Manufacturing Best Practices Webinar
November 16, 2011, 11 a.m. ET

Taking Control:
Improved Inventory Visibility Leads to Lean Success

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Agenda

• Why do we have inventory?
• Lean focus on inventory reduction
• Reducing inventory without pain
• The role of visibility
Poll

• Do you have too much inventory?
  – A. too much raw material
  – B. Too much WIP
  – C. Too much finished goods
  – D. All of the above
  – E. No, we’re okay
  – F. I’m in production or sales – there’s never too much inventory
Why have inventory?

- Decouples supply and demand
Why have inventory?

• Buffer against variation
  – Things we can’t control
    • Late deliveries
    • Rejects / scrap
  – Things we don’t know
    • Record errors
    • Forecast errors
What kind of inventory?

• Finished goods
  – Decoupling point for ship-from-stock
• Raw Materials
  – Decoupling point for make-to-order
• WIP
  – Decoupling points between work centers
• Any or all of the above
  – Immediate ship < Customer lead time < CMLT
How much inventory?

- Calculate from risk of stock-out and desired service level
So, how can you reduce inventory?

• Stop buying / producing
So, how can you reduce inventory?

• Stop buying / producing
• Get lean
  – Synchronize supply and demand
Poll

- Has your company implemented Lean?
  - A. We are lean
  - B. We use pull and kanbans for some things
  - C. We have made some lean improvements but have more to do
  - D. We are just getting started with lean
  - E. We have no Lean program or plans at this time
  - F. My mother always told me to stand straight and not to lean against the wall - ever
Get Lean

• Become “demand driven”
  – Shorten lead time / synchronized production
  – ‘pull’ orientation
• Reduce handling
• Visual signals (kanban)
  – Kanban can be electronic
• Smaller / more frequent replenishments
So, how can you reduce inventory?

- Stop buying / producing
- Get lean
  - Synchronize supply and demand
- Reduce variation and risk of stock-outs
How do we reduce variation?

• Better forecasts
  – Shorter horizon (shorten lead time)
  – Collaboration / downstream data
• Stable schedules
• Improve quality / supplier reliability
• Improve inventory record accuracy
  – Cycle counting
  – Automate reporting
Inventory – Matching Physical Reality
Real Time Processing

- Receiving Inspection
- Checksheets
- Lot Info

- Moves
  Scan everything that moves

- Locations
  Scanning tracks To and From locations

- Manufacturing
  Scan and load all material to Workcenter
  Scan every WIP move

- Inspection
  Quality inspection associated with every container

- Outside Services
  Scan out to and in from outside firms

- Shipping
  Label each shipping container

- Receiving
  Label everything that comes in the door

VISIBILITY
TRACKING
TRACEABILITY
GENEALOGY
Poll

• Do you use automated reporting?
  – A. Bar code scans for inventory reporting
  – B. bar code or touch screens for production reporting
  – C. Both
  – D. Neither
  – E. Other automation approaches
Automated Reporting

• Timely
  – Data to the system immediately (perhaps)

• Accurate
  – Data errors are rare
  – Operator feedback (in some systems)
  – Elapsed time calculations

• Productive
  – Less worker involvement than manual recording
AutoID Reporting reduces uncertainty

• Reduced uncertainty allows reduced inventory (safety stock) without a reduction in service
• Early detection of errors or problems shortens response time and reduces uncertainty
• Proven, affordable technologies available
• Not incompatible with lean focus
Thank you for attending this webinar
Let us know what other webinar topics you might be interested in

Follow-up questions… dave@daveturbide.com