

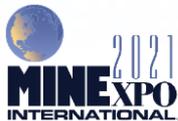
KOMATSU



Investor relations and analyst meeting

Komatsu mining business

September 2021



Thank you for joining us today. I'm Rod Schrader, chairman and CEO of Komatsu North America. After a difficult few years, we're excited to be back at MINExpo as we come together once again as an industry to begin moving toward what we hope is a brighter future ahead.

Our theme this year is Creating Value Together. For us, that means working in partnership with our customers and stakeholders to create value through manufacturing and technology innovation to empower a sustainable future where people, businesses and our planet thrive together.

We've designed this year's Komatsu MINExpo experience to demonstrate in concrete ways how we partner with our customers and others to deliver the equipment, technologies and solutions needed to help mining operators reach their goals and help position the mining industry to meet the world's need for minerals in increasingly sustainable ways.

Cautionary statement

The information set forth herein contains forward-looking statements which reflect management's current views with respect to certain future events, including expected financial position, operating results, and business strategies. These statements can be identified by the use of terms such as "will," "believes," "should," "projects" and similar terms and expressions that identify future events or expectations. Actual results may differ materially from those projected, and the events and results of such forward-looking assumptions cannot be assured.

Factors that may cause actual results to differ materially from those predicted by such forward-looking statements include, but are not limited to, unanticipated changes in demand for the Company's principal products, owing to changes in the economic conditions in the Company's principal markets; changes in exchange rates or the impact of increased competition; unanticipated cost or delays encountered in achieving the Company's objectives with respect to globalized product sourcing and new Information Technology tools; uncertainties as to the results of the Company's research and development efforts and its ability to access and protect certain intellectual property rights; and, the impact of regulatory changes and accounting principles and practices.

A quick note: the information we're about to present reflects Komatsu's current views, but actual results may differ materially from those projections. Results based on the forward-looking assumptions we'll be discussing today cannot be assured.

Featured executive leaders

Presenting:



Rod Schrader
Chairman and CEO
Komatsu North America



Jeffrey Dawes
Vice President
Mining Business Division, KLTD
President and CEO
Komatsu Mining Corp.

Participating in the chat and Q&A:



Max Moriyama
President
Mining Business
Division



Peter Salditt
President
Komatsu Underground
Mining



John Koetz
President
Komatsu Surface Mining



Jorge Mascena
Sr Vice President
Mining Technology
Solutions
President and CEO
Modular Mining



Shingo Hori
Sr Vice President
Mining
Technology
Solutions



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I'd like to start by introducing the Komatsu executive leaders who will be participating today.

Presenting along with me will be Jeff Dawes, vice president mining business division, KLTD, and president and CEO, Komatsu Mining Corp.

In addition, several executive leaders will be participating in the chat and Q&A. Those leaders include:

Max Moriyama, president of our mining business division

Peter Salditt, president of underground mining

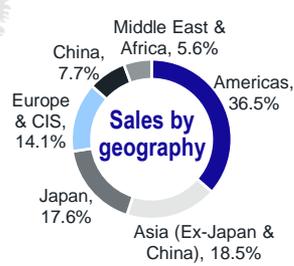
John Koetz, president of surface mining

Jor-Jay Mascena, senior vice president, mining technology solutions and president and CEO of Modular Mining

And

Shingo Hori, senior vice president of mining technology solutions

Komatsu at a glance



For the last century, companies have relied on Komatsu equipment to help them power society and develop the world's infrastructure.

In the years since our company's founding in 1921, Komatsu has grown to become a global \$22.3 billion company, in the last 12 months of revenue, employing 62,800 people worldwide.

Komatsu now provides essential equipment, technologies and services for the construction, mining, forest, energy and manufacturing industries. As you can see from the charts on top right, the bulk of our sales come from customer purchases of construction and mining vehicles and equipment.

Creating value together

Mergers and acquisitions

JOYGLOBAL


mineware





Integrations

Formation of **Mining Technology Solutions** team


**MODULAR
MINING**
A Komatsu technology brand

 | 

Alliances and strategic partnerships

NOKIA





Cummins





Since the last MINExpo in 2016, Komatsu has been taking steps to create a future where mining environments are interoperable ecosystems that bring together each customer's chosen equipment and technology to accelerate value delivery and empower innovation.

To help us reach that future, we've undertaken a series of mergers and acquisitions, which have included:

- Joy Global and MineWare in 2017
- Timberock and Immersive Technologies in 2019

We also recently formed a new Mining Technology Solutions team to bring together experts from across our businesses to focus on rapid technology advancement. The new business unit includes Modular Mining, one of our longtime subsidiaries. As part of this evolution, the MineWare brand is being discontinued and its Argus and Pegasys monitoring solutions will now be part of the Modular Mining brand portfolio.

