

KOMATSU

Hydraulic mining excavators



**Powerful performance.
Innovative features.
Sustainable productivity.**

Hydraulic mining excavators



Harnessing the power of industrial technology to support a sustainable, prosperous future for all.

You move the minerals. We make the machines.

The essential minerals you produce power modern technology, facilitate community growth and move society forward. But these minerals are hard to find and tough to mine.

Your customers trust you to deliver these resources, so you need an equipment, service and technology provider you can rely on to help keep your operation productive and efficient. Together we can focus on operating safely, productively and responsibly.

Setting the standard for state-of-the-art mining equipment

Safety

Komatsu continues to develop its business with the safety of its customers, suppliers, residents of local communities, employees and their families as its top priority.

Our Mining HEX are designed with safety in mind, including 45° access & egress ladders, three dedicated emergency escape systems and wide walkways, among others. Service and maintenance points are easy to access and follow the EMERST design philosophy - delivering safer, quicker, and more ergonomic safety routines for maximum focus. Multiple cameras provide clear and unobstructed views of the machine ensuring full visibility at a glance.

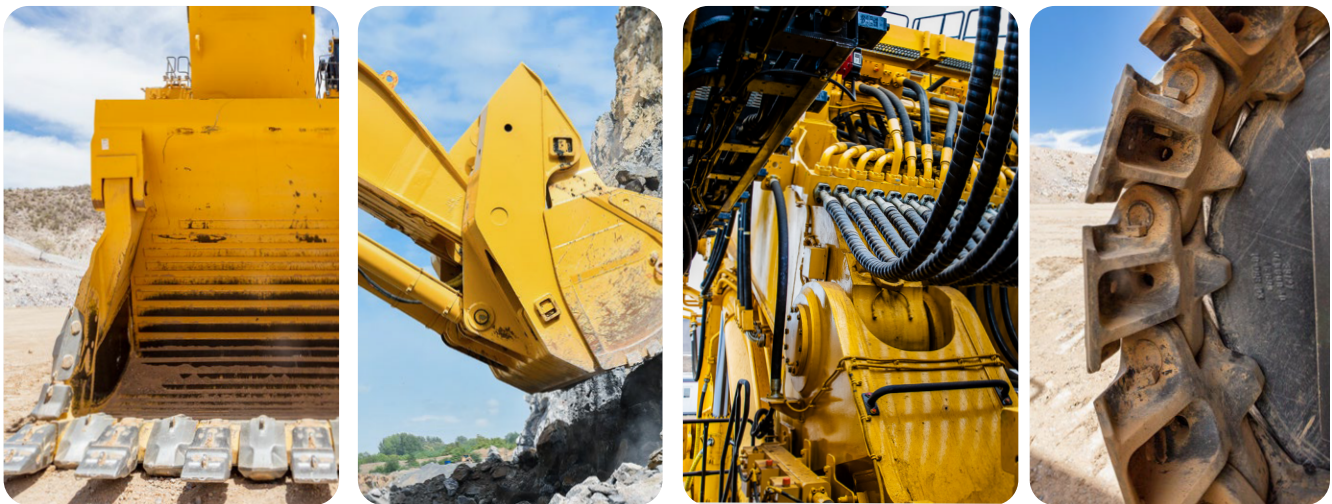
Reliability

With machines reaching up to 175,000 hours, reliability is an essential requirement in the design. A robust steel structure capable of exceeding its lifetime far beyond 60,000 operating hours, reducing component wear, and reducing downtime are some of the characteristics of the product portfolio. Mining HEXs are effective in all operation types, including tropical or arctic conditions, high altitude, and soft or hard rock. An extended undercarriage life provides flexibility for long travels/movements, improving mobility and optimizing your cost per ton.

Productivity

Top-of-class digging forces are Komatsu's key to effortless digging — combined with optimized truck-shovel matches and state-of-the-art hydraulic systems, Komatsu mining HEXs are a perfect fit for any mining application.

