

P11712: Cheesecake Water Dosing Automation

Throughput Analysis – Time Comparison

A<sub>1</sub> = First set of 4 pans  
 B<sub>1</sub> = Third set of 4 pans  
 C<sub>1</sub> = ...

A<sub>2</sub> = Second set of 4 pans  
 B<sub>2</sub> = Fourth set of 4 pans

**Current Process Time Study**

Time Slot	Conveyor	At Stop	Oven	Dose Water	Oven Cycle
4:40/ 0:05	A <sub>1</sub>				cycles
2:00	A <sub>2</sub>	A <sub>1</sub>			
4:00		A <sub>1</sub> & A <sub>2</sub>			
4:40/ 0:05	B <sub>1</sub>		A <sub>1</sub> & A <sub>2</sub>		cycles
1:40				A <sub>1</sub>	
2:00	B <sub>2</sub>	B <sub>1</sub>			
3:20				A <sub>2</sub>	
4:00		B <sub>1</sub> & B <sub>2</sub>			
4:40/ 0:05			B <sub>1</sub> & B <sub>2</sub>		A <sub>1</sub> & A <sub>2</sub>

**Proposed Process Time Study**

Time Slot	Conveyor	At Stop/ Dose	Dose Done	Oven	Oven Cycle
4:40/ 0:05	A <sub>1</sub>				cycles
2:00	A <sub>2</sub>	A <sub>1</sub>			
2:22	A <sub>2</sub>		A <sub>1</sub>		
4:00					
4:22		A <sub>2</sub>	A <sub>1</sub> & A <sub>2</sub>		
4:40/ 0:05	B <sub>1</sub>			A <sub>1</sub> & A <sub>2</sub>	cycles
2:00	B <sub>2</sub>	B <sub>1</sub>			
2:22	B <sub>2</sub>		B <sub>1</sub>		
4:00		B <sub>2</sub>			
4:22			B <sub>1</sub> & B <sub>2</sub>		
4:40/ 0:05				B <sub>1</sub> & B <sub>2</sub>	A <sub>1</sub> & A <sub>2</sub>

**Time to fill a set of 4 pans = 22 seconds**