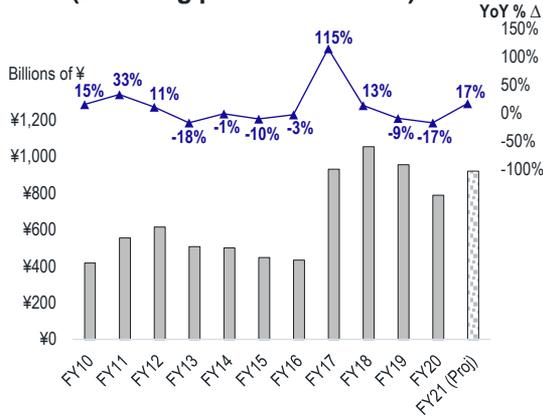
It's important to note that through these integrations, we're not trying to make our technology companies more like Komatsu, but instead, to enhance Komatsu's capabilities by adopting their interoperability business model. We're aiming to open up collaboration and change the dynamics of the entire market. We believe we are the first OEM to break the traditional mining support model.

Finally, we've developed and strengthened several alliances and strategic partnerships including:

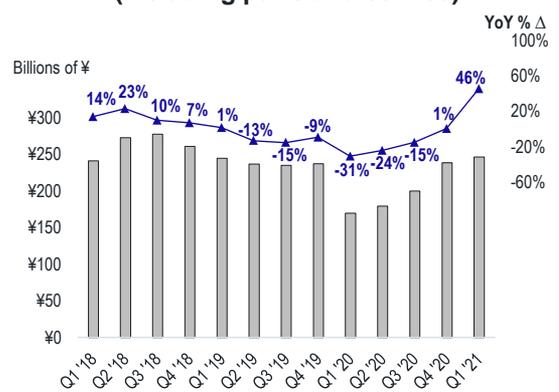
- Jenmar. Through an agreement announced just last week, we'll be working with Jenmar to deliver innovative pumpable resin solutions for underground hard rock mining drilling and bolting customers.
- Nokia. We've worked with Nokia over the years in the autonomous space, and our FrontRunner Autonomous Haulage System is qualified to operate on Nokia's private LTE mobile broadband technology.
- Cummins. Engine monitoring and analytics
- Wabtec. Electric drives
- Topcon. High-precision GNSS receiver
- Advantech. Works in the IoT space, they provide Trek mobile computers

Komatsu global sales of mining equipment

**Annual sales of mining equipment
(including parts and service)**

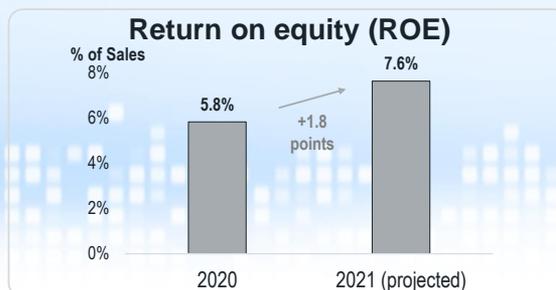
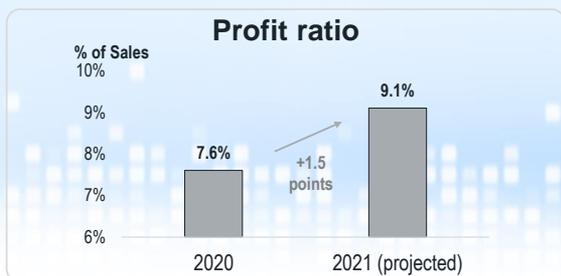
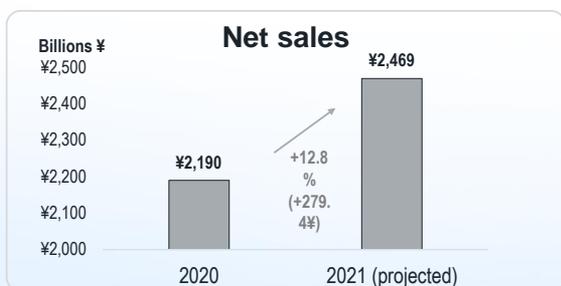


**Quarterly sales of mining equipment
(including parts and service)**



- These charts show equipment, parts and service sales for our mining segment
- Looking at the annual sales of mining equipment, the big jump from FY16 to FY17 is representative of the Joy Global acquisition.
- For full year 2021 we expect the mining segment to grow by 17%, primarily driven by strong demand in Oceania, Latin America, CIS and Asia.
- On a quarterly basis, as you can see, mining sales increased by 46% in the 1st quarter versus same quarter last year.

