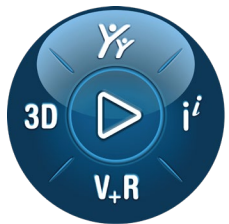




CUMMINS FACTORY SHOWCASE

April 25 – 26, 2024 | Columbus, Indiana



3DEXPERIENCE®



INVITATION ONLY >

CUMMINS OVERVIEW



Founded in 1919 by Clessie Lyle Cummins in Columbus, Indiana



Over 85 plants; 73,600 employees worldwide; \$19.8 billion USD revenue (2020)



Global power technology leader that designs, manufactures, and distributes diesel, natural gas and hydrogen engines and power train-related component products



55% of company sales come from the US



Cummins was inspired by the diesel engines of Germany's Rudolf Diesel



Business Segments: Engine, Components, Distribution & Power Systems



Manufactures products for the following industries:

- Aerospace and Defense
- Chemicals
- Consumer & Household Electronics
- Energy
- Equipment & Machinery
- Food & Agriculture
- Medical
- Semiconductor
- Transportation & Mobility, Rail

CUMMINS OVERVIEW

Cummins designs and manufactures state-of-the-art diesel and natural gas powered engines for on-highway and off-highway use. The business also offers new parts and remanufactured parts and engines.

From clean diesel and zero-emissions natural gas engines, to electric, hybrid and alternative fuel powertrain technologies, Cummins is committed to delivering the power of choice to provide operations with maximum efficiency, reliability and performance.

The Cummins Mid-Range Engine Plant (CMEP) mostly manufactures engines for RAM and Daimler Truck North America.



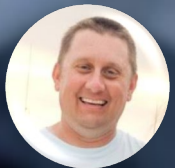
Cummins offers a comprehensive portfolio of innovative products to fit unique needs, including:

- Engines
- Power Generation
- Components
- Digital Solutions

CUMMINS FACTORY SHOWCASE



Our Host



Marc Fountain

Advanced Manufacturing Leader at Cummins
and
DELMIA User Champion



Cummins selected Dassault Systèmes' DELMIA Apriso Global Manufacturing Suite (called **CMES** by Cummins) to improve manufacturing execution, quality and maintenance and maintain consistent output.

Attend and hear the Cummins transformation story firsthand; see DELMIA solutions in action and discover how Cummins achieved the following:

- Utilizing CMES to integrate work instructions, shop floor equipment and quality processes resulting in improved throughput and quality
- Standard business processes have accelerated global CMES deployment while reducing deployment costs up to 75%
- Leveraging standard business processes across diverse units, tailored for various manufacturing models
- Utilizing powerful manufacturing intelligence tools to fuel continuous improvement
- Expanding reach of CMES projects across the USA, Asia, and EMEA regions

CUMMINS FACTORY SHOWCASE AGENDA



THURSDAY, APRIL 25, 2024
HOTEL INDIGO – BELVEDERE ROOM

- 7:30 AM BREAKFAST | DEMO STATIONS
- 8:30 AM WELCOME
- 8:45 AM CUMMINS VISION AND STRATEGY
- 9:30 AM **CUMMINS FACTORY TOUR INNOVATION**
- TRANSPORTATION PROVIDED
- 12:00 PM LUNCH | DEMO STATIONS
- 1:30 PM PANEL DISCUSSION
- 2:30 PM CUSTOMER PRESENTATION
- 3:15 PM BREAK | DEMO STATIONS
- 4:00 PM CUSTOMER PRESENTATION
- 5:45 PM CLOSING
- 6:00 PM GROUP DINNERS

FRIDAY, APRIL 26, 2024
HOTEL INDIGO – BELVEDERE ROOM
(CUSTOMER EXCLUSIVE)

- 7:30 AM BREAKFAST | DEMO STATIONS
- 8:30 AM DELMIA **CUSTOMER-ONLY** ROUNDTABLE
- 12:30 PM LUNCH & DEPARTURES

5 DELMIA Demos

DELMIA 3DLean
DELMIA Augmented Experience
DELMIA Industrial Engineering
DELMIA MOM
DELMIA S&OP

