



# Industrial BIM: Tools and Techniques to Harness Future Success

Chris Capps – Yates Engineering  
Stephen Cauthen – Yates Engineering

## PD5874-R

### Description

How is your industrial organization utilizing the latest BIM tools to design, fabricate, coordinate and construct in a client friendly, cost effective manor? In this round table we will discuss BIM and its use in the industrial engineering and construction. We will dive into tools, techniques and workflows which offer the best return on investment and explore the different ways projects are being executed in a 3D world. Discussions will be centered on the Plant Design Suite, Plant 3D, Revit and the Cloud.

### Learning Objectives

At the end of this class, you will be able to:

- Identify various Plant Design Suite tools and workflows for effective project creation
- Share information efficiently between engineers, detailers, fabricators and construction
- Strategies to manage projects effectively across multiple disciplines and offices
- Identify cloud based solutions for delivering modeling data to construction in the field

### Discussion Topics

- Workflows
  - How does you company organize the Plant 3D file structure?
  - How do you share Catalog & Spec Libraries? Network Share or Local?
  - Do you reference other 3d Files? What format?
  - What software do you use for structural modeling?
  - What analytical software do you use?
  - Do you pass you model between BIM and analytical software?
- Information Sharing
  - What type of contracts do you establish with 3<sup>rd</sup> parties to ensure open model sharing
  - What file formats do you exchange with 3<sup>rd</sup> parties most often?
  - What software does you steel / rebar detailers utilize?
- Multi-Office Model Management
  - At what stage of the project do you share model files? Does his vary by contract type?
  - Where and how do you store your files?
  - How do you divide work to minimize locked files?

- Cloud Based Solutions
  - What type model files do you share with the Construction Team?
  - How do you share these files?
  - Do you utilize BIM 360, Glue, and Assemble Systems?
  - How often do you update your shared models?

### **About the Speaker**

*Chris Capps is a Lead Structural Designer with YATES Engineers, LLC in Birmingham, Alabama. He also managed an IT Computer Support Department for five years. Chris has been a member of various Technology Committees and been a Cad Coordinator at three large Engineering Firms throughout his career. He has been working with various CAD packages since 1985 including Intergraph, MicroStation, AutoCAD, PDS, PDMS, Tekla Structures, AutoPlant, Autodesk Plant Design, and Revit Structure. He has been a member of various Technology Committees. His experience includes design of industrial, chemical and power facilities in the US as well as 3D modeling, and CAD coordination.*

*Stephen Cauthen is a structural engineer for Yates Engineering in Birmingham, Alabama. He graduated from the University of Alabama at Birmingham in Civil Engineering with an emphasis in Construction Management. His experience includes design and engineering of industrial, chemical and power facilities in the US; as well as 3D model, CAD coordination and software development. He is Autodesk® Revit Architecture certified and enjoys bringing models to life in both Autodesk Revit® and Autodesk 3DS Max Design®.*

### **Learning Objectives**