

**CASE STUDY**

Lean Time Studies Clean Uniform

■ PROBLEM / CHALLENGE

Clean Uniform developed time standards years ago and used them in a pay-incentive program. Investigations revealed that the standards were no longer accurate due to new products, new equipment and layout changes. Most importantly, customer complaints were increasing and management thought the incentive program was making people work faster but not better.

■ Problem Definition

- Current labor incentive standards are not clearly defined, are out-of-date and not specific to site differences
- Management and direct labor don't trust the standards
- Lack of clear definitions
- Customer-quality is not part of the direct labor incentive

■ IMPLEMENTATION DETAILS: Lean Time Studies

- **Formed a Lean Time Study Team with representatives from all six production sites and multiple functions including HR, Operations, Service**
 - This team was facilitated and educated by Supply Velocity but did substantial work doing the time studies and documenting non-value-added work and best practices
- **Did over 32 time studies, each repeated 3 times to develop standards**
- **Identified best practices and quantified time saved**
 - Wide variations across operators was validated in time study videos
- **Clarified the definition of quality and provided specific criteria**
 - Accountability = customers get what they expected
 - Cleanliness = garments washed with the correct formula and meet contract requirements
 - Functionality = (example) zippers work
- **Met weekly to review time studies completed, non-value-added work identified and best practices**
- Action items created and tracked to eliminate waste and standardize best practices

Created Time Study Matrix for the 30 Product Families and 36 Operational Processes to Determine the Number of Time Studies Required and Track Completion

Product Families>>>>	Shirts	Pants	Dress Pants	Apron	Coveralls	Jackets	Polo shirts	Gloves	Press Shirts	Mats	Bag Towel	50 Count Bags	Fold Towel	Clnsp Towel	Fender cover	Bath Towel	Fold Napkin	Press Napkin	Mops	CRT	Med Bath towel	Surg towels	Bed pad	Med sheets	Med blinks	Med scrubs	Med gowns	Micro mops	Med pillow	Doc coats	
Operation Names																															
Unload truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Soil Sorting											3		3	3	3	3		3	3	3		4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	
Soil counting (medical)																						4	4	4	4	4	4	4	4	4	
Soil load building (slinging)										2			5.5	5.5	5.5	5.5		5.5	5.5												
CRT unwind																					5.9										
Scan table	6	6	6	6		6	6		6																						
Washer loading large	8	8	8	8		8	8	8			8		8	8				8	8	8		8	8	8	8	8	8	8	8	8	
Ellis										8.1																8.2	8.2		8.2		
Washer loading small									9					9	9						9									9	
Dryer loading large	10	10	10			10	10	10		10	10		10	10				10	10	10		10	10	10	10	10	10	10	10	10	
Dryer loading med									11.1																	11.1					
Dryer loading small									11					11	11						11									11	
Loading Carts to Lift Table	11.2	11.2	11.2	11.2		11.2						11.2																			
Garment hanging	12	12	12	12	12.5	12																				12					
Tunnel catch / hang	13	13	13	13		13																				13					
Press									14												14.1									14	
Final sort by customer, ma	15	15	15	15.1		15	15																							15.3	
Final sort scan	15c	15c	15c			15c	15c																							16	
Final sort bundle	15d	15d	15d			15d	15d																							16.1	
Polybagging	15.3																													16	
Hand truck loader	16	16	16	16		16	16																			16				16.1	
Trolley Loading	16.1	16.1	16.1	16.1		16.1	16.1																							16.1	
Trolley Loading Depot	16.2	16.2	16.2	16.2		16.2	16.2																							18	
Z rail unloading	16.3	16.3	16.3	16.3		16.3	16.3																							18	
Clean Carts for Loading								18.1		18.1	18.1		18.1	18.1	18.1	18.1		18.1	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	
Bulk loading								18		17	18		18	18	18	18		18	18	18	18	18	18	18	18	18	18	18	18	18	
Clean bulk storing										17.1	17.2		17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	
Towel bagging																															20
Gown Sorting																														28.2	
Gown Snapping																														28.1	
Folding				21.1									21	22	23	23.2	24					23.1	21	23.3	25	26	27	28	29	30	
Wrap folded towels																						23.2a	23.2a	23.2a	23.2a	23.2a	23.2a	23.2a	23.2a	23.2a	
Band folded towels																						23.2b	23.2b	23.2b	23.2b	23.2b	23.2b	23.2b	23.2b	23.2b	
Mat Rolling										31																					
CRT wind																					31.5										
Sling/hoist operator	32	32		32		32	32	32		32	32		32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	

= we have 3 time studies, enough to set a standard
 = we have 1 or 2 time studies

Turned the 24 Improvements Identified during the Time Studies into an Action Register that Tracked all Improvements to Completion

#	Issue	Role	Idea/Solution	Benefit (High/Low)	Imp. (Easy/Difficult)	Owner	Start Date	Target Date	Closed	STATUS
1	Two operators put different amount of mats in washer pockets, which is best and machine can get of balance	Washer	Training, set a standard of how full pockets should be Visual standard Sling load versus hand load	Low	easy	Greg H.	23-Feb	30-Mar	Closed	St. Louis will start slinging mats If Ellis is used for mats the mats must be unrolled in slinging. If the 450 is used for mats the mats don't need to be unrolled in slinging
2	Mats should not be rolled up when they are put in the washer	Washer	See #1 (addressed when using sling)							St. Louis will use 450's for Mats and will start sling loading April 14th.
3	Garment hanging variation (see g-hang dif)	Garmen t Hanger	What is the standard - define and communicate	high	easy	Brian & Nia	23-Feb	16-Mar	Closed	
4	How much inspection is the right inspection	Folding	Who would know this?	high	easy	Kyle	24-Feb	4-Apr	Closed	Came up with a guideline for all locations.
5	Dress pant hanger - strut hanger or not	Tunnel Catch	Strut - Highland, OKC No strut - STL, OF, Joplin	Med	easy	Nia	13-Mar	4-Apr	Closed	Strut all dress pants at clean hang. Poly bags upon request.

RESULTS

- Time studied all operations across all products using people from Clean Uniform to ensure buy-in
 - Supply Velocity taught and facilitated, Clean Uniform did the work and implemented
- Identified 24 'do now' improvements to increase productivity and quality
- Defined Quality, provided specific examples and built quality into the direct labor incentive
- Standardized best practices across six facilities spread throughout the Midwest
- Rolled out new standards and incentive based on productivity and quality



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