

Case study

800xA control system for GMDs Protect all components of your grinding system



Downtime of Yanacocha's GMD was prevented thanks to a simple solution: a 800xA backup server.

Imagine your plant is affected by a thunder storm and heavy lighting is causing a malfunction of your 800xA server for your gearless mill drive (GMD). If the server fails, the GMD stops working. This could lead to immense production losses. The team of Minera Yanacocha in Peru experienced such an event. But thanks to a 800xA backup server system downtime was prevented.

Minera Yanacocha located in Cajamarca in Peru operates with one ABB gearless mill drive system. In February 2014 heavy lightning caused malfunction of the 800xA server of the GMD. Only by having a redundant 800xA server installed production loss of several days was prevented.

GMDs are the bottleneck in the mining process. So, your maintenance team has to perform all crucial tasks ensuring system availability and reliability. To achieve high availability the team mainly focuses on mechanical and electrical components of the GMD system while the installed control system is not addressed properly.

But there could be a very simple solution for this: The reliability of the 800xA control system can be increased with an upgrade to a redundant server structure. This can reduce unplanned downtime of your GMD system from several days down to several hours.

And it is easily implemented: ABB can execute the upgrades to the redundant server structure during a planned GMD system shutdown or a planned control system upgrade.

ABB's scope of supply

Easy solution for a secure GMD control system

Depending on the existing control system topology of the GMD an upgrade to a redundant server structure includes typically additional server hardware and interconnections between all existing E-houses. Redundant servers should be installed in a customer server room and 800xA clients inside of the existing E-houses. ABB recommends to update the existing operation system from Win XP to Win 7 during the execution.

Scope of supply

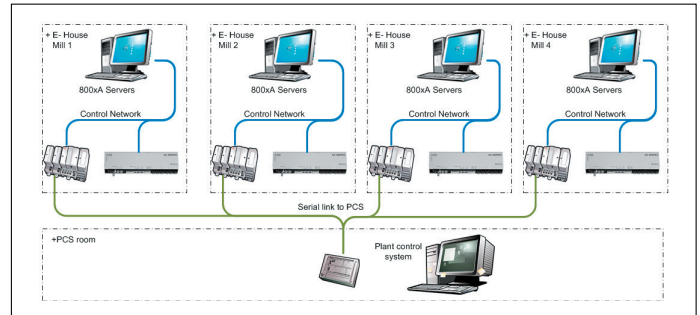
- 800xA server
- 800xA system configuration for server and clients
- Interconnections between all E-houses and customer server room
- Additional network component are required, e.g. ethernet switches
- Build up of redundant control and client/server network
- Adaption of 800xA licenses to allow redundant server structure.

Feature

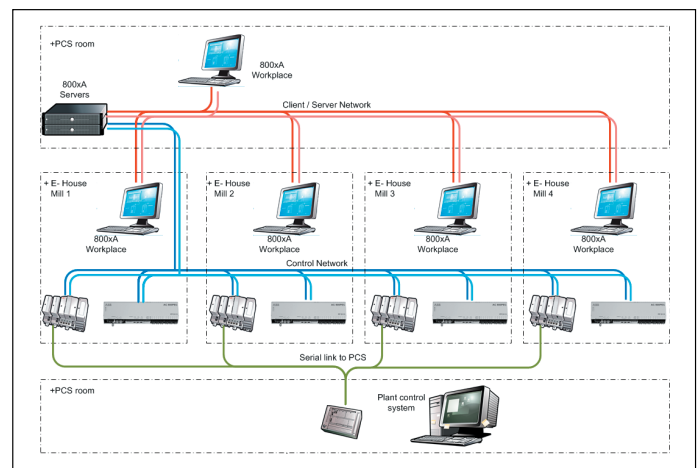
- On sites with several GMD installations: easy access of any GMD HMI from any workplace located inside the E-houses
- All GMD data are stored in one common place. This allows comparison of different mill data in the same trend.
- Control system is able to add any additional 800xA client.

Benefits

- Increased system reliability
- More robust and more reliable control system for GMD
- All future upgrades of the control system are executed online
- One common source for all GMD system data
- Extendable configuration, e.g. adding 800xA client
- Simultaneous system upgrade to latest 800xA version give you additional benefits:
 - new system features
 - bug fixing of Windows and 800xA



GMD system – actual situation



GMD system – redundant network

For more information, please contact:

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