Hydraulic mining excavators are available in front shovel and backhoe configuration, and meet all requirements to mine efficiently — customize your machine with the perfect-fit bucket size and wear package, drive configuration, track pad variation and many more to suit your mine-specific requirements.



Creating value together

Technology solutions for productivity improvements



Simplified electric system

The simplified electric system brings a new controller generation with a lean electrical harness. Machines with this technology use a redundancy CAN bus for high reliability that exceeds industry standards with redundancy control lines. The simplified electric system features embedded components designed to minimize electrical downtime and keep your operation running.

Machine guidance

The optional ProVision Machine Guidance System and Frontrunner integration helps to increase the total tons moved by the loading machines, improves the accuracy of material movement and decreases costs associated with working outside the mine plan. This system offers:

A continuous feedback loop to the mine planning system to achieve better synergy between the mine departments

- Immediate communications to the equipment operators about changes to the mine plan
- Intuitive operator elevation controls to increase accuracy and minimize rework

Komtrax Plus

Komtrax Plus is a monitoring system for large machines, capable of remotely monitoring the health and operation status via satellite or direct PC communication. The new version is capable of detailed high-resolution data collection with GPS information every second.

Payload monitoring (PLM) system

The optional PLM system helps manage operations efficiently, particularly in managing haul cycles so that more material is moved in less time, optimizing the whole value chain. The PLM provides insight that helps:

- Optimize the efficiency of the load and haul fleet
- Guide the operator to increase the bucket fill factor in line with the truck's capacity
- Provide real-time feedback to the operator to understand the remaining payload on the dump truck

Hydraulic mining excavator sustainability approach

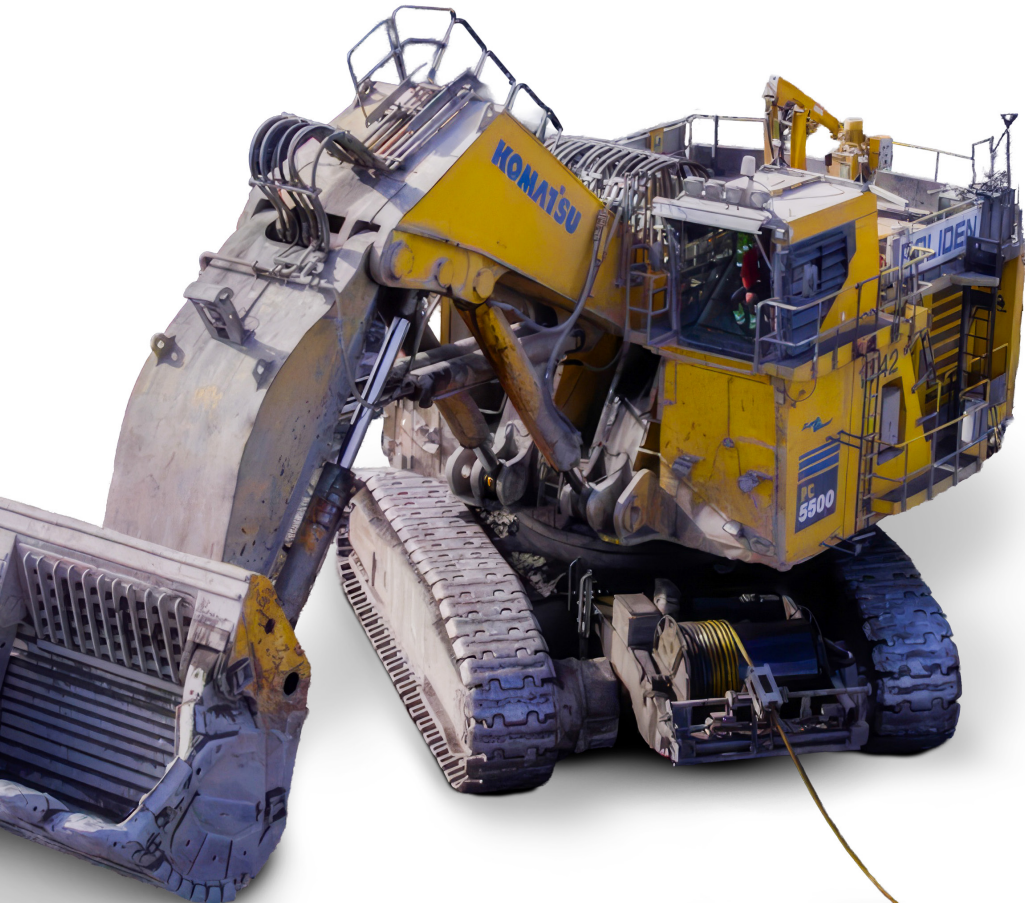
Komatsu strives to be a valued partner across the globe, supporting sustainable efforts that reach far beyond Komatsu. Building from core commitments to ethics and safe conduct, our corporate social responsibility (CSR) priorities are enhancing people's quality of life, developing future generations and growing with society. To enhance sustainable actions, we focus on CO₂ reduction, renewable energy use, water conservation and waste reduction.

