

Mining

## REPOWERING SOLUTIONS

mtu

A Rolls-Royce solution

### WORK WITH COMPLETE CONFIDENCE.

We stand alone as the premier engine supplier to many of the world's most productive mine operations. Day in and day out, our engines perform under extreme conditions. When it's time to repower, you can count on us to boost your equipment's performance, while reducing fuel, maintenance and repair costs.

### A proven solution.

MTU engines have a long history of proving themselves in mining applications for all emissions levels and all kinds of mining equipment—above and below ground. No matter if you want to repower your haul truck, drill rig, excavator or wheel loader, our distributors and service technicians have the expertise to help you choose the best solution for your specific mining operation.

### We offer expertise every step of the way, including:

- Field equipment evaluation
- Retrofit engine and repower kit selection
  Order
- Original engine removal and replacement
- Kit installation
- System configuration
- Testing
- MTU ValueCare parts, service and support

### Engines that don't back down.

High altitude, extreme temperatures and heavy loads are no match for the best engines in the world. Our Series 1600-4000 engine lineup offers exceptional performance while achieving significantly low fuel consumption. The lineup covers a wide power range from 75-3000 kW (101-4023 bhp), led by the legendary Series 4000, renowned as the industry's best engine for high-horsepower applications. Dependability and cutting-edge emissions technology are also available at lower power ranges up to 730 kW (979 bhp).



# BUILD YOUR BUSINESS ON A STRONG FOUNDATION.

### Powerful advantages.

As leaders in quality and tested in practice a thousand times over, MTU engines are built to legendary high standards. Our repower solutions include the following benefits:

### Higher reliability

 Increased uptime through improved engine reliability and ease of maintenance due to simplicity of engine configuration

### Higher availability

- Proven, robust engines

### Enhanced operator productivity

- Lower engine noise level reduces operator fatigue

### Lowest total cost of ownership

- Excellent fuel efficiency
- Increased time between overhaul (TBO) and highly consistent overhaul intervals
- Multiple rebuilds of original engine core throughout the engine life
- Lower operation costs

### Wide range of emissions and application specific engines

- High altitude specification engines
- Emissions qualified
- Fuel consumption optimized

### Quick turnaround

- Our repower process has a typical equipment outage of
- one week or less

### Safer for community and operator

- Reduced fire hazard
- Maintenance-friendly
- Reduced noise, vibration and emissions
- Improved equipment responsiveness and maneuverability

### Let's get started.

With a custom-equipped fleet repower, your mine will be fine-tuned and primed for optimal performance that will enable maximum return on investment. For more information, contact your local MTU distributor. To find an authorized MTU distributor near you, visit www.mtu-solutions.com.

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### Tips for a successful repower project.

Every repower project takes meticulous planning to ensure the equipment and engine works optimally as a system. To get the most out of your next repower project, make sure to:

### Work closely with us and your local distributor

- They have extensive engine-application knowledge, and understand your priorities and concerns
- Protect your investment by ensuring that your equipment
- performance and cost expectations are achieved

### Evaluate safety, load profile and emissions regulations

- This ensures that the power rating of the new engine complies with environmental standards and to reach production targets
- If they don't, the result is lower efficiency, higher emissions and greater operating costs
- Measure KPIs, such as cost-per-ton moved and ROI
- Factors such as engine availability and reliability are key to a successful repower program
- Measure lifecycle costs against tons of material moved

### Abide by federal engine disposal regulations

 Mishandling a repowered engine core will lead to hefty federal fines that accumulate on a per-day, per-engine basis

### Check for other system upgrades

 Work with your distributor to determine which system upgrades are available and would improve performance at the time of your repower.

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