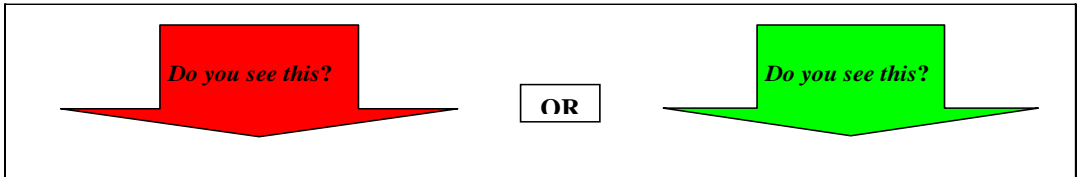


## THE OBSERVATION SHEET OR LEARNING BY LOOKING!

### Lean Deployment Observation Sheet



#### TRADITIONAL

#### LEAN

#### Visual Management

- No notification/information (and/on) boards
- No/little evidence of Lean metrics used
- Variation in work performance
- Standard procedures not being followed
- Dirty/cluttered, messy work area
- Messy bathrooms
- Materials piled everywhere
- Unmarked gauges & tools
- No min/max levels at line side
- Empty shadow boards, tools, missing disorganized
- Oil dry on floor, pig socks used, overflowing drip pans, puddles of fluid on floor

- Use notification/information (and/on) boards
- Demonstrate use of key Lean metrics
- Standardized Work forms prominently displayed/workers knowledgeable
- Workers do the job the same ways every time
- Sparkling, clean machines, tools, work areas and bathrooms
- Designated area for empty/full containers
- Marked gauges & key equipment
- Min/Max levels clearly marked
- Shadow boards for tools that are used and maintained
- Shiny clean floor-painted

#### Evidence of Teams

- No production data visible (or outdated)
- Lack of conference rooms for teams to use
- Suggestion campaign old, suggestion box not active, little implementation of suggestions accepted
- No problem solving involvement at operator level
- 8D done in Quality Department
- Team not actively involved in Standardized Work activity or work flow

- Available team meeting areas
- Team data prominently displayed
- Teams implemented many of their own suggestions
- Proof of problem solving activities many places in plant (Fishbone diagrams filled out and displayed, PDCA cycle being followed, 5 Why's)
- Aggressive Team Standardized Work input



Where Lean Thoughts can become Reality

*"Unless you try to do something beyond what you have already mastered, you will never grow."*

Ronald. E. Osborn

**LEAN OBSERVATION SHEET**

**Changeover**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Usually done by one person</li> <li><input type="checkbox"/> No tracking of changeover time</li> <li><input type="checkbox"/> Most work done when machine is down</li> <li><input type="checkbox"/> Lack of standardized methods – no specific work task/procedures identified</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Changeover done by team</li> <li><input type="checkbox"/> Clear internal/external task identification</li> <li><input type="checkbox"/> Changeover chart tracks times, improvements, goals, ideas</li> <li><input type="checkbox"/> Use of changeover cart, visual organizations used, standard methods</li> </ul> |
|---|--|

**Pull Systems**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> High level of inventory on lines &amp; in plant receiving and shipping</li> <li><input type="checkbox"/> Materials waiting &amp; stacked at lineside</li> <li><input type="checkbox"/> Delivery timing of materials unregulated</li> <li><input type="checkbox"/> Centralized schedules w/out Takt time</li> <li><input type="checkbox"/> Products “pushed” to the next area</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Low level of inventory on line &amp; in plant</li> <li><input type="checkbox"/> Read Kanban system in use</li> <li><input type="checkbox"/> Material delivered frequently to line side</li> <li><input type="checkbox"/> Use of small supermarket areas</li> <li><input type="checkbox"/> Localized/Customer demand with Takt times</li> </ul> |
|---|--|

**Returnable Container/Dunnage**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Cardboard containers</li> <li><input type="checkbox"/> Wooden pallets</li> <li><input type="checkbox"/> Large number of parts / containers</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Re-usable containers (plastic, metal) recycled between Ford and Suppliers</li> <li><input type="checkbox"/> Small number of parts/containers</li> </ul> |
|---|---|

**Layout and Good Material Flow**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Insufficient, poorly spaced docks</li> <li><input type="checkbox"/> Cluttered staging areas</li> <li><input type="checkbox"/> Warehouse/storage poorly placed for continuous flow</li> <li><input type="checkbox"/> Designated scrap areas that are full</li> <li><input type="checkbox"/> Long conveyors, full of WIP</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Point of use shipping &amp; receiving docks</li> <li><input type="checkbox"/> Visually clear and simple staging areas</li> <li><input type="checkbox"/> Well placed small market area</li> <li><input type="checkbox"/> Little scrap/use of mistake proofing</li> <li><input type="checkbox"/> Short conveyors, min/max levels marked</li> </ul> |
|---|--|

**Lean Process Flow**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Assembly running much fast than customer requirements Large buffers/production push product</li> <li><input type="checkbox"/> Large off-line repair bays</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Assembly tied to customer requirements</li> <li><input type="checkbox"/> Small buffers used sparingly to de-couple major processes</li> <li><input type="checkbox"/> Production pulled from prior operation</li> </ul> |
|---|--|

**Cell Design**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Inefficient assembly configurations</li> <li><input type="checkbox"/> Assembly long way from point of use</li> <li><input type="checkbox"/> Storage of completed materials (more than 1 day supply)</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> U-shaped cells/no wasted motion</li> <li><input type="checkbox"/> Cells adjacent to point of use</li> <li><input type="checkbox"/> Sub-assembly and raw materials storage of four hours to support production</li> </ul> |
|--|--|

**Machine Stability**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Little visible evidence of preventive maintenance process</li> <li><input type="checkbox"/> Frequent breakdowns &amp; no tracking</li> <li><input type="checkbox"/> No Overall Equipment Effectiveness data</li> <li><input type="checkbox"/> No study/analysis into major losses</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Maintenance schedule posted and carried out-employees involved</li> <li><input type="checkbox"/> Breakdowns fixed quickly and prevented</li> <li><input type="checkbox"/> OEE at 85% or better (posted and tracked by teams)</li> </ul> |
|--|---|

Lean Thoughts