

Summary Datamanagement +

Remote Service in Polysius

01. October 2022 | BU Polysius | Automation and Digital

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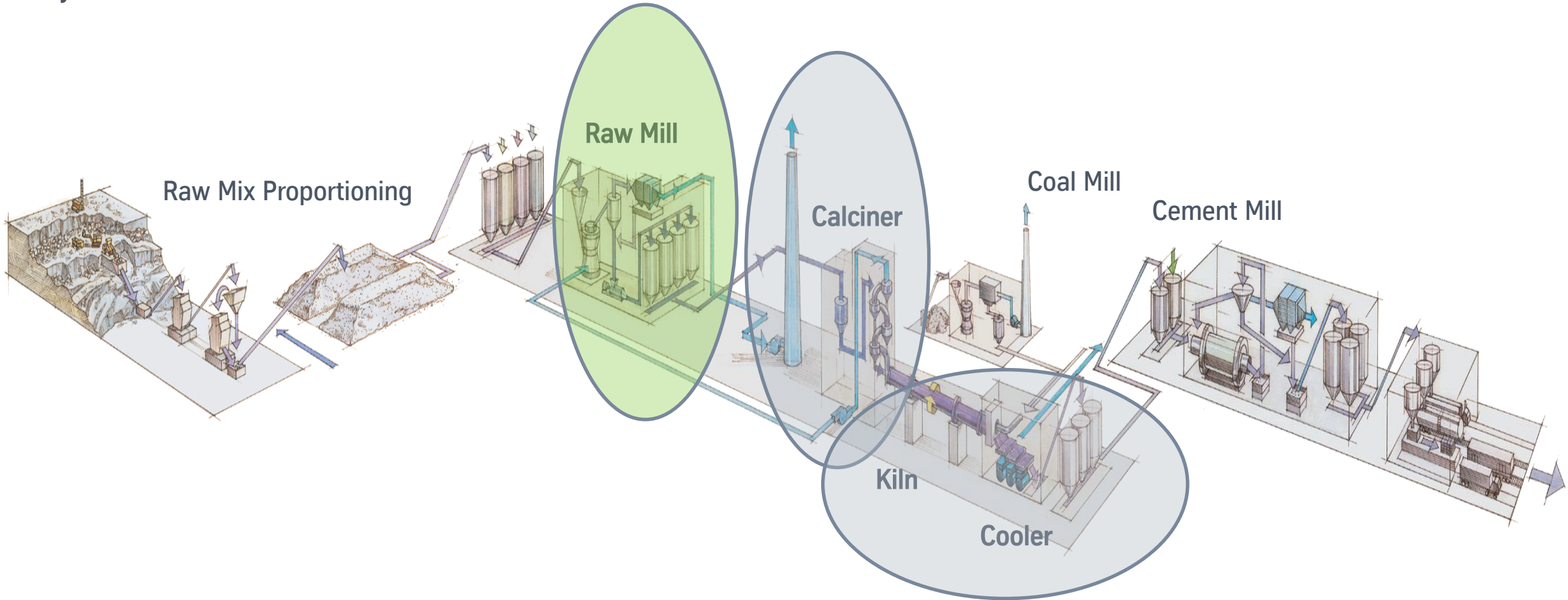
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Expert system + datamanagement

