Continuous Roaster #1 (CR1) Cleaning Changeover Time Reduction
Mount Franklin Foods Azar Nut Company
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Background
Azar Nut Company
- Company started in 1907 as Shibley Azar’s small nut and candy store in El Paso, Tx.
- The company distributes more than six hundred national, private label and signature brand items, such as raw nuts, roasted and further processing nuts, candy, and peanut butter
- Over one hundred years have passed and this company has changed to combine to change the original entrepreneurial spirit with added packaging and processing capabilities.

Continuous Roaster #1
- CR1 is washed an average of 8 to 10 times per month
- Average cleaning time of 5.5 hours
- It represents an estimate of $62,000 USD/Year

Objective
- Reduce the CR1 cleaning time by 30%
- Standardize the Washing Process
- Reduce delays at the start of the first shift

Methodology
Washing Continuous Roaster 1 Process Observed
Materials Needed
- Power Wash
- Water gun
- Hoses
- Gloves
- Plastic bags
- Sodium Hydroxide pump

Time Consumed
- 5 to 6 hours on average

Number of Workers
- 2

Implementation
Washing Continuous Roaster 1 Process Implemented
Materials Needed
- Degreaser
- Power Wash
- Water gun
- Hoses
- Gloves
- Plastic bags
- Sodium Hydroxide pump

Number of Workers
- 2

Time Consumed
- 3 to 3.5 hours on average

Results
Process Time Comparison
<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINUTES</td>
<td>95</td>
</tr>
<tr>
<td>Rework Down Time</td>
<td>30</td>
</tr>
<tr>
<td>Warehouse Trips</td>
<td>40</td>
</tr>
<tr>
<td>Excessive Setup</td>
<td>50</td>
</tr>
<tr>
<td>TOTAL TIME (in hours)</td>
<td>7:30</td>
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Optimization Percentage
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Conclusions
- The implementation of the new method was effective
- Total cleaning time was reduced from 7.5 hours to 3.083 = 58.8 %
- Delays at the start of the first shift were reduced
- The standardization of the new process is in process (by the continuous improvement team – AZAR)

Acknowledgments
- Mount Franklin Foods Azar Nut Company
- Lorenzo Marquez, Azar Industrial Engineer
- David Barrios, Azar Sanitation Supervisor

Team Members

Ishikawa Diagram – CR1 3rd and 1st shift Overlap

Value Stream Map – CR1 Washing Process Implemented

Root Cause Analysis

Washing Continuous Roaster 1 Modifications
- Boiling of water and degreaser in the CR #1
- Proper assignment of tasks to workers (sectioning the CR 1)
- Usage of cart to move the equipment
- Proper Equipment (Cart, Scraper, and Fiber sponge)
- Less trips to Sanitation Wash Bay