

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

**Cleaning Trial Type:** Aqueous

**Industry:** Musical Instrument Manufacturer

**Segment:** 26 Fabricated Metal Products

**Soil:** Shop dirt, oil, cutting fluids, drawing lube, wax and tallow (bee's wax and soy paste)

**Substrate:** Brass

**Description of Part(s):** Two brass instrument parts

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

**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)

**Temperature used:** 150°F

**Time required:** 10 minutes

**Post Cleaning:** Fresh water rinsing 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 150°F in a Spray-Under Immersion Washer for a minimum of 10 minutes.

**Before Picture**



**After Picture**



**Source:** TSR #17-A-038