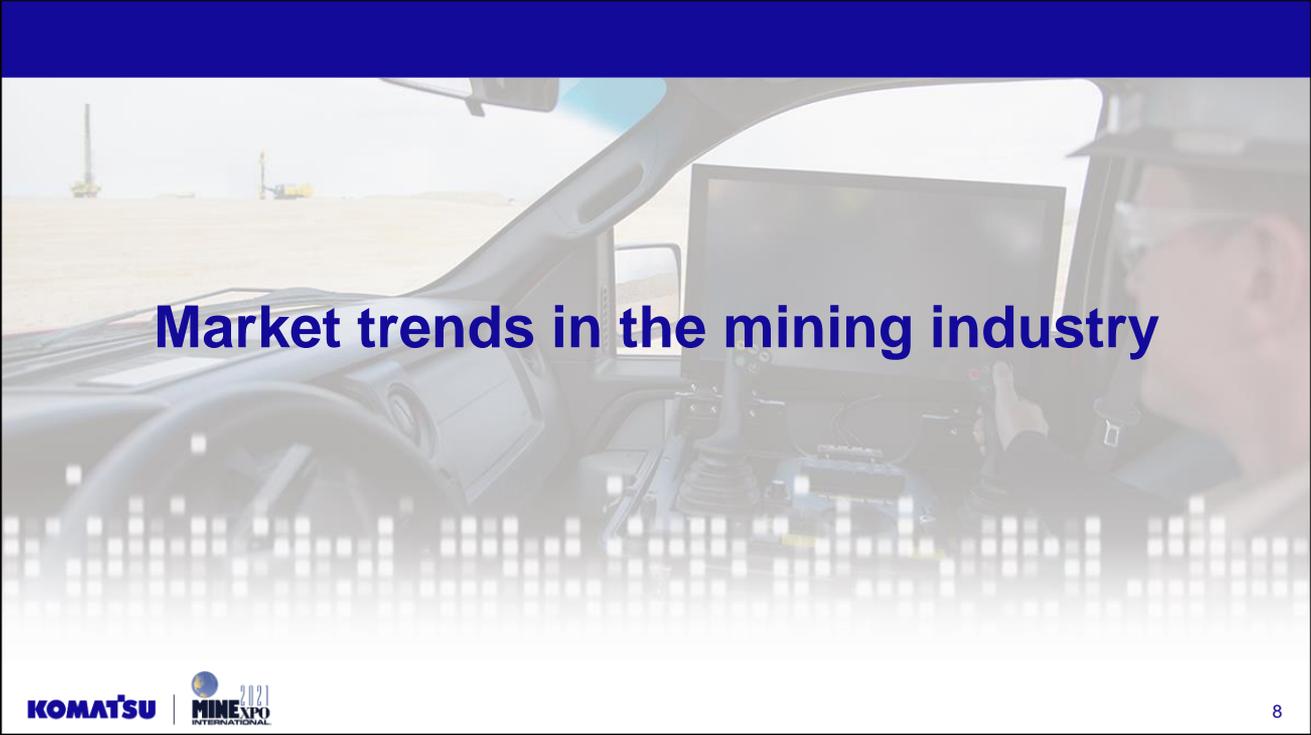
KLTD Outline of projection for FY2021



Komatsu Limited's guidance for FY2021, as stated during our last earnings call, expects overall net sales to increase 12.8%, as you see in the first chart. This is in-line with industry spending expectations along with a broad-based recovery in the mining industry and overall economy.

These facts, along with the structural reforms we have taken in the last several years, is leading to a stronger operating income and profit ratio for the 2021 projection.

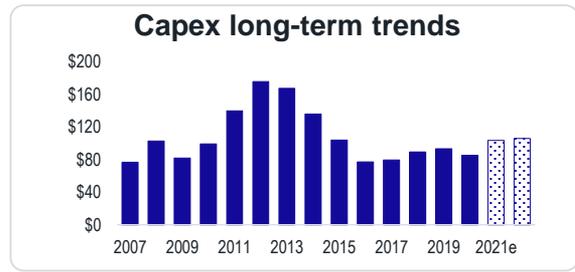
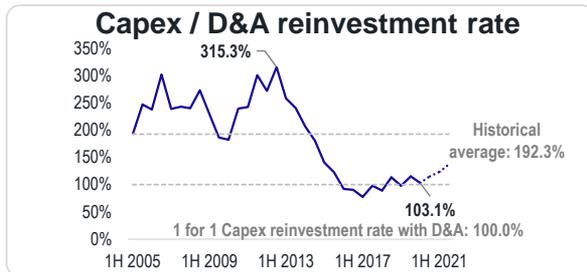
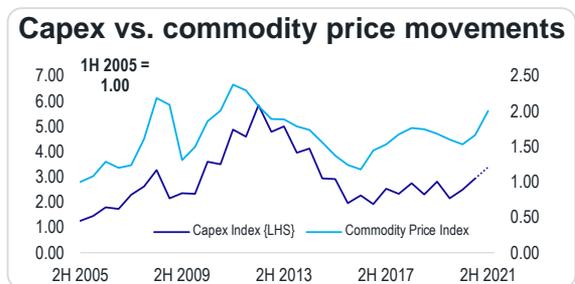
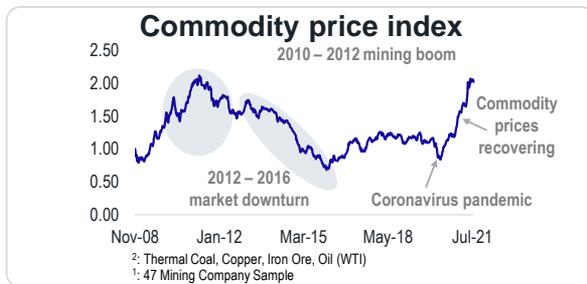
Like the improved profit ratio, we are also expecting a slight improvement projection on return on equity for shareholders.