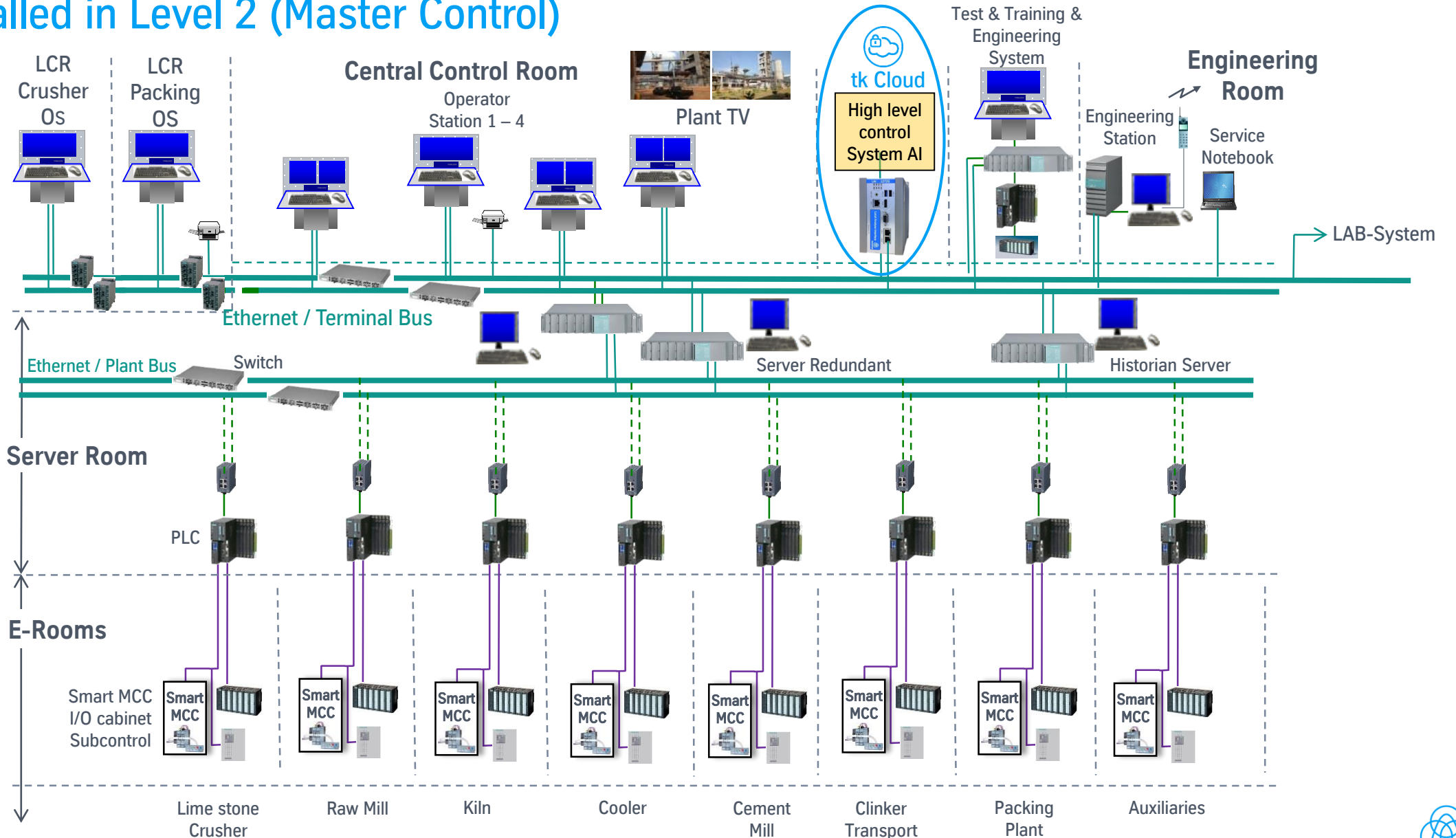


Expert systems + Digitalization + AI + Internet Security

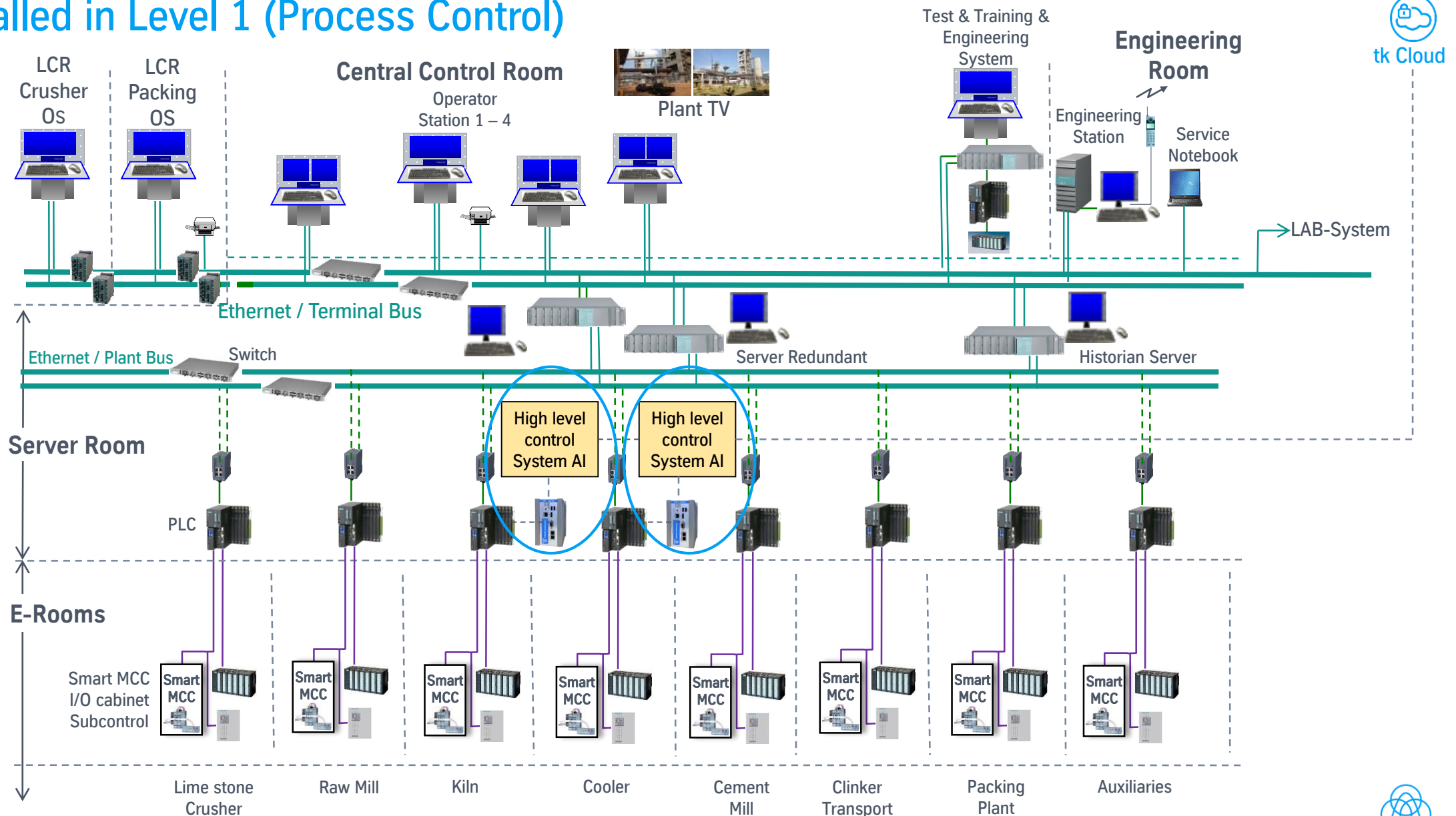
Polysius



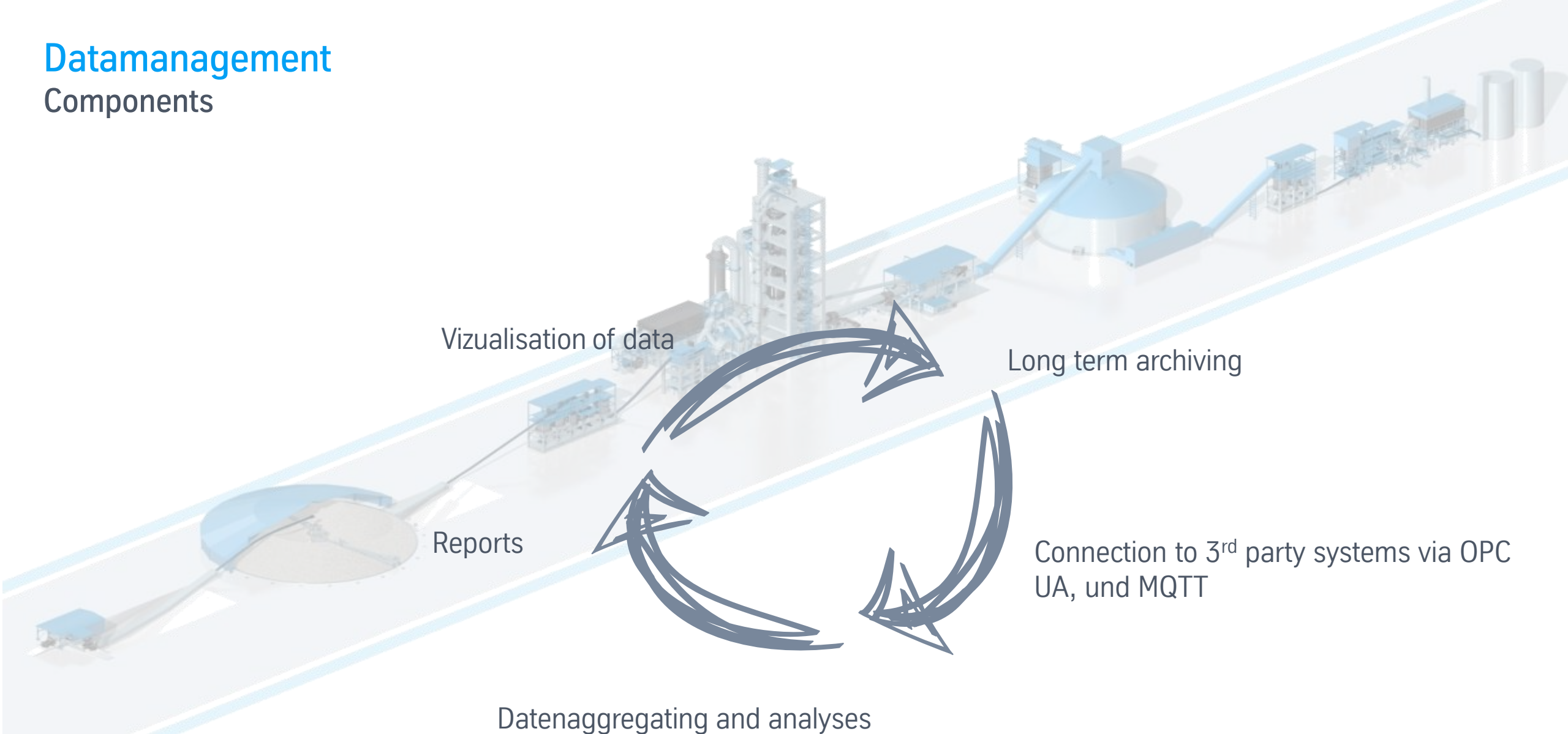
Typical hardware configuration of a process control system with high level control system (AI) – Installed in Level 2 (Master Control)



Typical hardware configuration of a process control system with high level control system (AI) – Installed in Level 1 (Process Control)



Datamanagement Components



Datamanagement

Polysius

Data Logging

- Long-term data storage via a versatile edge device (industrial PC)
- Efficient storage by utilizing a time series database and a hierarchical component database
- Comparison of machine runtimes over years

Modular Approach

- The logging software on the edge device can be easily extended by writing drivers for additional hardware (sensors)
- Drivers for most common Sensors / PLCs exist

