

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

**Cleaning Trial Type:** Aqueous

**Industry:** Cool rolling tech manufacturer

**Segment:** 31 – Primary Manufacturing

**Soil:** Shop dirt, oil, grime, grease and HOCUT 787-B (oil based coolant with emulsifier). Coolant is breaking down and turning into grease/sludge.

**Substrate:** Steel

**Description of Part(s):** An assortment of “tool” steel parts

**Customer objective:** The customer was looking to improve their cleaning performance, automate their cleaning process, reduce rework, reduce their cleaning costs and eliminate water spots after parts are cleaned, rinsed and dried

**Cleaner used:** 5% by volume solution of ArmaKleen™ 4 in 1 Cleaner

**Machine used:**

- Spray Under Immersion Washer (Graymills T12, Graymills T24, SK Model 81.8 w/SUI)
- Ultrasonic Washer (SK Blackstone model 6315)
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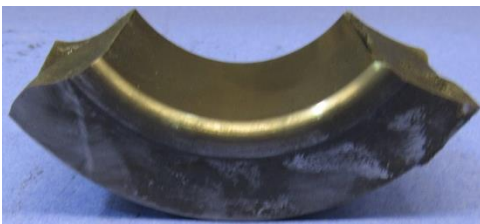
**Temperature used:** 150°F – 160°F

**Time required:** 2 hours

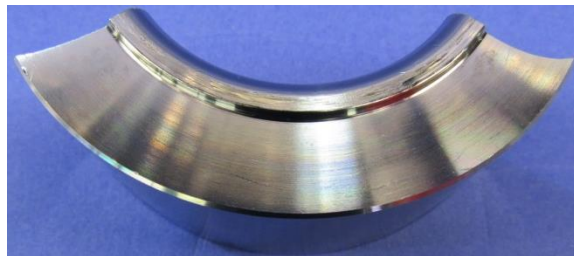
**Post Cleaning:** De-ionized water rinse followed by air pressure drying

**Recommendation to Customer:** The ArmaKleen Technical Center recommends using a 5% by volume solution of ArmaKleen™ 4 in 1 Cleaner at 160°F in an Ultrasonic Washer for a minimum of 2 hours.

**Before Picture**



**After Picture**



**Source:** TSR #17-A-065