Market trends in the mining industry

We'll move on now to the market trends we're seeing in the mining industry.

Global mining industry trends



Source: Bloomberg, Company Data, IHS Markit Insight



Top Left:

- The post COVID-19 recovery has accelerated as commodity prices, in many cases, are approaching levels last seen during the Super-Cycle. As prices have recovered, so has the outlook for 2021.

Top Right:

- Commodity prices fell during 1H 2020 as a result of the pandemic. As the global economy has begun to recover, there was a substantial increase in commodity prices. The expectation is that Capex will improve in 2H 2021 given the substantial positive trends in commodity markets.
- Capex increases usually trail commodity market upturns by 6 – 12 months. Strongest correlation at 6 months (0.79) and 12 months (0.75).

Bottom Left:

- The Capex / D&A (Depreciation and amortization) relationship demonstrates the level of spending necessary to sustain production levels as assets are depreciated. The current trajectory (~103%) is just above the 1 to 1 (100%) relationship level and suggests that spending trajectory must increase to maintain miners' assets productivity.

Bottom Right:

- Following a -8.8% decline in 2020, industry spending is now expected to be up +22.6% in 2021 as economy recovers and miners feel more confident. Despite the increase, aggregate spending remains similar to levels seen in 2015.

Trends shaping the mining industry

Driving to zero harm



Embracing a more sustainable future



Adopting smart mining practices



The strategic priorities and trends shaping our industry are a mix of old and new. We must continue to prioritize safety and the environment, but we are able to do so in increasingly innovative ways: leveraging automation, electrification and the use of connected systems to evolve the ways we help our customers extract essential minerals to power modern society.

At this year's show and in the roadmaps for the years ahead, we're focusing on:

- Advancement in the use of automation and remote operations to help remove people from the mine face
- The use of batteries, electrical and alternative power sources to help improve air quality, reduce emissions and support more sustainable mining methods
- An increased need for hard rock minerals used to create alternative energy sources
- The adoption of smart mining practices including digitalization, the use of real-time data analytics, connected infrastructure and interoperable systems to transform mining operations for continued optimization and advancement.



Komatsu's vision and strategic initiatives, which we'll be sharing next, are designed to help our customers find new ways to extract the minerals needed to advance the future of energy and help create renewable resources for the long term. The products, technologies and solutions that we'll be featuring at MINExpo this year are designed to help mining companies advance their journey toward this future vision.

Komatsu strategic initiatives

Sustainability

Digitalization

Automation



Aligned to what our customers need to stay profitable and what society expects of mining for the long haul, our strategic initiatives shaping product, service and technology innovation are:

- Digitalization
- Sustainability and
- Automation

And we know there's consistent value in helping customers strive for safety, productivity, reliability and carbon neutrality, so those value drivers remain at the core of what we do as an original equipment manufacturer and global support partner.

So how does it all come together?



Digitalization

Using data to transform the way tasks, processes and operations are run

First let's take a look at digitalization, and how we're helping customers use data to transform the way tasks, processes and operations are run.

Digitalization roadmap



Our digitalization roadmap begins with discrete technologies, where best-in-class applications help mine operators optimize at the task level. However, these systems tend to be proprietary and closed.

Connected data is the next step on the map, where an open-technology ecosystem is used to integrate technologies and business systems to accelerate value delivery.

Next, data intelligence leverages cloud and edge computing capabilities, sensing technologies and communication systems to analyze, prevent, respond and measure results.

In the final step, integrated operations utilize artificial intelligence and autonomous systems to help deliver mine-wide optimization.

Our smart mining vision

A connected, interoperable mining ecosystem designed to:

- empower rapid innovation through collaboration
- enable integration of the customer's chosen technology and equipment
- accelerate value delivery to mines



Digitalization in mining, at its core, follows a vision for a digitally connected, autonomous or “smart” mine in which connected systems help reduce the ever-increasing complexity of the site and improve decision-making in real time.

We are on the cusp of rapid change and innovation – where advanced automation, digital and integrated technologies intersect to optimize their operations.

From being machine driven...to data driven

Connecting across an open platform

And making data-driven decisions, in real time.

Intellimine Synergy enabling rapid innovation

An open-technology platform designed to collect, integrate and process data in real time



Visit the Modular booth #7671 for a sneak peek



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To accelerate this transformation, last month, we announced the development the new Modular Mining Intellimine Synergy open-technology platform. This innovative new platform:

- Brings together data from all relevant Komatsu, Modular Mining and third-party machines, mining processes, systems and technology applications
- Enhances automated decision making, in real time, and
- Expands opportunities for optimization from task to process to enterprise level

Intellimine Synergy is aligned around common goals of:

- being more agile and collaborative
- increasing efficiencies, and
- leveraging the full capacity of Komatsu's mining experience

Some of the Synergy-ready solutions available to preview in the Modular booth include:

- Advancements in optimization logic
- Integrated technology applications and
- A redesigned ecosystem architecture and user experience

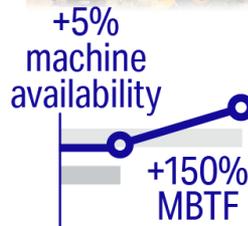
Data intelligence delivering value

Payload management



Results demonstrated
at customer site

Remote health management



Results achieved during
6-month program

Truck cycle optimization



Results demonstrated
at customer site



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Komatsu's Data Solutions programs combine integrated data, advanced analytics and augmented digital capabilities to provide valuable insights that enable more effective decision making for our customers.

