Process Walk

Measuring Workstations

Instructions:

1. Visit the production service area/production line or workstation. Choose one operation. Use the Worksheet Template.
2. Apply the Time Study Procedure.
   a) Calculate Sample Size if the data is available.

Sample Size	
Preliminary mean of observation time	34
Standard deviation of observed time	2
Confidence level required (z Value)	1.96
Maximum acceptable error	5%
	5

   a) Determine the Performance Ratings and Allowance factors.

	Performance Rating Factor	Allowance Factor
Manual Operation	100%	5%
Machine Operation	100%	5%
Process (Manual+Machine)	85%	8%

Working Hours	8.00

HANDS ON

Measuring workstations

Instructions:

1. Analyze the operation.
   a) Select the operator
   b) Time, collection and record data.

												UOM	Pouches
Operator ID	Task / Operation	Type of Operation	Cycle Time (seconds) 1	2	3	4	5	Ave Obs Time (sec)	Ave Obs Time (min)	Normal Time (min)	Standard Time (min)	Target Pouches/hr
1	Open the box with tubes	Manual	2	3	5	5	2	3.40	0.06	0.06	0.003	169,412
2	Fit box inside dispenser	Manual	5	3	5	7	6	5.20	0.09	0.09	0.004	110,769
3	Fill kanban bin with tubes	Manual	3	4	3	4	4	3.60	0.06	0.06	0.003	160,000
4	Pick up empty kanban bins	Manual	2	4	3	5	3	3.40	0.06	0.06	0.003	169,412
5	Take one tube and label it	Process	3	4	4	3	6	4.00	0.07	0.06	0.005	105,882
6	Place tube on bin	Manual	4	3	5	4	2	3.60	0.06	0.06	0.003	160,000
7	Pass tube to check weigher machine	Machine	3	3	4	3	3	3.20	0.05	0.05	0.003	180,000
8	Place 12 tubes in a case	Manual	4	5	4	3	5	4.20	0.07	0.07	0.004	137,143

2. Review the results
   a) Cycle time
   b) Normal and Standard Times
   c) Expected target

Total Cycle Time	30.6	sec	
	0.51	min	
Total Normal Cylce Time	0.50	min	
Total Standard Cylce Time	0.03	min	<--- Can be the used for Takt Time
Expected Target	149,077	Pouches/hr	