

Finnish Society of Automation

OPC & MES Day, 7.October 2014. Dipoli Congress Centre.

Manufacturing Execution Systems in Mining, Minerals and Metals Industries
- Case: Oulu Mining School, Mini Pilot Plant

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Schneider
Electric

Pragmatic Agenda

- Schneider Electric in brief
- Mining, Metals and Minerals – technical environment
- MES supporting continuous improvement
- Oulu Mining School - Minipilot plant
- Ampla – MES implementation at Minipilot plant
- Key takeaways

Solutions and Services for Mining

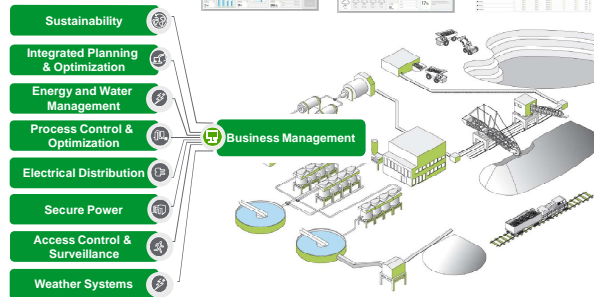
Global Presence / Local Support:

- Expertise in **global** centers
- **Local** presence in + 100 countries
- International **KSAM** coordination
- Specialized system integrator **partnership program**
- Strong **distribution channel** for components

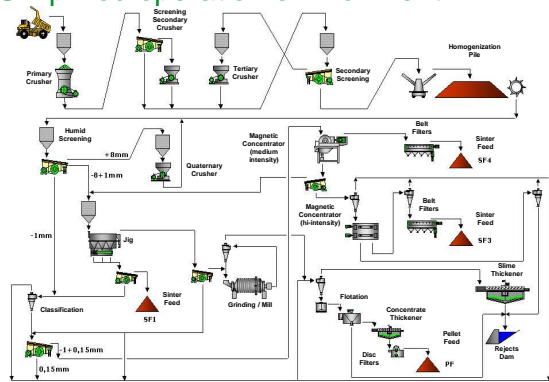


Solutions and Services for Mining

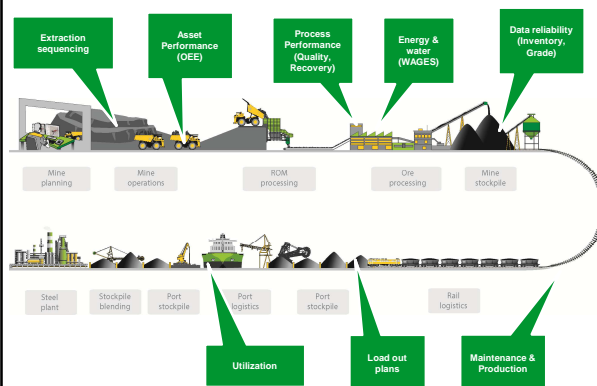
Products, solutions & services
from the mine site to the
enterprise level