We have been able to combine offerings to provide targeted programs for:

Payload management, integrating Komatsu brand technology products including DISPATCH, ProVision, and Argus; along with on-board truck data to achieve a more than 5% increase in payload accuracy

For **Remote health management**, we're integrating multiple data sources and systems (such as MineCare and Komtrax Plus), to help customers minimize downtime with proactive and real-time alarms. Achieved results include increasing machine availability by more than 5% and increasing mean time between failures by more than 150%

Using simulation tools and digital twins, our teams can also help customers with **truck cycle optimization**. By identifying opportunities to optimize haul routes, reduce stoppages and maximize machine performance, we've been able to achieve results including a demonstrated 23% improvement in truck cycle time.

Jeff will now walk us through our Sustainability strategic initiative.

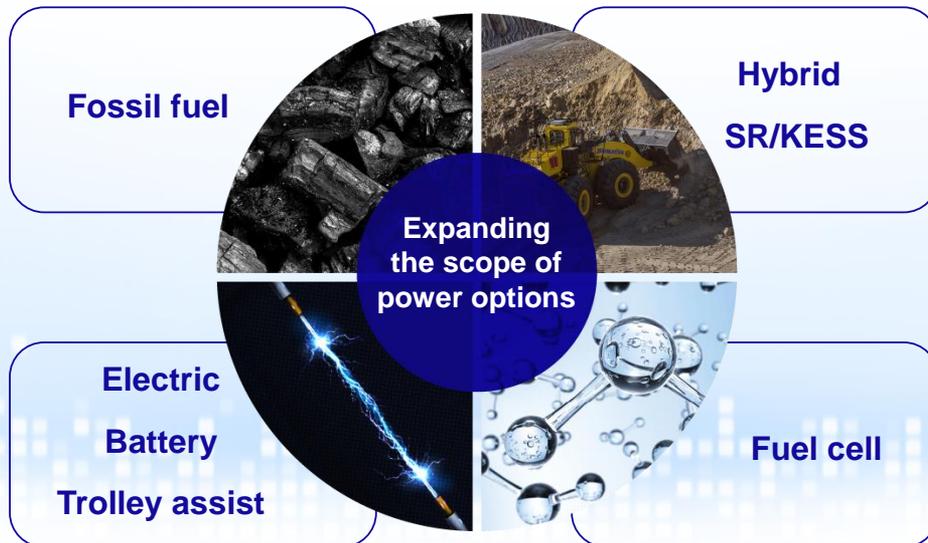


Sustainability

Supporting the drive for more sustainable mining methods

As minerals become more difficult to find and even harder to mine, we share accountability to support society's growing needs in environmentally responsible ways, supporting our customers' drive for reduced carbon emissions and more sustainable mining methods.

Sustainability: power source diversification



Our sustainability roadmap prioritizes reducing carbon emissions from use of our products, to help customers achieve carbon neutrality and Greenhouse Gas Reduction targets and to advance use of alternative power sources.

Fossil fuels are still one power source we leverage, but we're building on our legacy of switched reluctance (or SR) innovation and Kinetic Energy Storage System (KESS) advancement to continue expanding the ways we power the equipment of today and tomorrow.

Equipment in our current and near-term product roadmap will also be able to draw power from hybrid sources, trolley assist, electric and batteries. We're even working on options for hydrogen fuel cells.

Our vision is to continue expanding the power options available to customers and provide equipment that adapts to the future technologies, evolving with the pace of sustainability innovation.

