

MODULAR COMPRESSION

Gas/Electric Partnership Conference 2018

Ken Rumsey / Solar Turbines



Solar Turbines

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Powering the Future



AGENDA

- Why modularize?
- Solar execution
- Examples

Why Modularize?

Efficiency eludes the construction industry

American builders' productivity has plunged by half since the late 1960s



Unlearning by doing

United States, gross value-added*
Per hour worked, 1947=100



Source: McKinsey Global Institute

*At constant prices

Economist.com

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Caterpillar: Confidential Green

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Why Modularize?



FACTORS THAT PROMOTE A MODULAR APPROACH

- Improved Cost and Schedule Predictability
- Reduce Effects of Project Risk Factors
 - Pre-Engineered Solutions / Design Variability
 - Site Workforce Inefficiencies and Trade-skill Interference
 - Weather Impacts
 - Challenging Site Location
 - Security Concerns
 - Limit sub contractors and supplier interfacesWe are a “One Stop Shop”
- Standardization = Velocity = Faster to Market

CONSTRUCTION SERVICES

- Formed in 1968
- Executes Projects Worldwide
- Balance of Plant Engineering Procurement & Fabrication
- Modularization Specialists
- Complete **EPC** Installations
- Over 1,250 Projects to Date

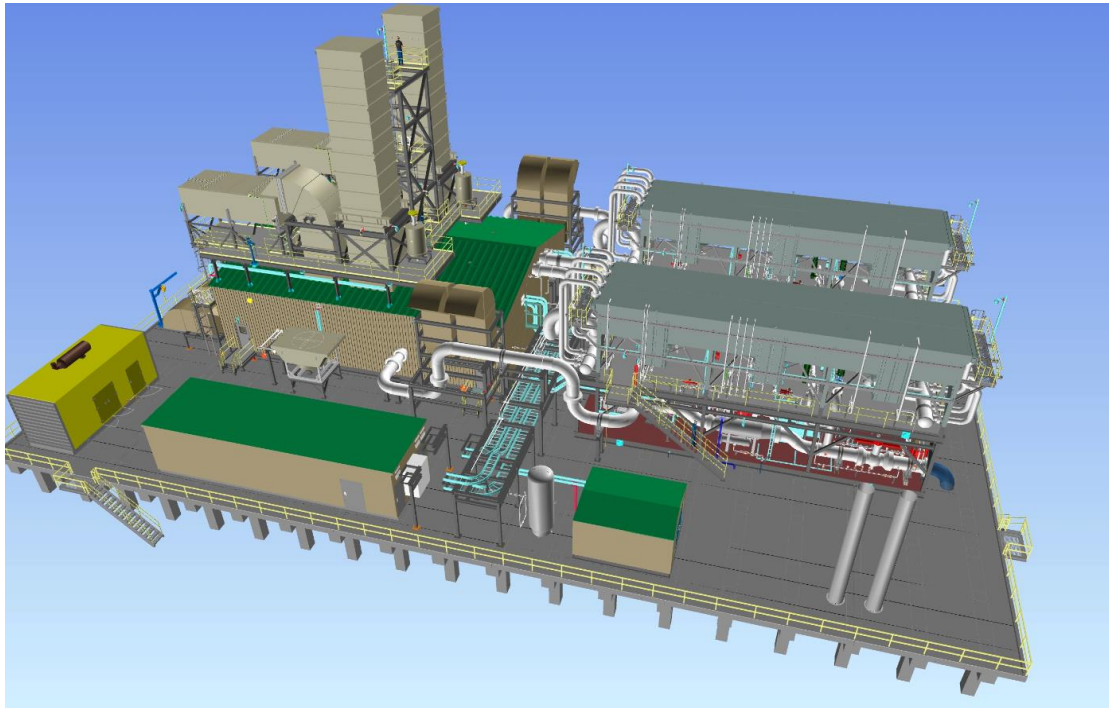


TURBOFAB – CHANNELVIEW, TX.