CO₂ reduction

Komatsu hydraulic mining excavators are built following the latest emission regulations such as Tier 4 Final and Euro Stage V standards. Alternatively, an electric drive is available for the whole product range enabling a locally zero-emission loading. An automatic cable drum can be used to optimize the cable management during operation.

Biodegradable lubricants and operating fluids

Toward an environmentally friendly operation, Komatsu has qualified and tested various biodegradable oils and greases that can be used in hydraulic mining excavators.

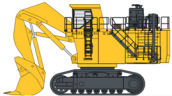
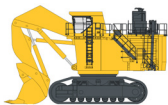

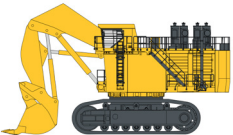
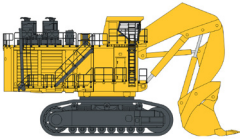
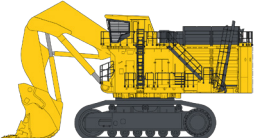


Did you know?

Electric drives have been part of the Komatsu portfolio for over 40 years. Accumulating more than 13.5 million operating hours with electric drive, our electric-driven Mining HEX demonstrate its effectiveness providing benefits to customers and the environment - reducing cost per ton (up to 50%) and CO₂ reduction by up to 95% compared to its diesel-driven equivalent.

i For more information:
→ Check our Whitepaper!

Meet the hydraulic mining excavators that will make your life easier

Model		Standard Bucket Configuration	Weight Front shovel (Backhoe)	Engine Power
PC3000-11		16 m ³ (21 yd ³)	250 t (252 t)	940 kW (1,260 HP)
PC4000-11		22 m ³ (29 yd ³)	398 t (404 t)	1.400 kW (1,880 HP)
PC5500-11		29 m ³ (38 yd ³)	537 t (542 t)	1.880 kW (2,520 HP)
PC7000-11		38 m ³ (50 yd ³)	682 t (690 t)	2.500 kW (3,350 HP)
PC8000-11		42m ³ (55 yd ³)	759 t (768 t)	2.980 kW (4,050 HP)
PC9000-12		46m ³ (60 yd ³)	884 t (896 t)	3.356kW (4,500 HP)



Front shovel attachment

This type of attachment is suitable for loading blasted rocks where bigger boulders are present and digging force is required. When digging flat surfaces, the top-of-class digging forces can show their advantages. This configuration also allows doubleside loading, which is the optimum use of haul and loading equipment, reducing the truck spotting time and achieving higher productivity.

