WG15 Status

- AP238 e1 being used in production
  - Significant process savings
  - Met industry requirements
  - 3,000 unique parts per day
- AP238 translators from third parties
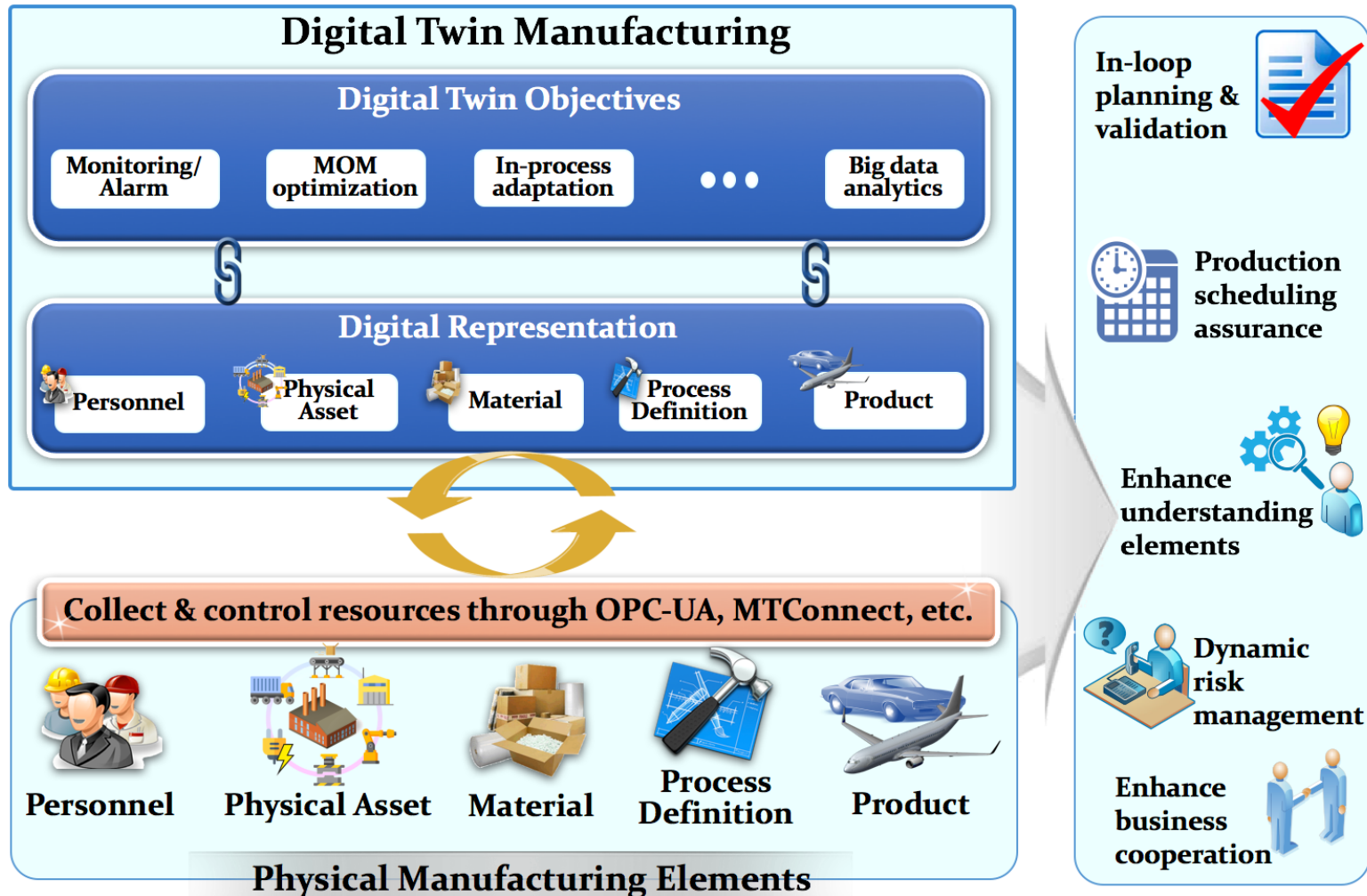- AP238 implementation by two machine vendors

WG15 Digital Manufacturing

- Accomplishments in Mukilteo
  - Developed plan for rapid completion of AP238 Edition 2
  - Submitted NWI for Digital Twin Manufacturing Framework

Digital Twin Manufacturing Framework

Demonstrations 2018

1. Digital Twin machining in multiple booths
   - Machining of typical aerospace part
   - Transmit machining status to large screen TV's using MTConnect

2. Demonstrate digital twin framework
   - Stop the machining
   - Transfer to another booth

3. Digital Twin measurement to validate results
   - In process measurement at the CNC
   - Final measurement on a CMM
   - Feedback to the digital twin using QIF

WG15 Digital Manufacturing

- Plans
  - Complete DIS for AP238 Edition 2
  - Continue development of Digital Twin scenarios
  - Harvest QIF as an SC4 standard
  - Use MTConnect as a model for Part 28 Edition 3