

TOSHIBA

MINING & MINERALS

SOLUTIONS

**MINING &
MINERALS**



CUSTOMIZED SOLUTIONS FOR COMPLEX DEMANDS

Toshiba International Corporation's (TIC) large installed base of product offerings in the mining and minerals industry demonstrates our customers' confidence in choosing Toshiba. We provide comprehensive in-house services and offer customized solutions to meet your application needs. TIC also has the capability to test many of our product offerings together as a complete system before they go out into the field, helping to ensure high levels of quality, performance, and reliability. Customized system solutions include:

- Reliability and Uptime
- Lower Lifecycle Costs and Extended Equipment Life
- Excellent Performance and Efficiency for Reduced Energy Costs
- Superior Product Support for Reduced Maintenance Costs
- Single Source Supplier of Integrated Motor & Drive Systems

LOW VOLTAGE ADJUSTABLE SPEED DRIVES

Toshiba's low voltage adjustable speed drives can be used to precisely control a wide variety of applications at various stages in the mining process. Offering some of the highest overload ratings in the industry, these drives can operate continually in demanding mining applications while maintaining a high level of control. Toshiba's low voltage drives are reliable and efficient, making them ideal for pump, fan, compressor, elevator belt, and separator applications.

- **AS3 General Purpose:** 230 V & 460 V; 1/2 HP to 500 HP
- **PLUS PACK OUTDOOR:** 380 V & 460 V; 60 HP to 1500 HP

LOW VOLTAGE MOTORS

Toshiba's low voltage motors are designed for harsh mining environments where premium performance, efficiency, and reliability are a must. These low voltage motors have the capability to carry an impressive 20:1 constant torque turn down ratios for 1 to 20 HP, which is critical for operating conveyor mining applications.

- **EQP GLOBAL® SD:** 230/460 V, 460 V & 575 V; 1/2 HP to 800 HP
- **EQP GLOBAL® 840:** 460 V & 575 V; 3/4 HP to 500 HP
- **EQP GLOBAL® 841:** 460 V & 575 V; 3/4 HP to 400 HP
- **EQP GLOBAL® QUARRY DUTY:** 460 V & 575 V; 5 HP to 750 HP
- **EQP GLOBAL® EXPLOSION PROOF:** 230/460 V, 460 V & 575 V; 1 HP to 350 HP



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MEDIUM VOLTAGE ADJUSTABLE SPEED DRIVES

Toshiba's medium voltage adjustable speed drives are some of the most advanced drives on the market. Their multi-level PWM designs allow these drives to have a reduced footprint and component count, helping to lower ownership and maintenance costs. These drives can be retrofitted into mining installations using existing motors while also allowing for multiple-motor operation, which is ideal for operating conveyor mining applications. Their control circuit topology also provides higher performance than competitors' models while using fewer parts for easier maintenance.

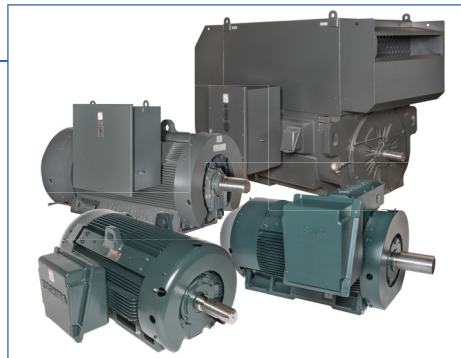
- **T300MV2® General Purpose:** 2400 V, 3300 V, 4160 V, 6600 V & 6900 V; 300 HP to 11,000 HP
- **MTX2® OUTDOOR:** 4160 V; 500 HP to 1500 HP, 3500 HP to 6000 HP
- **MTX® OUTDOOR:** 4160 V; 500 HP to 3000 HP



MEDIUM VOLTAGE MOTORS

Toshiba's medium voltage motors are an excellent choice for tough mining applications where reliability and durability are essential to minimizing down time and maximizing production. Toshiba's medium voltage motors are constructed with rugged cast iron frames, boosting its high torque/high efficiency performance and unique multi-mount capabilities. High torque motor designs are also solutions for crusher, mill, and conveyor applications.

