



California Boiler Inspectors Association

2016 San Diego Conference

May 24, 2016

Quality Update

Integration of Safety and Quality Principles

- Adoption of INPO Principles
- Culture as a means of sustained improvement

Corrective Action Program

- Implemented new electronic program in 2013
- Combined with existing lessons learned database
- Feedback from Customers and Program Managers
- Share CARs with customers

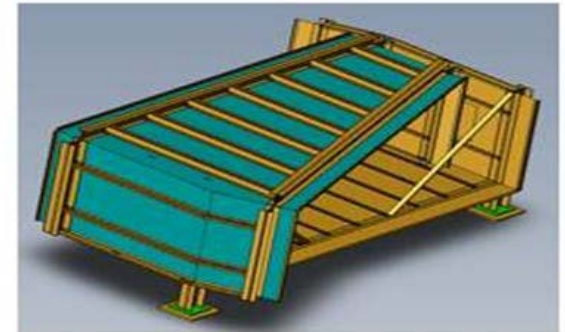
Continuous Improvement – OpEx Program

- Black Belts: 10 active, 9 reintegrated
- Yellow Belts: 121 participated and trained
- 25 projects in process

Supplier Control

- Qualification Process – audits, surveys, first article
- Monitor Performance – quality, drawings, delivery, safety, relationship
- Quality oversight – sample over-inspection, corrective action implementation

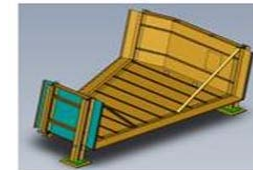
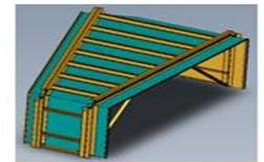
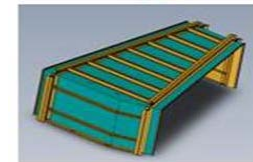
C-Modules Nested for Shipping



Lift & Rotate Top Modu



Set and Weld Top Module



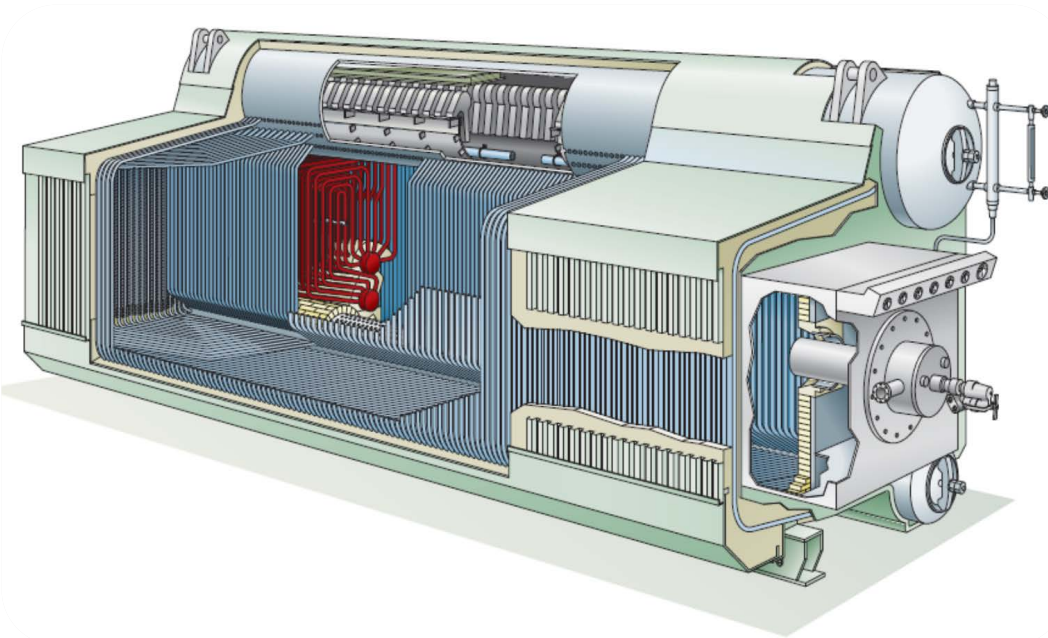
Next Level of Focus: Learning Organization