Analytics & Reporting

- On-prem analytics possible with already installed software and web interface
- Jupyter Lab cloud based / on prem Python Programming Suite
- Reports and Evaluation of machine behavior from our Domain Experts if cloud connection available
- Webbased operating protocols

Visualisation & Alerting

- Visualisation and Dashboard Management with Grafana
- Definition of Alerting Rules
- Various Message Channels available



Automation - Analytics - Digitalization

- Becoming smart with thyssenkrupp automation and digitalized expertise solutions



Remote service

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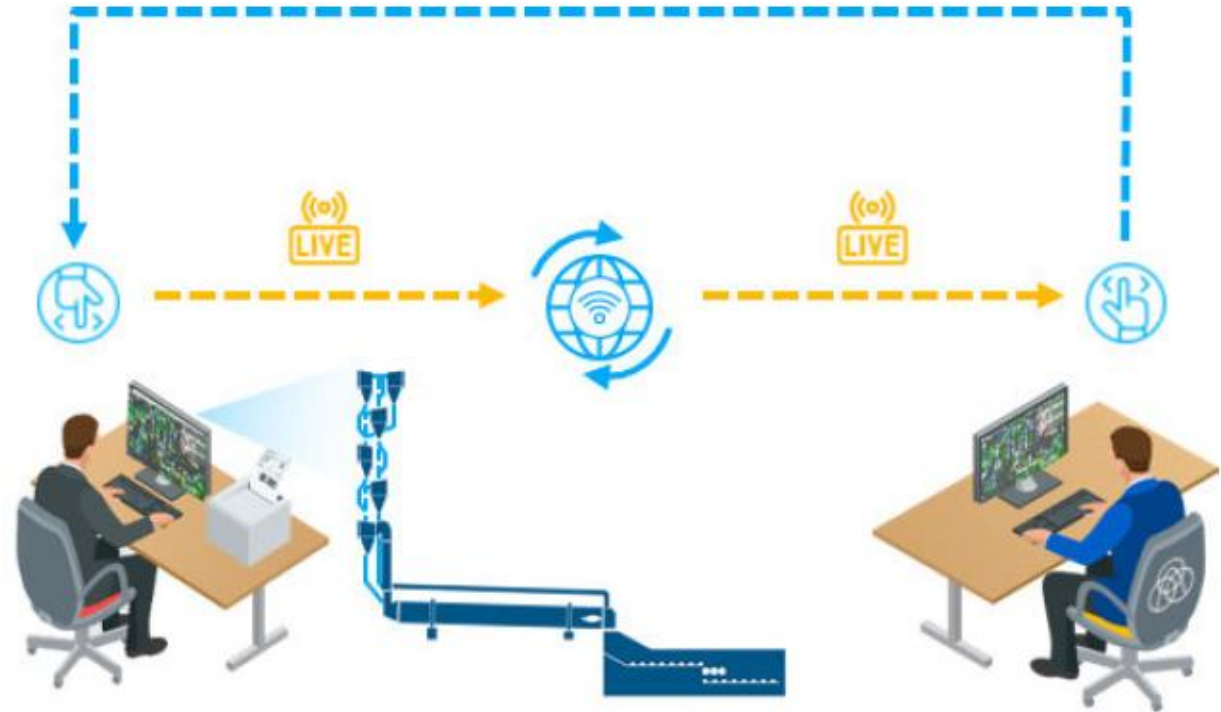




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remote assist automation

Engineering | Commissioning | Maintenance





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remote service

See through our expert's eyes.



BENEFITS

- Have expert knowledge on site
- Receive fast assistance – tailored to needs
- Get access to easy operation – worldwide
- Benefit from significant cost-savings
- Have less down times

DESCRIPTION

- Experts support via PC, tablet or smartphone – no matter where they are in the world
- Contact via smartphone, tablet or data glasses – no matter where your job site is located
- Live support incl. possibility to make videos and screenshots, as well as markers can be set in the live image, plus: all documents are available as documentation after the remote service
- Sharing of documents such as data sheets, technical diagrams, checklists etc.