- **EQP GLOBAL® 587 Design C:** 2300/4000 V & 4000 V; 250 HP to 750 HP
- **EQP GLOBAL® 840:** 4000 V; 200 HP to 500 HP
- **EQP GLOBAL® 841:** 2300/4000 V; 100 HP to 400 HP
- **TEAAC:** 4000 V; 450 HP to 3,000 HP



CONTROLS

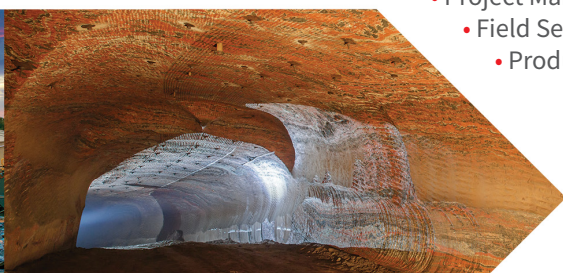
Toshiba's motor controls are designed to softly start and stop AC motors in fixed speed applications, helping to reduce wear and tear on the motors. Toshiba's motor controls are constructed to help improve product performance and are an excellent option for use with conveyors, compressors, fans, and pumps.

- **TE2/3 Series Soft Starters:** High-end, digitally programmable, reduced voltage heavy-duty starter
- **TE-H Combination & TE-B MLO & Combination Series:** TE2 Series soft starters in heavy-duty enclosure that is ready to work right out-of-the-box
- **JK Series Medium Voltage Solid State Starters:** Medium voltage controller; compact design; available in indoor/outdoor enclosure ratings
- **JK Sync-Xfer:** Medium voltage controlgear that is available in multiple configurations, including with multiple motors



TOSHIBA SOLUTIONS

- Research & Development
- Engineering
- Manufacturing
- Technical Sales
- Product & Application Support
- Customer Service
- Project Management
- Field Services & Preventive Maintenance
- Product & Field Service Training


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APPLICATION SOLUTIONS

	PUMPS	BALL, SAG & HPGR MILLS	CRUSHERS	DREDGERS	FANS	COMPRESSORS	SEPARATORS	ROLLERS	SCREENS ROTARY	KILNS	ELEVATOR BELTS	CLASSIFIERS	THICKENERS	FLOTATION CELLS	CONVEYORS
LOW VOLTAGE DRIVES															
AS3	•		•	•	•	•	•	•	•	•	•	•	•	•	•
Plus Pack Outdoor	•		•	•	•	•	•	•	•	•	•	•	•	•	•
LOW VOLTAGE MOTORS															
EQP Global 840	•	•		•	•	•	•	•	•	•	•	•	•	•	•
EQP Global 841	•	•		•	•	•	•	•	•	•	•	•	•	•	•
EQP Global SD	•	•		•	•	•	•	•	•	•	•	•	•	•	•
EQP Global Quarry Duty		•	•				•	•	•	•	•				•
EQP Global Explosion Proof	•	•	•		•	•			•	•	•				•
MEDIUM VOLTAGE DRIVES															
T300MV2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MTX2-15	•	•			•			•		•	•			•	•
MTX2-60	•	•	•		•	•		•		•	•		•	•	•
MTX	•	•		•	•			•			•			•	•
MEDIUM VOLTAGE MOTORS															
EQP Global 587	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
EQP Global 840	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
EQP Global 841	•				•	•				•					•
TEAAC	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CONTROLS															
TE2/3	•		•	•	•	•	•	•	•	•	•	•	•	•	•
TE-H & TE-B	•		•	•	•	•	•	•	•	•	•	•	•	•	•
JK Solid State Starter	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Sync-Xfer	•	•	•	•	•	•	•	•	•		•	•		•	•

