

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

**Cleaning Trial Type:** Aqueous

**Industry:** Endoscope Manufacturer

**Segment:** 28 – Mfg – Machine (incl Medical)

**Soil:** Oil and cutting fluids.

**Substrate:** Brass, aluminum, stainless steel

**Description of Part(s):** Two brass ring, two threaded aluminum connectors and three stainless steel connectors

**Customer objective:** The customer was looking to clean mixed metals together, reduce their cleaning costs and eliminate hazardous chemicals/waste and reduce VOCs.

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

**Machine used:**

- Agitated Immersion Spray Washer (SK Model 81.8, Graymills T24)
- Ultrasonic Washer (SK Blackstone 6315)

**Temperature used:** 150°F – 160°F

**Time required:** 15 minutes

**Post Cleaning:** De-ionize water rinse and air pressure dried.

**Recommendation to Customer:** The ArmaKleen Technical Center recommends using a 5% by volume solution of ArmaKleen™ 4 in 1 Cleaner at 150°F in an Agitating Immersion Washer or at 160°F in an Ultrasonic Washer for a minimum of 15 minutes.

**Before Picture**



**After Picture**



**Source:** TSR #17-A-127