.

**Before Picture**



**After Picture**



**Source:** TSR #13-A-102