Expanding use of SR and KESS

SR + Kinetic Energy Storage System (KESS) advantages

45% less fuel consumption

35% less CO₂

10-15% TCO advantage versus a diesel drive

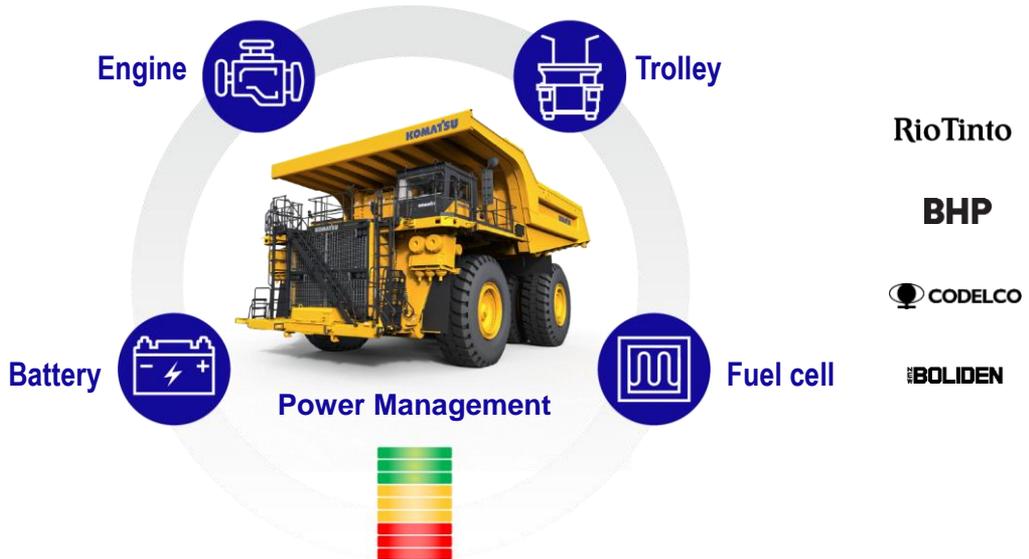
Komatsu Switched Reluctance (SR) system scalable, simple, efficient



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- Our Komatsu products pioneered the use of **SR technology** within the mining industry, a long legacy we are proud to continue expanding in support of customers' sustainability needs - across our portfolio
- Machines like our new WE1850 Gen 3 wheel loader leverage our **SR hybrid drive system and KESS**, which captures power during braking and retarding, stores it, and then uses it to boost power when needed to increase productivity with minimal fuel usage.
- The WE1850 Gen 3 and some of our other products also leverage the additional capacity of our **KESS** system, further expanding the sustainable benefits achieved.
- With the **SR + KESS process**, motors become generators, storing energy in the **KESS system** for on-demand use of added and substantial power. When combined, these two systems have the ability to provide up to:
 - 45% less fuel consumption
 - 35% less C-O-2
 - and a 10 to 15% total cost of ownership advantage versus a comparable diesel drive machine

Greenhouse Gas Alliance



Collaborations with customers are key to the rapid advancement necessary to match the pace of innovation needed to meet the industry's sustainability needs.

In August, we announced the formation of the Komatsu Greenhouse Gas Alliance with founding members Rio Tinto, BHP, Codelco and Boliden.

Together we are actively collaborating on product planning, development, testing and deployment of the next generation of zero-emission mining equipment and infrastructure.

In line with our sustainability roadmap, we're working to test a variety of power sources to rapidly advance reduced emission equipment solutions.

The alliance's initial target is advancing Komatsu's power agnostic truck concept for a haulage vehicle that can run on a variety of power sources including:

- diesel electric
- electric
- trolley (wired)
- battery power and
- hydrogen fuel cells

Power agnostic truck development platform



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We have several parallel development programs under way for testing power sources and technologies required on the final truck platform.

One of these development platform trucks is what we have here at the show in the Komatsu booth. After MINExpo it will return to our proving grounds in Arizona for further testing before eventual teardown and transformation into the next configuration needed for progressing ongoing testing of lithium batteries.

We intend to develop an entire portfolio of power agnostic haul trucks to support customers' needs. The priority of the development for each size class will be determined by the market needs. Our first target is models greater than 240 tons.

Our vision is a truck that can adapt to all power sources over time, making it the high-value choice during times of future power uncertainty and regulatory requirements.

This will enable a natural progression from diesel to zero-emission batteries, trolley or hydrogen fuel cells.

Underground: leveraging electricity and batteries

Next-generation battery solutions: Lithium-ion



Can power a hauler up to

136,000
feet per charge

vs. **115,000**
feet per charge

for lead-acid batteries

Less than
2.5 hours
Charge
time



Battery-electric



Fully electric



We're also expanding our use of electric and battery systems for underground mining, building on the more than 50 years of experience we have producing equipment that leverages these power sources in applications including coal, salt and other industrial minerals.

The next generation of solutions includes our new BH-18A battery hauler with new lithium-ion battery technology, available to see on display in the Komatsu booth. Lithium-ion batteries can power a hauler up to 136,000 feet per charge, vs. 115,000 feet for lead-acid, and charge in less than 2.5 hours.

For underground hard rock mines, we know that driving toward reduced emissions and working toward electrification is a high priority. To support that goal, we are leveraging a mix of battery and electric in our new driller and bolter offerings.

The jumbo drill and bolter (ZJ32Bi/ZJ/ZB) have a modular, battery-electric driveline with the utilization of battery power for tramming and electric power for drilling, allowing the complete elimination of diesel power source in underground hard rock drilling and bolting solutions.

And the new MC51, designed to advance more sustainable mining methods by reducing the amount of equipment required to get to the ore body and eliminate emissions, is fully electric, with less ventilation needs for optimal sustainability.



Automation

Increasing the use of advanced capabilities

As we help advance automation technology and remote capabilities, we are helping customers expand their use of automation to help remove people from harm's way, increase the reliability and productivity of their operations, and reduce their mining footprint.