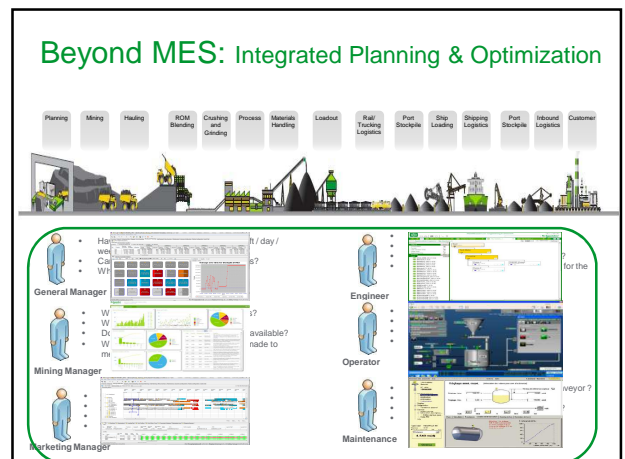
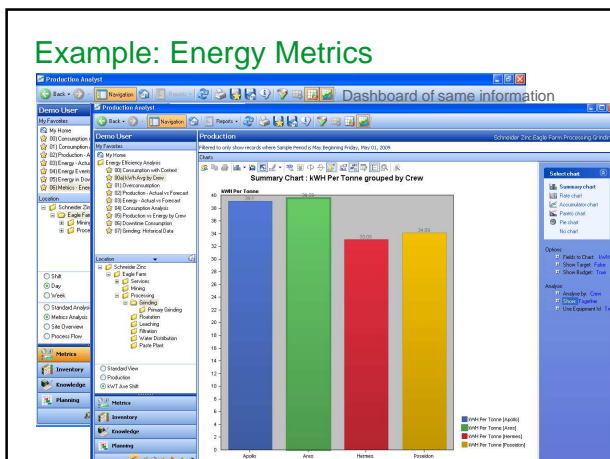
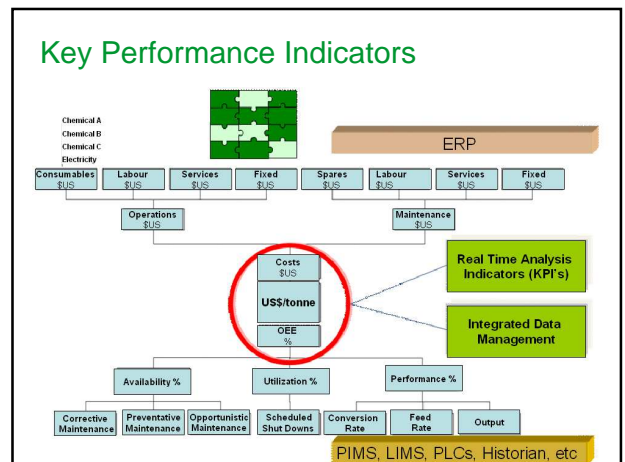
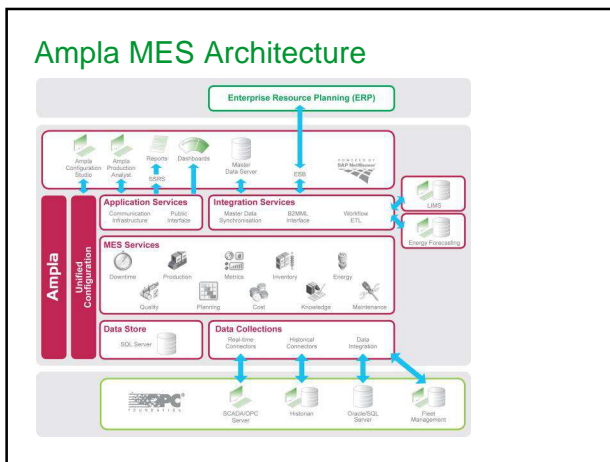
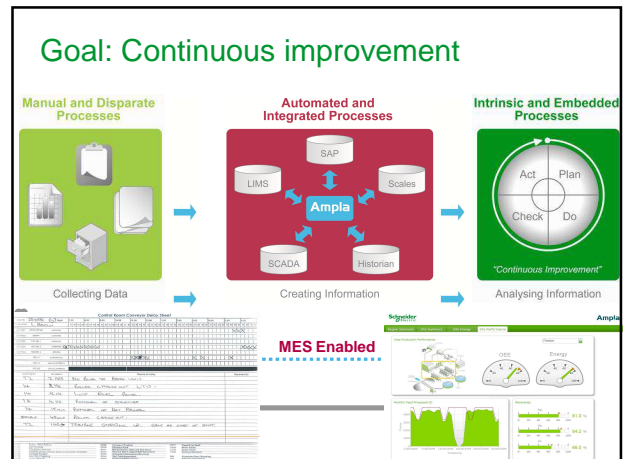
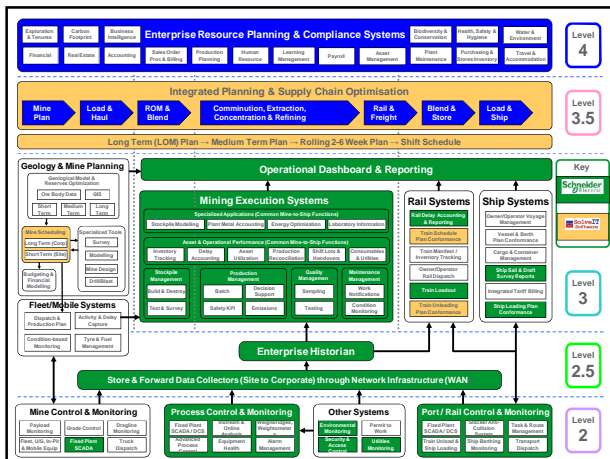