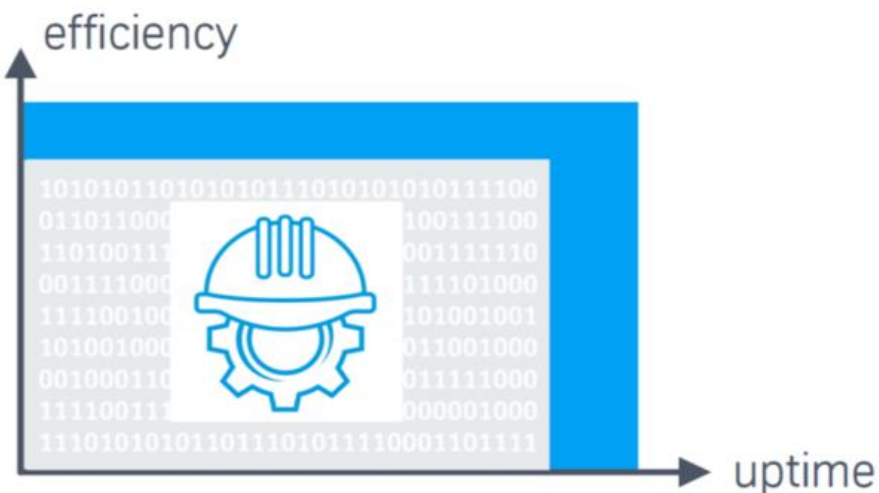
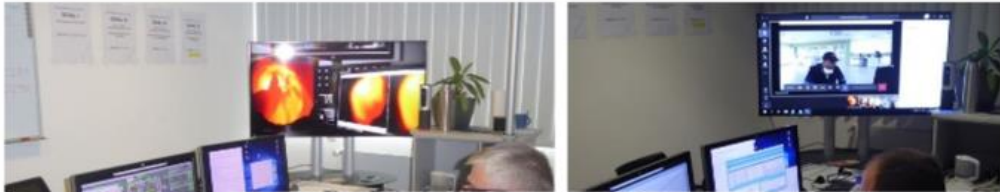




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remote operating support

Plant Operation & Optimization | Commissioning



BENEFITS

- Benefit from in-depth knowledge and experience
- Decrease costs
- Increase process efficiency
- Save time and be more agile
- Regular short sessions possible

DESCRIPTION

- Support from our virtual control room
- Operational support during commissioning and day-to-day plant operation
- Support in the event of problems of any kind during plant operation
- Training and further education of the operating personnel.





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Engineering | Commissioning | Maintenance



BENEFITS

- Our global positioning and regional competence enable worldwide support
- Short response times
- Professionally qualified competence center
- Customer-oriented training
- Decrease costs

DESCRIPTION

- Support from our virtual control room
- Efficient methods of technical assistance through remote diagnostics, active interventions in the automation system and support of our customer's maintenance technicians
- Based on a fast international communication infrastructure
- Fields of application in the areas of engineering - commissioning - maintenance





Remote Education – Invest in your staff. Increase profitability.



BENEFITS

- Increase the output
- Enhance the product quality
- Have fewer cases of damage
- Improve plant availability
- Boost safety in daily operations
- Increase the motivation of your personnel