Automation roadmap

The journey of automation



Manual



Operator guidance



Partial automation



Conditional automation



High automation



Fully autonomous

Full operator responsibility

Full vehicle responsibility

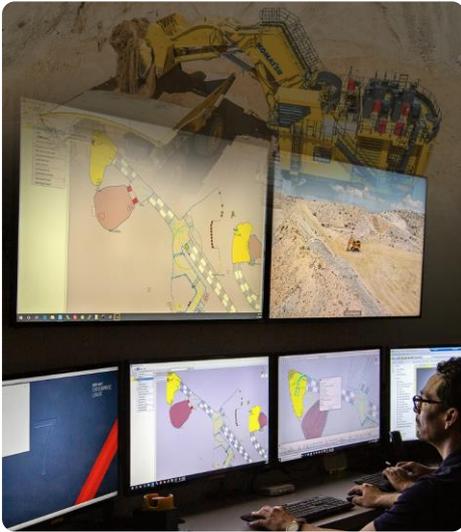


Note: Adapted from SAE J3016 25

Our automation roadmap goal is to enable mines to progress from fully manual to autonomous operation. How does that happen? By leveraging an open supervisory system that communicates with all machines, makes and models, allowing for mixed fleets and for staffed equipment to operate alongside unstaffed equipment.

The progression starts with manual operation, with a human operator fully responsible for all functions. The roadmap moves in stages through increasing levels of autonomy until it reaches the **fully autonomous state**. **At that point**, all functions are automated and the system can manage environmental uncertainty and system failures without external intervention. Performance can exceed manual operations in all scenarios.

Autonomous Haulage System (AHS)



Frontrunner AHS

13 sites
4 countries

—
4+ billion tons
of surface material
moved

—
400+ autonomous
trucks deployed
globally



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Our FrontRunner Autonomous Haulage System plays a key role in our roadmap to autonomy. AHS delivers efficient total haulage control, integrating the industry-leading DISPATCH fleet management system to deliver full optimization of a mine's autonomous haulage operations.

Since our first commercial deployment of autonomous haulage at Codelco back in 2008, we're proud to have been at the forefront of autonomous haulage with our customers. Just last week we hit 400 autonomous trucks deployed around the world and our customers have now used AHS to move more than 4 billion tons of surface material worldwide.

And we are announcing the development of an autonomous water truck, which we're currently trialing and will be introducing commercially in 2022.

We've continued to evolve the focus of our truck development program since 2016's MINExpo, where we introduced our Innovative Autonomous Haulage Vehicle concept. We're continuing to develop autonomous solutions while prioritizing the reduction of carbon emissions. Each evolution is a step toward future commercial truck offerings, and we are working to bring both priorities to life in future concepts.

Teleoperations



Teleoperation for excavators **live** from our proving grounds in Tucson, Arizona

Demo features **PC7000** and **autonomous haulage vehicles**



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One of the things we're most excited about showcasing at MINExpo this week is our in-development teleoperation systems for excavators. Twice daily, from a remote console in the Komatsu theater, an operator will teleoperate our newest hydraulic excavator loading an autonomous concept truck at our proving grounds in Tucson, Arizona, more than 400 miles away.

Development on the PC7000, a semiautonomous 700-ton-class hydraulic excavator, is nearing completion and we have plans to trial the concept machine at a customer site next year.

Also featured is our autonomous haulage vehicle, initially featured at MINExpo 2016, that is an ongoing research and development platform. Through it we are focused on advancing operations and automation for the next generation of mining.

Growing with our customers' drill automation capabilities

Expanding the Komatsu drill product line



Accelerating drill automation development



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As our customers grow their operations, their capabilities and needs change. We've evolved our drill automation capabilities and increased our drill product line to meet those needs.

Each of our customers is at a different stage of the automation roadmap, so we now offer drilling solutions from level one – manual operation - to level three – which includes auto navigation. We're also conducting testing for higher levels of automation where the system is able to execute core functions and intervention is required only for complex functions.

Currently, our ZR77 semi-autonomous machine is at the proving grounds for testing and two 320XPC teleremote systems are deploying in Brazil and Chile. In addition, we have formed a partnership with a major mining company for autonomous electric drill development.

Here at MINExpo, in addition to unveiling our Komatsu-branded machines, we are also introducing the newest model, the ZR122, to our family of drills, which will continue to expand.

