## **ArmaKleen Technical Service Report Summary**

Cleaning Trial Type: Aqueous

Industry: OEM pipe manufacturing

**Segment:** 03 Dealerships - Auto

Soil: Shop dirt, oil, grime, cutting fluids

Substrate: Steel

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

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

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

## Machine used:

1. Ultrasonic Washer (SK Blackstone model 6315)

2. Spray Washer (JRI TL3, JRI FL250, JRI FL500, Better Engineering G-2000)

Temperature used: 150 to 160°F

**Time required:** 1 hour 30 minutes

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

**Recommendation to Customer:** The ArmaKleen Technical Center recommended using 5% by volume ArmaKleen™ 4 in 1 Cleaner at 150 to 160°F in an Ultrasonic Washer or a Spray Washer for a minimum of 1 hour 30 minutes.

## Before Picture After Picture



Source: TSR #13-A-230