EVENT LOCATION & INFO



Dates



April 25 all day
April 26 half day customer only

Factory Tour



Cummins Mid-Range Engine Plant
2725 West 450 South
Columbus, IN 47201
Transportation will be provided to/from Hotel Indigo

Venue & Recommended Hotel



Hotel Indigo Columbus Architectural Center
400 Brown Street
Columbus, IN 47201
+1 812 375 9100

Room block available



Indianapolis Airport -> Columbus
~50 miles / 1 hour



Agenda Available



Contact Debra NEWFIELD with any questions at f7p@3ds.com



INVITATION ONLY >

CUMMINS GLOBAL CMES PROJECT OVERVIEW



CMES COMMON GOALS



BUSINESS

- Configurable system that allowed processes to be changed by business staff
- Detailed data collection (Support Lean & Six Sigma)
- Operations Changes w/o controls or IT program changes
- Fast process setup for new product introduction
- Integrated Quality Tools
- Lower TCO



IT

- Create a reusable application to support 80% of the requirements across all Engine Plants
- Establish a standard hardware infrastructure to be replicated at each site
- Centralize the support infrastructure required for CMES solution worldwide
- Centralize the development of new CMES functionality

CMES CHALLENGES



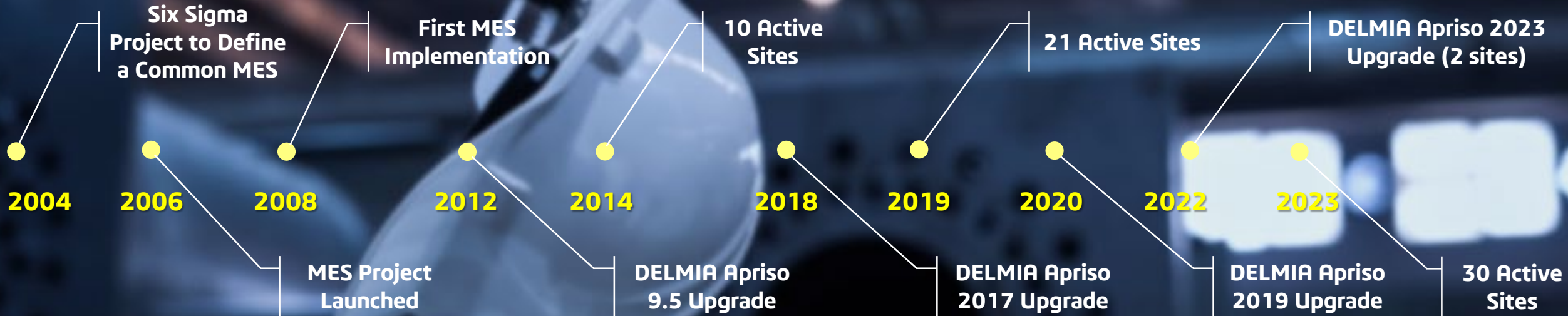
Application needed to support common processes across multiple manufacturing models

- Mass Customization (low cycle time, build to order)
- Engineer to Order
- Build to Stock
- Just In Time

Application needed to support many physical variations driven by plant infrastructure and unique process needs

- Line length
- Repair processes
- Test / Audit requirements
- Data collection requirements
- PLC vendor and controls age
- Line-side material delivery processes

CMES PROJECT HISTORY



DELMIA Apriso Modules Installed

Archiving, Business Integrator, Containment Manager, Execution Platform, Global Process Manager, Labor, Machine Integrator, Manufacturing Process Intelligence, Performance Management, Process Builder, Production, Quality, RFID Integrator, Time & Labor

CMES BENEFITS TO CUMMINS ENGINE



Efficiency

25%+ output increase realized in 1st plant deployment



Quality

Order of magnitude improvement (25%+) in Defects to Customer metric



Process

Cross-plant and BU process reuse 95%+ for engine assembly and 85% for component operations



Global

Initial deployments outside of U.S. aligned to Corporate Growth Plan

25% - Production Output Improvement

25% - Quality Improvement

95% - CMES Reuse in Engine Plants

85% - CMES Reuse in Component Plants

15%-25% - Average cost to deploy a Cummins Engines component plant compared to original DEP engine assembly plant

