

# Embarking on a Journey with the Pl System

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### Company Background

- Company Headquarters: Paris, France
  - 2015 Revenue = \$5.66 Billion
- Plant Based in Ravenswood, West Virginia
  - Largest Constellium facility in United States
  - Built in 1955
- Produce Aluminum Plate and Coil Products used in:
  - Aerospace industry (ie wing skins, space crafts & rockets)
  - Military Vehicle Protection
  - Automobile Industry
  - Tractor Trailers
  - Rail Cars
  - Pleasure Boat
- Employees:
  - Plant = over 1,000
  - Company = over 10,000 (22 Total Plants Worldwide)
- New to OSIsoft PI (since 2015)



### Operational Business Challenges

- Product Flow
  - Casting → Hot Rolling → Plate & Cold Rolling → Customers
- Ever Increasing Product Quality and Production requirements
- Culture of Continuous Improvement
- Limited Financial and Manpower Resources



## Journey to PI

- 4 Years Ago
  - Corporate Initiative "Process Quality and Efficiency Improvement"
  - Explore ways to drive Process Optimization & Quality
  - Legacy Data Historian in use since 2000
    - Used mainly by Engineers only
  - Open Data Infrastructure:
    - Provide awareness
    - Real time & historical data to more Employees

# Journey to PI

- Legacy Data Historian
  - <u>Challenges</u>:
    - Hard to make updates
      - -Some custom code
      - -Required 3<sup>rd</sup> Party
    - No Asset Context
    - Support Issues



## Journey to PI

- New Requirements for Data Infrastructure:
  - Ability to Manage System within Limited Resources\*\*
    - Off-The-Shelf Software (no/minimal custom code)
  - Asset Context with Data
    - Open Data and Awareness to Non-Engineering Groups
  - Exceptional Customer Support
  - Perpetual Software License Model

\*\*Limited Internal Resources to Support Data Infrastructure

### What led us to OSIsoft

Colleague Recommendation

- Promise of:
  - Continued Product Development
  - Excellent Customer Support



- Attended the 2015 OSIsoft Regional Seminar
  - Impressed by Customer Value and Community

### **Proof of Concept**

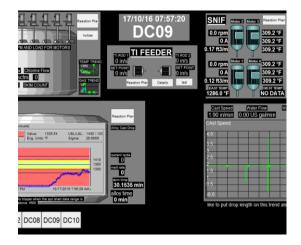
Original POC → Annealing Furnace area



- POC was successful:
  - System is expanding into additional area
  - Other Departments requesting PI System

### Intern Project → PI System Demand ↑↑

- Summer Intern Assignment:
  - 1-2 weeks
  - Build Processbook Screens for area
    - Process Graphics
    - Charts
    - Operator Display



- CEO and Middle Managers want similar Dashboards
- Plant Wide Project → "Process Data Visualization Project"
- Many New PI System Requests → Tough to Manage!

### **Future Plans**

- Expand PI System to All Critical Processes at Plant
- Full Asset Framework Hierarchy
- Use of Asset Analytics, Event Frames & PI Notifications
- Multi-level Management Dashboard
- Big Data / Business Intelligence Analysis & Displays

# **OSIsoft Support**

- Field Service Support for:
  - Installation
  - Architecture
  - Technical Questions

Excellent Tech Support

OSIsoft Youtube Channel

### Summary of Our Journey...

### **COMPANY** and **GOAL**

Constellium produces aluminum plate and coil products for the transportation, defense and aerospace industries. The objective was to expand process data collection and data availability to plant engineers and management.







### **CHALLENGE**

Replace process data historian with product that at least matches and preferably exceeds existing capability.

- Accessing multi data sources
- Process Data Visualization
- Improved analysis tools

### SOLUTION

Pilot Project to prove the feasibility of replacing the existing historian with OSI products and associated visualization tools

 PI Server & Asset Framework & Visualization tools

### **RESULTS**

Pilot Project has been successful.

Currently in planning stages of
expansion of PI System on a
plant wide basis

Leverage of newly acquired tools

- PI Asset Framework
- Pl Analytics
- PI Event Frames
- PI Visualization Suite



### **Contact Information**

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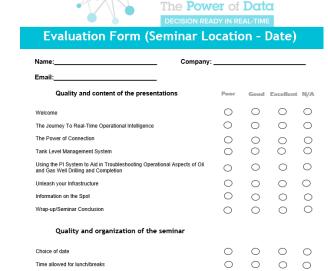
### Questions

Please wait for the microphone before asking your questions



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# Thank You