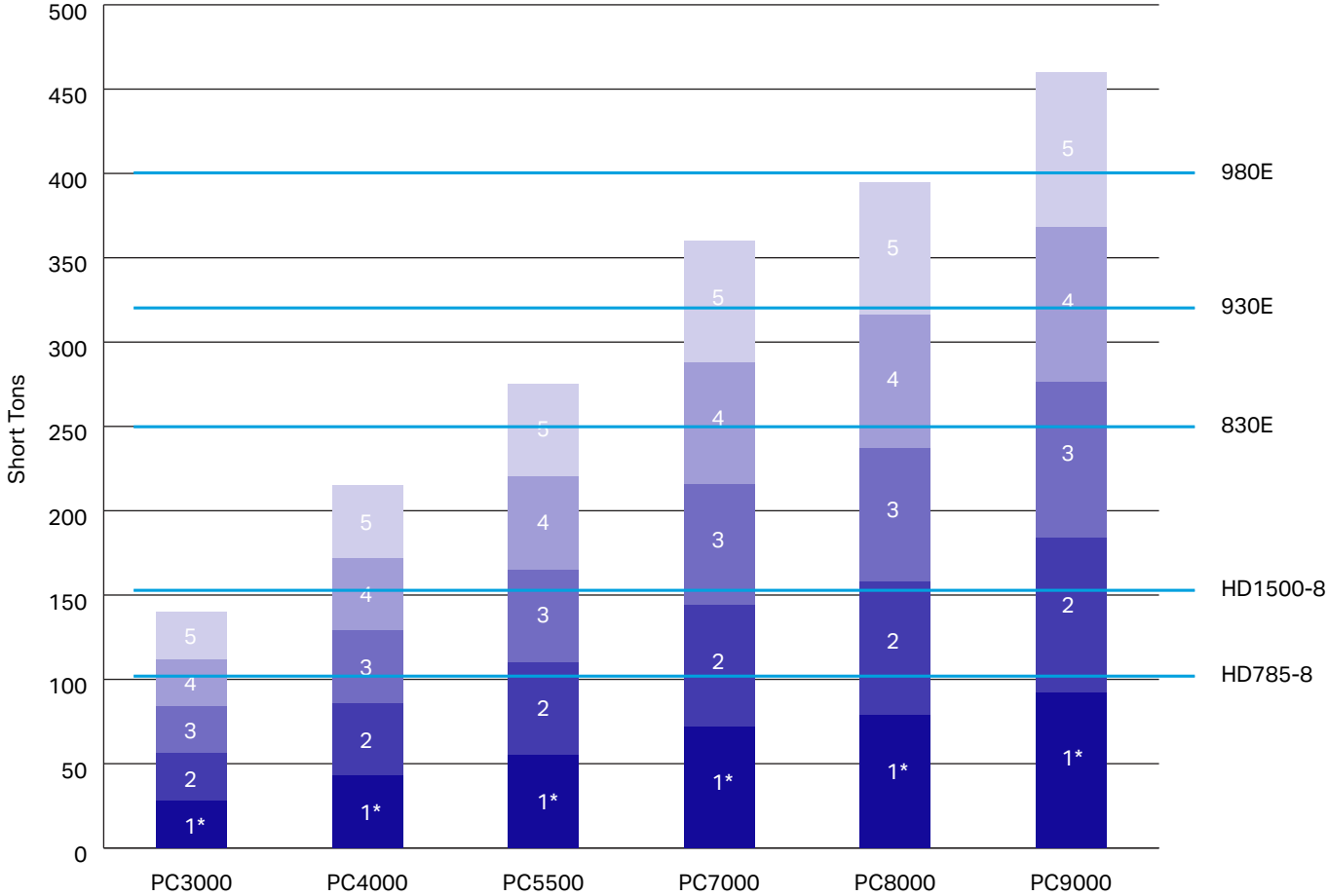


Backhoe attachment

An all-around attachment for digging and loading, this configuration allows the machine to work on a different bench from the dump truck. If the material is unstable, you can work on a shorter bench, decreasing the risk factor of sliding. This effective application has a short cycle time, thanks to the reduced lift and swing time.

