Technical Session
Collaboration and Transparency Using Digital Delivery Tools – GEMINI XD

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TODAY’S WORK PROCESSES IN EPC EXECUTION

- It’d be better if we change the pump flowrate.
- Why didn’t you do this earlier? My safety analysis has to be re-run.
- The delivery time on that pump is 6 weeks longer!
- Why is my schedule delayed?
- We have to re-do the test planning.
- I can’t install that pump that late.
- Now my pipe is undersized.
- We don’t have enough pipe in that size.
- Our order doesn’t have enough PSVs in that size.
- What happened to the budget?
- I don’t have the material for this work pack.
- Those pipes are already installed.

**Engineering**

**Supply Chain**

**Project Management**

**Fabrication & Commissioning**
TOMORROW’S WORK PROCESSES IN EPC EXECUTION
LOOKING BEYOND TYPICAL CAPITAL PROJECT SOLUTIONS

PRODUCT LIFECYCLE MANAGEMENT

- Requirements
- Design
- Project Schedule
- Documents
- Supplier Engagement
- Multi-CAD 3D Model
- Documents
- 3D Model
- Change Management
- Delivery
- Test
- Assembly
- Material Prep
- Material Receipt
APPLYING “PLM” TO CAPITAL PROJECTS

ENGINEERING TOOLS
- Process
- Mechanical
- Piping
- Electrical
- Instrument
- Structural
- Naval
- CSE
- Pipelines
- Commissioning

PROJECT LIFECYCLE MANAGEMENT
- Engineering Data Management
- Project Status & Progress
- Multi-CAD 3D Model
- Document Control
- Cross-Function Change Management

DOWNSTREAM SOFTWARE
- ERP
- Project Control
- Planning
- Fabrication Management
- Work Packaging
REAL-TIME REPORTING TO ENABLE ACTION
3D MODEL ENABLED VISUALIZATION
CROSS FUNCTIONAL COLLABORATION

Functionality:
- Common Platform for all project team members
- Digital Workflows
- Standardized Objects
- Object Relationships

Accuracy of Reporting
Improved On-Time Delivery
Transparency
INDUSTRY CHALLENGES – MOVING FROM PAPER TO DIGITAL

- Procedures rarely identify all of the details actually required to complete a process
- Procedures may not define data requirements to be captured
- Procedures typically don’t define reporting requirements in detail
INDUSTRY CHALLENGES – IT’S NOT THE TECH

Obstacles to Change:
• “This is how we’ve always done it”
• Comfort with existing approaches and tools
• Fear

Enabling Change:
• Why, What, and How
• Training and Support
• Top-Down
• Recognition
CFIHOS

- Capital Facilities Information HandOver Specification for process industries
- Standardize the specification of information handover requirements for a project for operators, contractors and equipment manufacturers and suppliers
- Consistent IHO standards allow integration of information requirements into systems resulting in more efficient delivery and improved quality of the information
CONCLUSION

Teamwork via a common collaboration platform

Best-in-class tools

Transparency in execution driving success
Thank You / Questions