# **Ensured Results in Mineral Processing**

**Gearless Mill Drives** 





•••••••••• Available ••• Robust . . .



ABB's scope Four complete Gearless Mill Drive of supply: Systems including:

> Wrap-around Motors Cycloconverters & Excitations Transformers, E-House Containers incl.: Cycloconverters, MCC's, PLC's, VMS Excitation Converters, Fire Fighting, UPS

> Two complete Synchronous Condenser Systems

Two complete Filter and Compensation Systems for Plant Compensation Two 220/23 kV Main Transformers 75/100/125 MVA

#### Antamina Compania Minera Antamina S.A. Peru

Project: One SAG Mill and 3 Ball Mill Drive Systems

Capacity:	SAG Mill 1000 t/h Ball Mills 1000 t/h
Consultant:	Bechtel, USA
Mill Builder:	FFE Minerals, USA
Mill Size:	SAG Mill 38 feet/11,58 m Ball Mills 24 feet/7,32 m
Ore processed:	Copper/Zinc
Drive Rating:	SAG Mill 20,1 MW, 9,23 rpm Ball Mills 11,2 MW, 11,38 rpm
Award of Contract:	March 1999
Start of Operation:	June 2001



of supply:

ABB's scope Four complete Gearless Mill Drive Systems including:

> Wrap-around Motors Cycloconverters & Excitations Transformers, E-House containers incl.: Cycloconverters MCC's, UPS, Fire Fighting, PLC's VMS, Excitation Converters

#### Escondida IV, Chile

Project: One SAG Mill and 3 Ball Mill Drive Systems

Capacity:	SAG Mill 4583 t/h Ball Mills 4583 t/h
Consultant:	Bechtel, Chile
Mill Builder:	FFE Minerals, USA
Mill Size:	SAG Mill 38 feet/11,58 m Ball Mills 25 feet/7,62 m
Ore processed:	Copper Ore
Drive Rating:	SAG Mill 19,4 MW / 9,31 rpm Ball Mills 13,43 MW / 11,5 rpm
Award of Contract:	November 2000
Start of Operation:	December 2002

## Efficient . . .

# Compatible



## ABB's scope of supply:

Two complete Gearless Mill Drive Systems including:

Wrap-around Motors Cycloconverters & Excitations Transformers E-House Containers incl.: Cycloconverters MCC's, PLC's, VMS Excitation Converters Fire Fighting UPS

#### Batu Hijau PT. Newmont Nusa Tenggara Indonesia

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Project: Two SAG Mill Drive Systems

Capacity:	850 t/h
Consultant:	Fluor Daniel, USA
Mill Builder:	Svedala, USA
Mill Size:	36 feet/10,97 m
Ore processed:	Copper/Gold
Drive Rating:	13,5 MW, 9,77 rpm
Award of Contract:	February 1997
Start of Operation:	December 1999



ABB's scope of supply:

One complete Gearless Mill Drive System including:

Wrap-around Motor Cycloconverter & Excitation Transformers, E-House Container incl.: Cycloconverters, MCC's, PLC, VMS Excitation Converter, Fire Fighting, UPS One complete Ball Mill Drive System incl.: Wound Induction Motor 6,72 MW, 996 rpm, 6 pole, 50 Hz. Liquid Starter

#### Century Zinc Pasminco Century Australia

Project: One SAG Mill Drive System

Capacity:	680 t/h
Consultant:	CMBJV
Mill Builder:	Fuller, USA
Mill Size:	36 feet/10,97 m
Ore processed:	Zinc
Drive Rating:	12,0 MW, 9,20 rpm
Award of Contract:	February 1997
Start of Operation:	October 1999



ABB's scopeTwo complete Gearless Mill Driveof supply:Systems including:

Wrap-around Motors Cycloconverters & Excitations Transformers, E-House Containers incl.: Cycloconverters, MCC's, PLC's, VMS Excitation Converters, UPS Two complete Filter and Compensation Systems

#### Goldstrike Barrick Goldstrike USA

Project: Two Ball Mill Drive Systems

Capacity:	512 t/h
Consultant:	Hatch Associate, Canada
Mill Builder:	Polysius, USA
Mill Size:	19 feet/5,8 m
Ore processed:	Gold
Drive Rating:	7,5 MW, 13,45 rpm
Award of Contract:	October 1998
Start of Operation:	April 2000

### ABB – Your Partner in Mining & Mineral Processing

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- Serving the industry since 1973
- Over 40 complete plants installed in 20 countries
- Drives and process control systems installed at more than 160 locations in 25 countries
- Internationally supported competencies and resources
- Single source responsibility for engineering and hardware needs
- Financially secure, longterm global commitment
- Over 80 additional process optimization and information management installations
- Wide range of process instrumentation
- Industry specific applications

ABB offers comprehensive packages of ABB competencies, products and services for the electrification, automation and optimization of the complete production chain in the industry.





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