

The Effects of Intermittent Water Rinses on Cleaning of Opadry® Red

Intermittent Rinse with 50°C Drying; 5 Day Dirty Hold



After 1st Coat & Rinse



After 2nd Coat & Rinse



After 3rd Coat & Rinse



After 4th Coat & Rinse



After 5th Coat & Rinse



✗ Result: FAIL

After 6th Coat & Detergent

No Intermittent Rinse; 5 Day Dirty Hold



After 1st Coat



After 2nd Coat



After 3rd Coat



After 4th Coat



After 5th Coat



✓ Result: PASS

After 6th Coat & Detergent

Cleaning Cycle After 6th Coat:

Final Cleaning Process	Detergent Concentration	Temp (°C)	Time (min)
Step 1: DI water spray	-	20	2
Step 2: Chematic® 422 Spray	6%	70	2
Step 2: DI Spray Rinse	-	20	1

Conclusions:

- The incorrect cleaning process results in re-cleaning & lost production.
- Intermittent water rinses are detrimental to cleaning.
- Drying temperature, 50°C or air drying, had no effect on cleaning outcome.
- Effective cleaning is achievable with Chematic 422 with no intermittent water rinses.
- Ideal detergent step temperature is 55°C – 60°C. The 70°C temperature used in this study was customer specific.