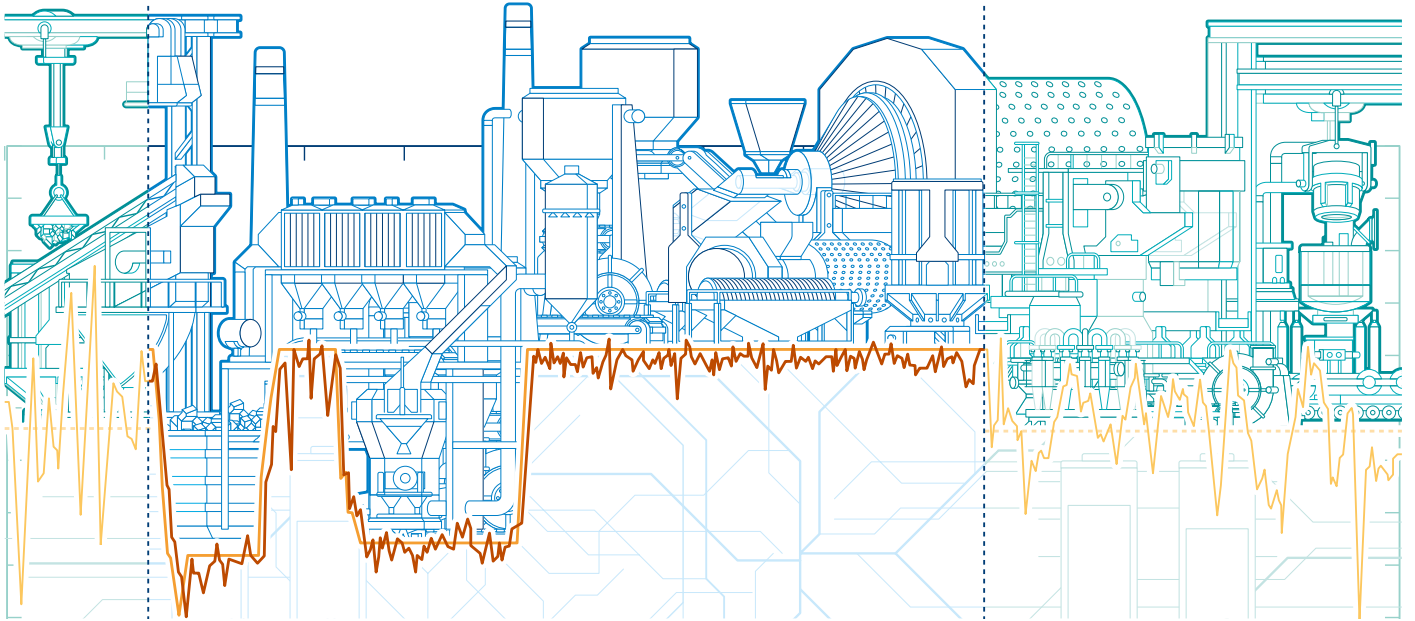


Service product

Process improvement services Optimizing process control for limitless performance



Economic challenges are pushing mining companies to work even harder to maximize process efficiency and maintain product quality, while reducing costs. However, operators controlling the process are being overwhelmed and overloaded with an increasing amount of complex tasks. The solution is process improvement services (PRISE), a packaged approach developed by ABB that merges essential data to consistently control plant processes at optimal levels — at all times, in all situations.

Process Improvement Services

PRISE optimizes process control for limitless performance



Customized process control

As plants become more and more automated with sophisticated smart sensors and powerful DCS, plant operators are required to monitor multiple complex processes, and predict and control their behavior based on an overwhelming amount of data.

Our range of process improvement services will combat operator overload by providing the essential information, while steering processes at precise optimal levels, in a systematic, consistent and permanent way.

With PRISE we identify and tackle the challenges preventing you from operational excellence in a variety of mining processes, including crushing, grinding, flotation, thickening, dewatering, leaching and stockpile management.

With more than twenty years of control experience, and our customizable packaged solution, PRISE will optimize all processes to improve product quality, prevent waste, and protect valuable equipment.

The PRISE approach

Process performance FingerPrint

Our experts will assess, measure and analyze your processes and provide an estimate of potential improvement.

Instrumentation

If any instrumentation is missing, we will make recommendations on what you should acquire and provide optimal measurement procedures.

PID tuning

With the help of proven LoopScan and LoopTune software embedded in ServicePort, we will assess and tune your PID loops to their best performance.

Advanced process control

Our process improvement services utilize model predictive control, first stabilizing the process, then driving key variables to their process limits.

PRISE will consistently control your process like your best operator, 365 days a year, 24 hours a day.



PRISE improvements at two Boliden mines

Improved grinding at Aitik*

- Particle size controlled
- Mill loads stabilized (standard deviation decreased by 79%)
- Autopilot for operators
- No constraint violations with respect to power, torque, mill load

*Results gathered over a six month evaluation

Increased flotation efficiency at Garpenberg*

- Recovery increased by 1%
- Reduction of variability in product grade
- Increased stability of froth levels and reagent consumption

*Results gathered over a two month evaluation



PRISE – process improvement services

Your challenges

- Lack of the right data
- Overloaded/inexperienced operators
- Lack of precise control
- Shift-to-shift variations
- Inconsistent handling of critical situations

Our solution

A packaged offering with a systematic and coordinated approach to improve and optimize processes in a permanent way, maximizing productivity, improving product quality, and saving energy.

Features

- Process assessment
- Instrumentation consultation
- A packaged solution to enable perfect process control
- Flexible and customizable to meet customer requirements

Benefits

- Maximum process efficiency to lower operational costs
- Energy savings
- Consistent product quality
- Minimized material loss in flotation
- Process stability to protect equipment from damage

Long-term service agreement

Tailored maintenance and state-of-the-art technology

The way to optimize process performance, protect your assets and extend the life cycle of your equipment, is by taking a long-term business approach to service. Comprehensive, but flexible, ABB can provide services and technologies to create a long-term service agreement (LTSA) that is customized to meet your site specific requirements.

With a PRISE long-term service agreement, ABB will concentrate on key mining processes, like crushing, grinding, flotation, thickening, dewatering, leaching and stockpile management, identifying and solving the challenges preventing you from operational excellence. With a long-term service agreement, we can ensure that the increased performance delivered by PRISE will always be sustained.

Long-Term Service Agreement (LTSA)				
Long-term scheduled maintenance	Spare parts lists and kits	Condition monitoring	On-site	PRISE™ Performance improvement services
Long-term on-site support				
Extended start-up support	On-demand spares	Supportline & troubleshooting	Classroom	Energy efficiency
On-demand service				Engineering & consulting
Field services	Spare parts services	Remote services	Training services	Advanced services

For more information please contact:

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