

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

**Cleaning Trial Type:** Aqueous

**Industry:** Piping OEM Manufacturing

**Segment:** 26 Fabricated Metal Products

**Soil:** Oil, cutting fluids, drawing lube and grease

**Substrate:** Low grade stainless steel

**Description of Part(s):** Stainless Steel Pipe

**Customer objective:** The customer was looking to improve their cleaning performance, automate their cleaning process and reduce rework and reject rate.

**Cleaner used:**

1. 5% ArmaKleen™ 4 in 1 Cleaner
2. 10% ArmaKleen™ MM-Dip
3. 10% ArmaKleen™ M-HP-2

**Machine used:**

1. Agitating Immersion Washer (81.8)
2. Spray Washer (TL3, FL250, FL500)

**Temperature used:** 160°F

**Time required:** 1 Minute

**Post Cleaning:** Fresh water rinse followed by air pressure drying.

**Recommendation to Customer:** The ArmaKleen Technical Center recommended the following;

1. 5% by volume ArmaKleen™ 4 in 1 Cleaner In either an Agitating Immersion Washer or a Spray Washer at 160 °F for a minimum of 1 minute.
2. 10% by volume ArmaKleen™ MM-Dip in an Agitating Immersion Washer at 160°F for a minimum of 1 minute.
3. 10% by volume ArmaKleen™ M-HP-2 in a Spray Washer at 160°F for a minimum of 1 minute.

**Before Picture**



**After Picture**



**Source:** TSR #12-A-249