DOING MORE WITH DCS

Digital Operations Center Wiesbaden

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CLASSIC VS FUTURISTIC PROCESS CONTROL

- Classic Process Control:
  - Based on traditional algorithms / programming
    - ✓ Inputs/Outputs (I/Os) and set of rules for a desired process control strategy
  - Mainly Reactive to avoid Process Safety events
  - Highly hardware dependent
    - ✓ Modernization / Migration projects needed after life-cycle (Controllers)
  - People dependent
    - ✓ SME and their experience
    - ✓ Operators and their experience
  - Siloed in Level 2 (mostly only OT driven)
  - Few monitoring of field processes
    - ✓ Paper procedures
    - ✓ Manual interventions (Example: manual valves)
  - High Cybersecurity standards

- Futuristic Process Control:
  - Hybrid
    - ✓ Desired process control strategy + **AI/ML** supported with model fed by history results: self-learning
  - Proactive to avoid Process Safety events with components of a **Predictive** system
  - Medium hardware dependent
    - ✓ Hardware + Cloud deployment of Intelligence
  - Less People dependent
    - ✓ **Digitalization** of know-how
    - ✓ Evolving to **Prescriptive & Autonomous Operation**
  - **Interconnected** from Level 2 to Level 4 (IT/OT)
  - **Interacting** more with field processes
    - ✓ Digital procedures (including DCS monitoring)
    - ✓ Monitoring of manual valves
  - **Very** High Cybersecurity standards

Seek

Together™