Advancing underground automation

Room and pillar

Cut – haul – crush
process cycles

automated
70%
of the time

12%
reduction
in customer
cycle times



Longwall



Results demonstrated
in a case study



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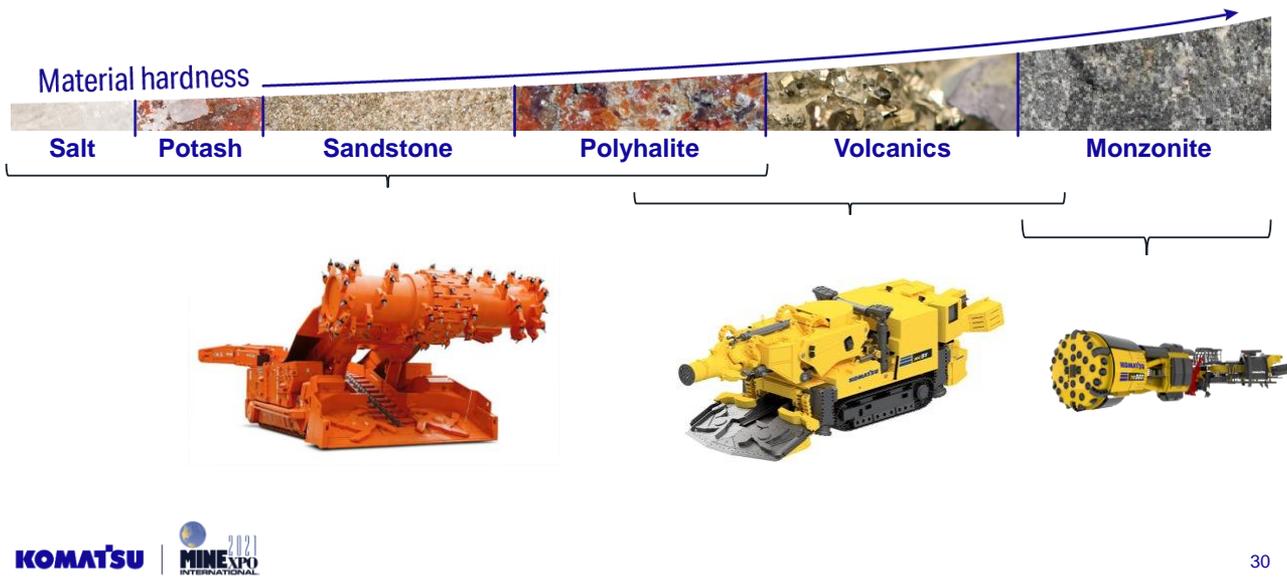
Building on years of experience in this space, we have continued to enhance use of automation in underground mining to help inform real-time decision making and automate processes in customers' longwall and room and pillar operations.

We are now achieving conditional and high automation levels with fully autonomous systems managed from remote locations. This is possible through the highly sophisticated use of sensors and gyroscopes since traditional satellite methods are not available underground.

Our customers are adopting automation at a high rate. Recent customer case studies in room and pillar operations show that automation utilized over 70% of the time for the 'cut – haul – crush' process, helps reduce cycle times by 12%. That's an additional 20 minutes of cutting time per shift.

In longwall operations, to take automation and remote management to the next level, we are launching a new control platform (RS20n) for increased data speed and ethernet connectivity, allowing for real time decision making in a highly productive system while keeping people away from the mine face.

Automated cutting across the spectrum



We now have continuous cutting methods for a variety of applications across all types of material hardness. Our proven continuous mining solutions can be used to help operators reliably cut through materials from the softest -- like coal, salt and potash -- to volcanics and some monzonite applications.

And with the commercial introduction of our MC51 machine, featuring our proprietary DynaCut mechanical cutter technology, mine operators have a new choice when it comes to breaking rock. Not only does the DynaCut technology provide a controllable way of cutting rock – within 50 millimeters accuracy to plan - the machine itself is designed to advance more sustainable mining methods by reducing the amount of equipment required to get to the ore body. The MC51 is now being trialed at Vale's Garson Mine in Canada to help finalize it as a commercial offering.

Our tunnel boring machines help rapid excavation through rock without blasting and without diesel, helping to create a better underground working environment

Our commitment to hard rock

Innovative products and solutions



Global sales and service



State of the art manufacturing center in Longview, TX



Retrofit solutions for existing fleets



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We've deepened our commitment to hard rock markets in a multitude of ways to expand how we support customer operations - introducing new products and innovating new solutions for existing fleets.

In the past year, we unveiled several new machines for hard rock mining, including a new drill and bolter that operate using a common platform to support flexibility and optimized fleet use.

Through Komatsu subsidiary brands such as Montabert and Timberock, as well as partnership agreements with companies including Jennmar, we are developing innovative retrofit solutions for existing equipment to support and help advance our customers' current fleets.

Customers in Australia, Latin America and Southern Africa now have expanded sales and service of hard rock products thanks to our growing Komatsu distribution network.

And we built a new manufacturing and assembly line in Longview, Texas to accommodate growth in our LHD and truck product line and to have a central location for all LHDs.

The future of mining



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Beyond our focus on strategic product and technology development to target digitalization, sustainability and automation, Komatsu is:

- Fully present in the underground hard rock space, with new equipment and offerings to enhance existing fleets
- Committed to advancement in our traditional markets, like underground soft rock
- Innovating for the future of mining to live in harmony with communities around the world

We hope you enjoyed exploring our MINExpo booth virtually and learning about the steps we're taking toward our future vision. Please reach out to the Komatsu IR team for further questions and thank you for joining us today.



Rod, Jorge, Shingo, John, Jason, Josh

Thank You

Visit [komatsuevents.com](https://www.komatsuevents.com)
to continue your MINExpo experience virtually