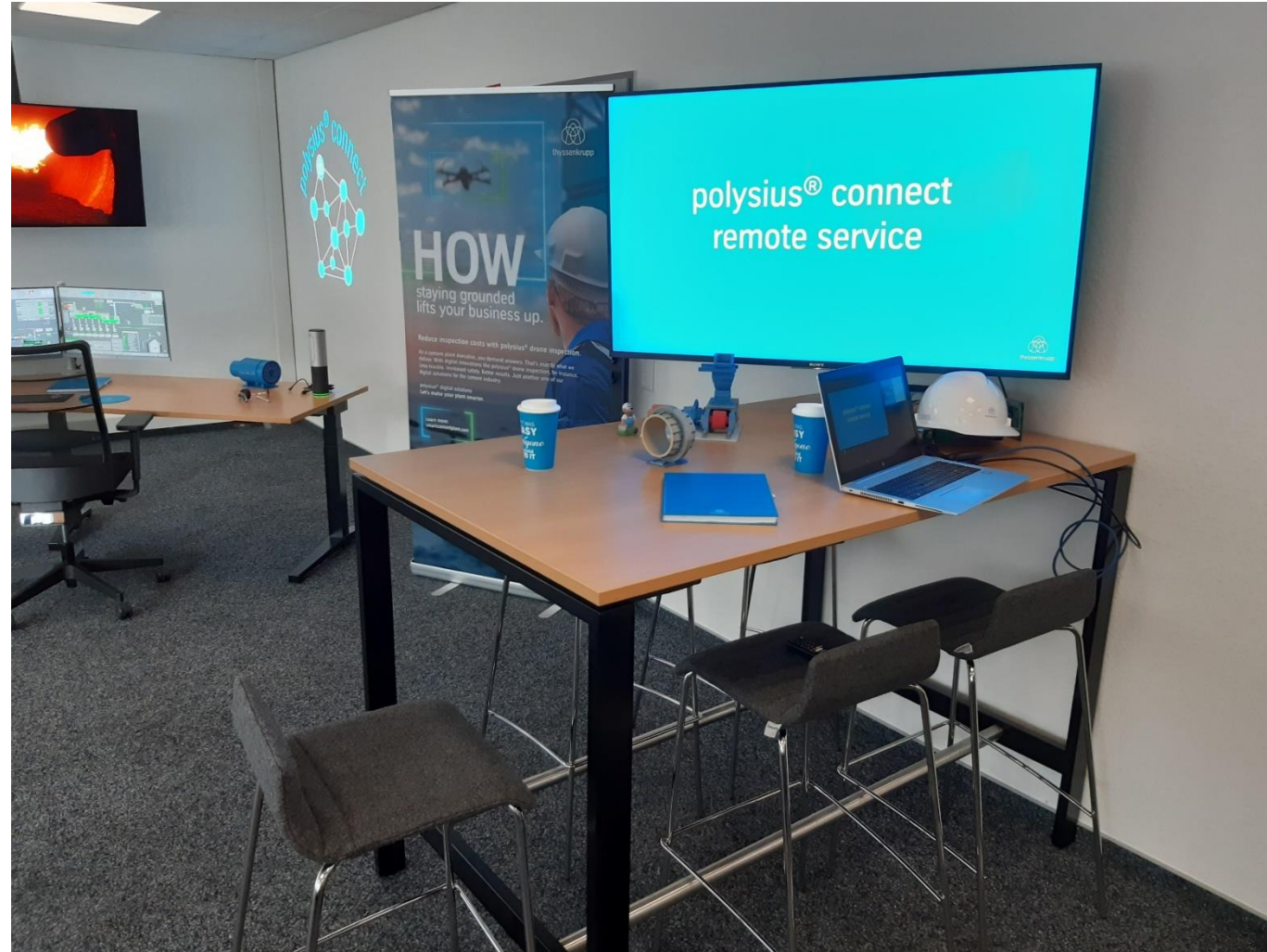
DESCRIPTION

- Custom-tailored technical training courses to systematically increase your employees' know-how – 100 % remote available
- Standard & trouble shooting courses
- Individually designed according to your requirements
- Our experienced field experts will discuss your problems with your personnel
- Integration of suppliers and outside specialists
- Global practicability
- Methodological training courses for process & production optimization, preventive maintenance & refurbishment and automation & control



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Remote service,
control center in
Beckum



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OP-AM Automation- at home all around the world



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Thanks for your Attention!

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