B&W Holds First Two Certificates of Authorization Ever Issued by ASME



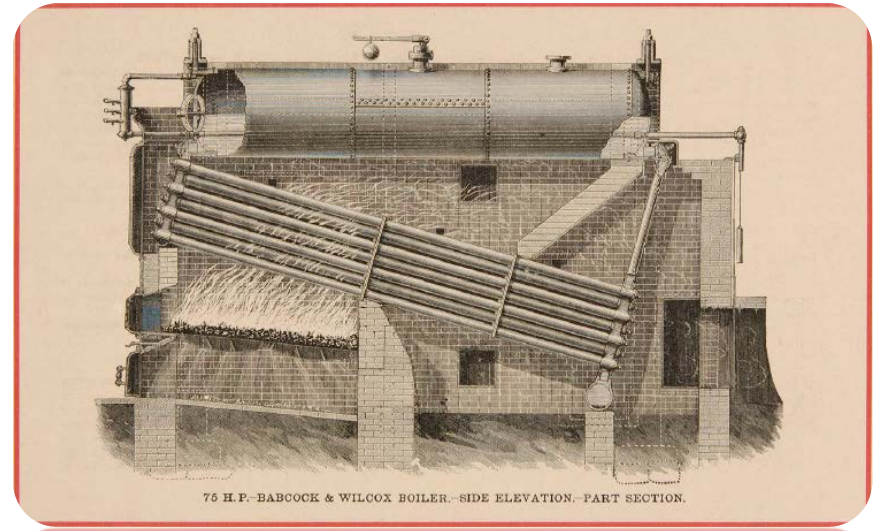
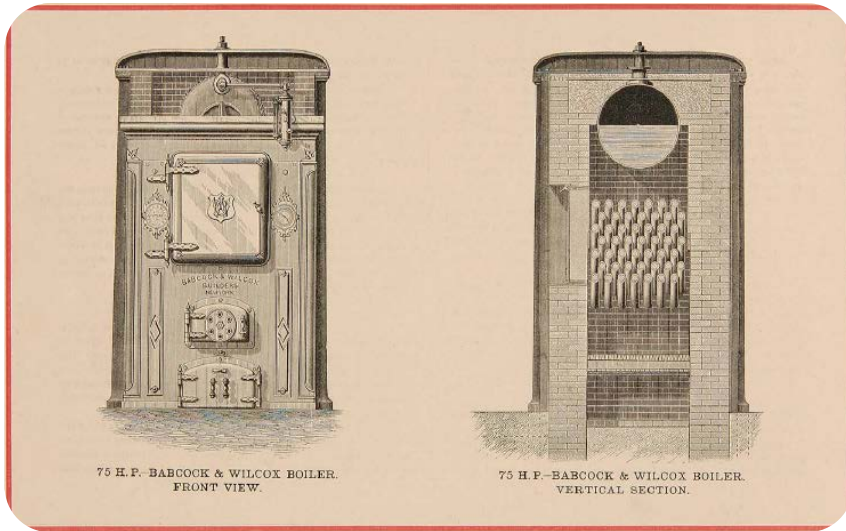
FM Model Package Boiler



- Steam Capacity: 10 to 300 kpph
- Design Press: 250 to 1250 psig
- Max Temp: 850F on gas
- Typical Fuels:
 - Natural Gas
 - Fuel Oil
 - Refinery Gas
 - Coke Oven Gas
 - Landfill Gas
 - Digester Gas

The FM D-type water tube Package boiler is B&W's most used Package boiler design. With the large furnace wall tube diameter and small 1" membrane between tubes, the FM boiler offers a large heat transfer area and water volume in the furnace section. This allows the FM boiler to be a very rugged and long-life boiler that fits most industrial boiler applications.

Water Tube Boiler Origin



In 1856, Stephen Wilcox and O.M. Stillman, a relative of George Babcock, patented a water tube boiler, the forerunner of the model seen above which was used to launch Babcock, Wilcox and Company in 1867.