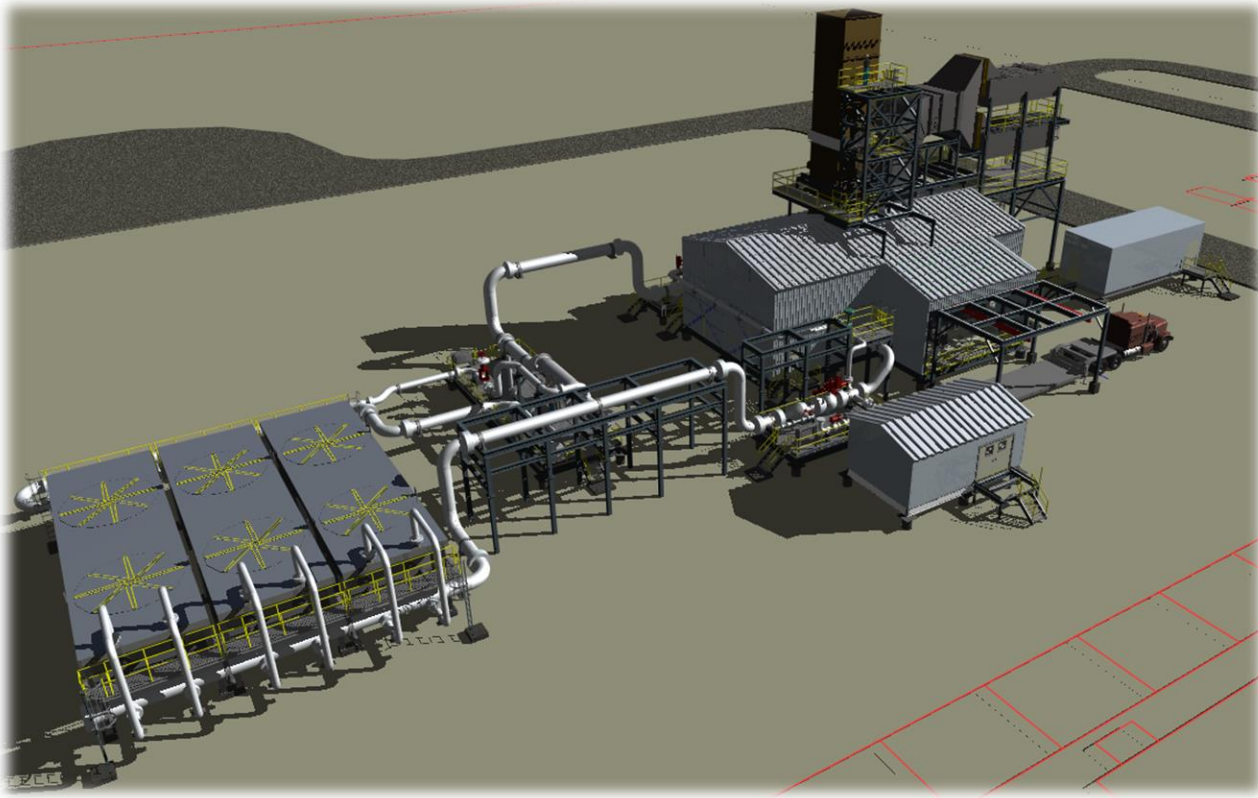
- Located in Channelview, Texas
- 50 Acre Fabrication Facility
- 248,000 sq ft Workspace Under Roof
- 1,200 feet of Waterfront Access to Houston Ship Channel
- 5000+ Ton Loadout Capacity
- Robotic Welding – 60 Ton Capacity
- Process Equipment Fabrication and Assembly



2 x MARS 100 CS – NEAR SHORE

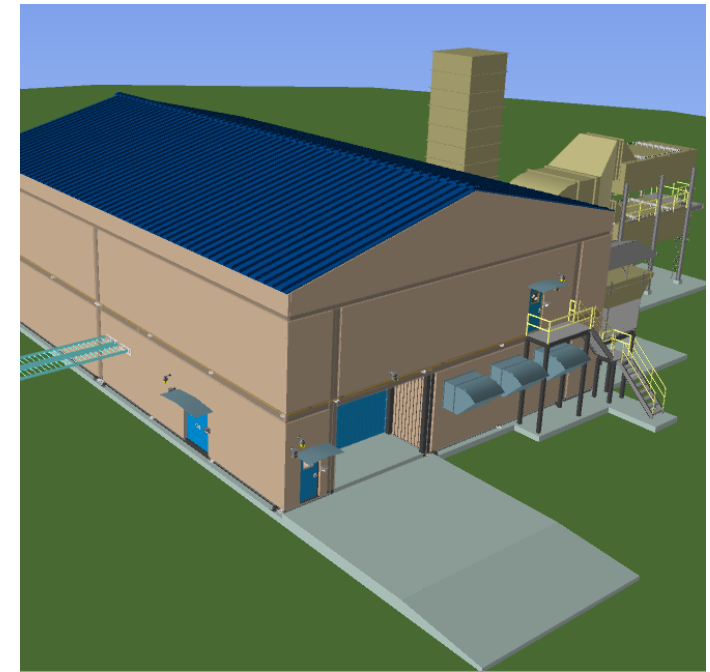


TITAN 250 CS – COLD WEATHER SITE



PHASE 2 DESIGN – KEY ELEMENTS

- Modular blocks lock together to form outer wall structure of building
- Key feature review:
 - Modular blocks contain sub systems (fuel gas treatment, HVAC, etc)
 - Walls and roof are noise attenuated & thermally insulated
 - Allows for local fabrication
 - Easily expandable
 - 2 Month onsite commissioning target



PHASE 2 – DEMONSTRATION UNIT (MOCK-UP)



Coming soon to
Turbofab!

Q1 2018

THANK YOU

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