



Lean Deployment Observation Sheet

Quick Lean Audit

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|  | OR |  |
| TRADITIONAL | | LEAN |
| Visual Management | | |
| <ul style="list-style-type: none"> <input type="checkbox"/> No notification/information (and/on) boards <input type="checkbox"/> No/little evidence of Lean metrics used <input type="checkbox"/> Variation in work performance <input type="checkbox"/> Standard procedures not being followed <input type="checkbox"/> Dirty/cluttered, messy work area <input type="checkbox"/> Messy bathrooms <input type="checkbox"/> Materials piled everywhere <input type="checkbox"/> Unmarked gauges & tools <input type="checkbox"/> No min/max levels at line side <input type="checkbox"/> Empty shadow boards, tools, missing disorganized <input type="checkbox"/> Oil dry on floor, pig socks used, overflowing drip pans, puddles of fluid on floor | | <ul style="list-style-type: none"> <input type="checkbox"/> Use notification/information (and/on) boards <input type="checkbox"/> Demonstrate use of key Lean metrics <input type="checkbox"/> Standardized Work forms prominently displayed/workers knowledgeable <input type="checkbox"/> Workers do the job the same ways every time <input type="checkbox"/> Sparkling, clean machines, tools, work areas and bathrooms <input type="checkbox"/> Designated area for empty/full containers <input type="checkbox"/> Marked gauges & key equipment <input type="checkbox"/> Min/Max levels clearly marked <input type="checkbox"/> Shadow boards for tools that are used and maintained <input type="checkbox"/> Shiny clean floor-painted |
| Evidence of Teams | | |
| <ul style="list-style-type: none"> <input type="checkbox"/> No production data visible (or outdated) <input type="checkbox"/> Lack of conference rooms for teams to use <input type="checkbox"/> Suggestion campaign old, suggestion box not active, little implementation of suggestions accepted <input type="checkbox"/> No problem solving involvement at operator level <input type="checkbox"/> 8D done in Quality Department <input type="checkbox"/> Team not actively involved in Standardized Work activity or work flow | | <ul style="list-style-type: none"> <input type="checkbox"/> Available team meeting areas <input type="checkbox"/> Team data prominently displayed <input type="checkbox"/> Teams implemented many of their own suggestions <input type="checkbox"/> Proof of problem solving activities many places in plant (Fishbone diagrams filled out and displayed, PDCA cycle being followed, 5 Why's) <input type="checkbox"/> Aggressive Team Standardized Work input |
| Changeover | | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Usually done by one person <input type="checkbox"/> No tracking of changeover time <input type="checkbox"/> Most work done when machine is down <input type="checkbox"/> Lack of standardized methods – no specific work task/procedures identified | | <ul style="list-style-type: none"> <input type="checkbox"/> Changeover done by team <input type="checkbox"/> Clear internal/external task identification <input type="checkbox"/> Changeover chart tracks times, improvements, goals, ideas <input type="checkbox"/> Use of changeover cart, visual organizations used, standard methods |

What If Everybody in Canada Flushed At Once?

The water utility in Edmonton, EPCOR, published the most incredible graph of water consumption last week. By now you've probably heard That up to 80% of Canadians were watching last Sunday's gold medal Olympic hockey game. But still the degree to which the water consumption matches with the key breaks in the hockey game is stunning.

http://www.patspapers.com/images/uploads/flush_game.jpg

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 Deployment Observation Sheet

Pull Systems

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

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

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

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

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

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