Komatsu mining HEXs can perform in split-bench operation, offering fast cycle times and excellent bucket control.

Mining HEX and truck match



* Number of passes

Calculations were done with the Backhoe standard bucket capacity, 95% of bucket fill factor and 1.8 ton/m³ density.

Diesel versus electric production

The hydraulic mining excavators are designed to offer the same productivity for the different kinds of drives, no matter if it's diesel or electric, this piece of equipment will perform in the same way, allowing customers to have a heterogeneous fleet and yet receive the same behavior.

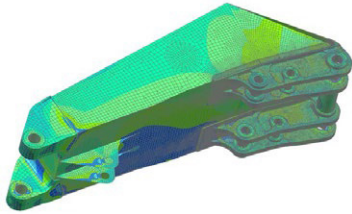


Every detail matters

Komatsu seeks to deliver the best match of a machine to mine — and with our comprehensive line of earth-moving equipment, that is what you'll get. Komatsu equipment provides multiple choices, increased payloads and high versatility to help you achieve your productivity goals. Designed to optimize operating hours, you can count on our robust structural design and high-quality components to meet your everyday needs. More important, you can feel confident knowing your Komatsu hydraulic mining excavators include globally recognized safety features.

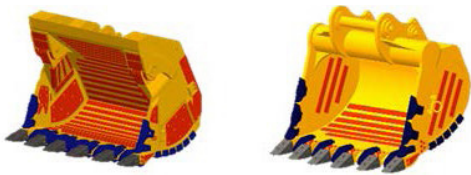
Metal structures

Komatsu steel structures are made in-house with deep expertise and field experience to help ensure quality products that can capably last beyond the indicated 60,000 hours.



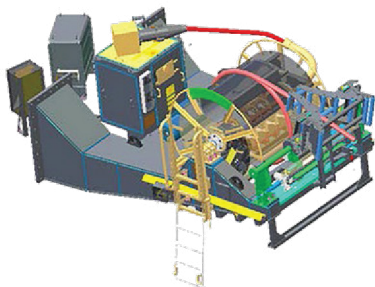
Buckets

All Komatsu buckets are SAE rated and can provide full payload in accordance with SAE standards. Wide variety of buckets and ground engagement tools are available to meet customer needs for all demands, from soft rock to hard rock applications.



Cable drum

Increase the cable life and operational safety with the auto-retracting cable drum, capable of detecting side tension and stopping the machine's movement to avoid driving over the cable.



Track pads

Designed to evenly distribute the load over the contact areas and have low pressure on the running path, Komatsu track pads and rollers meet the most demanding mining ground conditions. Extending the lifetime of components and reducing the maintenance, Komatsu track pads can help you reduce TCO.



Electric motor

With different electric frequencies or voltage inputs, all of our hydraulic mining excavators can operate worldwide without sacrificing performance.



Training

We offer a series of tailored training options designed to fulfill your requirements. These options are available over the machine's lifetime, so you can train the operating and maintenance departments when you get a new model or to increase their knowledge.



Equipping the world to empower a sustainable future together

Although we've been historically known for our mining equipment, we also provide comprehensive service solutions and fleet management technology. Committed to enhancing your entire ownership experience, we leverage the intelligence of data to deliver actionable insights and provide the technology needed to make sure you have the service, technology, tools and parts you need to help minimize downtime.

Komatsu is leading the way forward

Tomorrow's mining will demand ever-evolving technology in order to lower costs, raise productivity and drive zero harm. With virtual work sites throughout the world, we're able to develop and deploy the right technology at the right time. We are Komatsu. We are your global partner.





Watch your TCO drop

When you need to see your productivity rise and your costs go down, learn how Komatsu hydraulic mining excavators can help reduce fuel consumption, maintenance needs and replacement costs.

Contact your local Komatsu account representative today.

<https://www.komatsu.jp/en/dealer-locator>

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