


Time Observations

Facilitator Guide



Time Observation

- Get close to the work
- Observe reality vs. what we think happens
- This is not time study – it's a waste study
- The more waste we see, the better
- Most waste is hidden from the human eye

Time Observation Sheet												Task time	Observer	Leader Review (initials)	
Operation Name	Product Name / #	Observation Date	Observation Number (Stopwatch time above dash, rest time below)										Avg. Elapsed Time	Adjustment	Stop Time
Step #	Step Description	Observation Point	1	2	3	4	5	6	7	8	9	10			
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
www.velaction.com		Observed Cycle Time											SW Cycle Time		

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Time Observation

- Time Observation is detailed - three reasons:
 - To really see how the work is done
 - To understand how long things take to do
 - To see the non-value-adding (NVA) steps in detail



Book And OMAO cell - 4p.A-hud.0.1-2/13/00		Time Observation Sheet				
#	DESCRIPTION	POST	0	1	2	TIME
1	REMOVE MATERIALS, 1ST STEP	(7)	7	(3)	3	4
	REMOVE PRESSURE					
	WALK TO NEXT					
	TABLES, START	2	(3)	(3)	4	3
	UP CAPSULE FROM					
	CARTON POWER	(2)	8	3	(2)	2
	MOVES DOWN					
	ROCKE DOWN	(2)	(5)	6	7	5
	1ST DOWN					
	TABLE	5	(4)	5	(4)	4
	DOWN					
	TABLE	7	6	(5)	3	5
	MOVING MAKE					
	DOWN	(4)	8	7	(4)	4
	DOWN					
	UP PRESS					
	CLOSE	6	(7)	(7)	8	7
	REMOVE AND					
	CHECK QUANTITY	(8)	9	(8)	9	8
	STEP					
	WALK TO DOME					
	1ST	5	3	(4)	5	4
	FILL AND PLACE					
	STEP					

(at least 1 sheet per person)

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Time Observations

- Time Observations are the foundation of Standard Work
- Time Observations are the first step in Rapid Improvement Events:
 - To know how long the tasks take
 - To observe an area closely enough to see non-value-adding tasks (**waste**)
- Time Observations are always performed with two people



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Who Are You Timing?

- You are looking at the work sequence of each person. (We measure machine cycles separately.)
- Understand details of their tasks for one item
- First see the area
- **EXPLAIN TO PEOPLE WHAT YOU ARE DOING!**
- Watch the person working for a while before timing
- Ask for a repeating work sequence
- Write down each steps to complete one unit

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Setting up the Time Observation Sheet

- ① Always time in 2 person teams
 - 1 writing, 1 timing
- ② Choose the element size (i.e., step)
 - Note: VA and NVA tasks must be separated
- ③ Number and describe each
- ④ Choose the Break Points (the point when you'll read the watch)

#	Description of Step	Break Point
1	Pick up marker, remove cap, put cap down	Cap drop
2	Write "A-B-C" and draw box around (on board)	Touch cap
3	Put on cap. Walk to table	Open Cap
4	Remove cap. Write "1-2-3" (on paper)	Close Cap
5	Walk to board. Put down marker (cap on while walking)	Let go of Marker

③

④

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Gathering Data

5 Read the stopwatch at each break point and write down the total elapsed time so far

#	DESCRIPTION	POINT	0	DATA (top half - watch readings, bottom half - subtraction, right - notes)
1	PICK UP MARKER, REMOVE CAP, PUT CAP DOWN.	CAP DOWN	08	28 54 29 06
2	WRITE "A-B-C" AND DESIGN BOX AROUND (SEE BOARD)	TURN CAP	09	35 1'06 37 13
3	PUT ON CAP, WALK TO TABLE	STOP WALK	14	41 11 42 19
4	REMOVE CAP, WRITE "1-2-3" (SEE PAPERS)	1ST STEP	32	47 18 57 25
5	WALK TO BOARD, PUT MARKER DOWN (SEE MARKER STAND)	2ND STEP	26	51 23 2'02 29

6 Observe at least 5 cycles and note abnormal events

7 Keep the stopwatch running continuously (don't stop at the end of each cycle)

Interpreting the Numbers

Observed Time 1

2 Choose the lowest repeatable time for each element

[If there are no repeatable times, choose the second-lowest time: DO NOT TAKE THE AVERAGE]

#	DESCRIPTION	POINT	0	DATA (top half - watch readings, bottom half - subtraction, right - notes)
1	PICK UP MARKER, REMOVE CAP, PUT CAP DOWN.	CAP DOWN	08	28 54 29 06
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3 Add back time to reconcile overall time

4 Add the element times up

5 Make this the higher #

5 Choose lowest repeatable overall

4 Total each column

6 Select higher of 3 & 5

[Tips



- If cycle times are very long, videotape, and review
 - Note: You must have permission to videotape
- Don't get frustrated by variety; pick good examples of typical flow
- Save your Time Observation Sheets (for members and backup data)
- Separate VA and NVA tasks on the form
- Don't over staff – solve problems and improve instead
- Don't pad the demand – staff for today's demand
- Don't pad the available time – resolve problems