Simplified operation environment

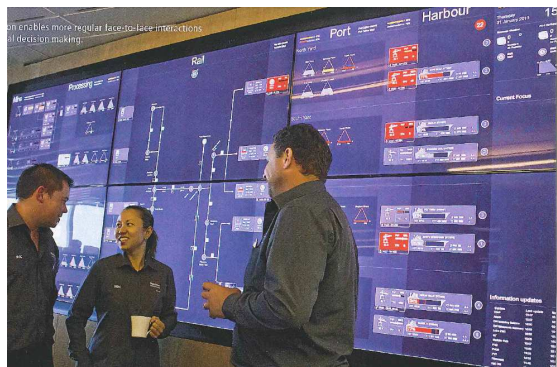


Optimization Challenges

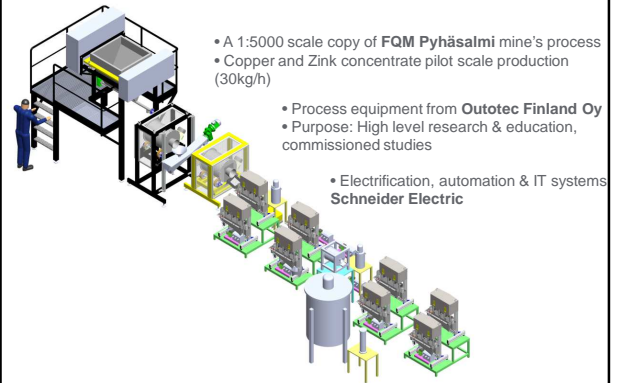




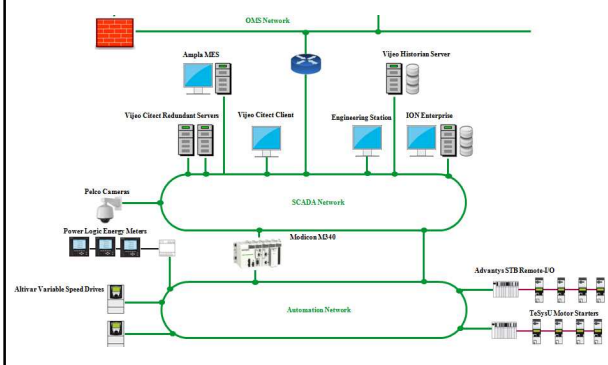
Example: MES User Interface



OMS Minipilot Plant



OMS Minipilot System Architecture

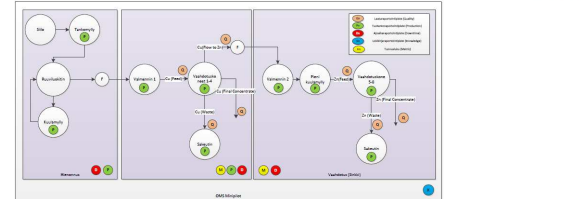


Minipilot MES System Architecture

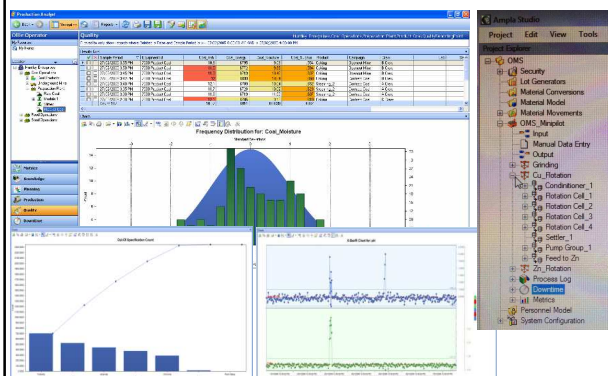
Ampla with:

- Quality
- Production
- Downtime
- Knowledge
- Metrics

• Partnering with CGI Finland



Ampla – Quality (LIMS) at Minipilot



Key Takeaways

- Is MES a solution?
- Why MES is seen as a "big" investment?
- When a operation is ripe for MES?
- DIY MES or commercial license?
- Cherry picking MES?
- Proprietary or open MES?
- Convergence between OT and IT?

**Make the most of your
energy**



Answers:

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