Pull Planning

Practical Application
Previous Experiences

• **All Some form of Industrial**
  – Power Plant
  – Refinery
  – Semiconductor Plant

• **Foul Balls**
  – Not enough use of the Post It Notes
  – Didn’t ‘Lean in’ Enough
    • Used an Excel Weekly Work plan produced by staff support
    • Still Too Much Reliance on the CPM Schedule
  – Not enough Training

• **Home Runs**
  – General Foremen Involvement Necessary
  – Phased and Methodical ‘Chunking’
  – Not all schedule Details necessary to have a functioning plan
  – More inter trade communication, earlier
Why Change?

• P6 is Tried and True, Right?
  – Supervision doesn’t see the work the way Gantt Charts Communicate it

• Commercial Influences are Great
  – Work Packaging
  – Offsite Laydowns and Just In Time Deliveries
  – Better efficiency

• A Chance to Improve ourselves
  – Deliberate Communication
  – Better Self Awareness

• It wasn’t the Process I liked
  – It can be a headache- Lots more folks involved = more stress
  – You can feel ‘without a net’
  – But....
The Foremen Got Better

• **Understanding of Production Rates Improved**
  – The Process is a daily report Card

• **Communication Became Deliberate**
  – Making Sure the others in the room understood what you said
  – There was no ‘We talked about that’ if we didn’t

• **A Healthy Respect for Established Plans**
  – No more Plan changes on a whim

• **Ultimately**
  – Management had to spend lest time Justifying and Updating the schedule
  – More time on Quality and Safety
  – I.e.- We had to spend less energy on process corrections related to schedule and more on building a great project.
Chunking the P66 Job Out

• **Project Data**
  – One Year Job
  – 100,000 Manhours
  – 5 Units
  – Civil Phase done, 180 tons of Iron, 16K LF of Pipe, 20+ Pieces of Major equipment

• **Targeted Milestones**
  – Major Equipment Sets Prior to Steel Erection
  – Large Heater Erection
  – Fin Fan Arrivals
  – Commissioning
Logistics
Successes

• **Full Commitment to the Process**
  – Training
  – CPM Schedule exists in case we need it… Haven’t Yet
  – Use of the Sticky Tabs instead of a Computer Forces Ownership by the foremen

• **Better ‘Team’ Approach**
  – Refinery Jobs Often Cost Reimbursable
  – Overall Project Success is Defined by the success of ALL contractors, not just the prime contractor

• **Schedule Ownership**
  – ‘Your Schedule’ is now ‘Our Schedule
  – More Deliberate Communication on the Planned Scope

• **Problem Resolution**
  – All Stakeholders In the Room
  – Quick and Open Communication
Areas for Improvement

• **Analysis Paralysis**
  – All Stakeholders means a lot of Opinions- Causing
  – Groupthink and the ‘Smile and Nod’

• **Fear of Failure**
  – Peer Judgement
  – “The Diamond”
  – Getting told what to do instead of being in complete control

• **Mutual Comfort**
  – Foremen Comfort and Trust in the Customer
  – Customer Trust in the Foremen
Key Things We’ve Learned

• **Don’t be Cheap**
  – Get a Formal Training Done
  – Get a Good Space committed to this

• **Engage Everyone**
  – Use Staff to Help Facilitate
  – Get Owners and Managers involved in Making Commitments

• **Commit Fully**
  – Use the Post It Notes
  – Back off the CPM Document- It’ll force better Use of this process

• **This is an Ideology Change**
  – You Won’t be Perfect the first time- it’s about developing the talent
  – You Probably won’t save money the first time

• **Keep It Positive**
  – You Want the Foremen to Like this…. Or at least not be in pain…