

KOMATSU

Shaft sinking equipment



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 tougher 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.

Low operating costs. High productivity.

Based on feedback from our valued customers, the Komatsu shaft sinking jumbo and mucker duo were designed to efficiently meet your mining operational needs while controlling capital costs. The ZS02 shaft jumbo — paired with the ZM01 shaft mucker — provides a continuous shaft cycle that eliminates the need for additional equipment.

ZS02: A versatile shaft sinking jumbo

We understand flexibility in your fleet is important, so the ZS02 jumbo is engineered to accommodate small to large shaft sizes. Plus, the multiple-boom configuration can help provide increased productivity and additional redundancy to ensure limited operational disruption.

Specifications - ZS02

Boom	2
Drifter	JZD21 or JZD27
Lubrication	Auto lube
Bucket well diameter	1.88 m 6 ft. 2 in
Emergency stop	Base unit features 3 with additional options available
Power unit	Up to 125 HP/93Kw IP55 rated per boom
Boom controls	4 and 5 section hydraulic valve (1 per boom)
Drill controls	Montabert developed advanced drill controls — Intelsense (1 per boom)
Remote controls	Optional
Function	Tandem hydraulic pumps 130CC/60CC (1 per boom)
Reservoir capacity	244 L
Boom coverage one boom only	6 m 19 ft. 7 in
Boom swing	-11° to +60° from vertical
Boom rotation	360°
Feed advance	1524 mm 5 ft. 0 in
Feed rotation	360°
Feed swing	180°

Key features:

- **Top hammer drilling** — efficient and powerful hydraulic drifters designed by a leader in the drilling industry, Montabert, makes the ZS02 a powerful and efficient workhorse that optimizes your shaft sinking cycle.
- **Maximum boom coverage** — operates with a 360-degree rotation at the top turret so your operations can gain the benefits of maximum boom coverage and overlap and redundancy across the majority of the face coverage
- **Auto parallelism** — relying on a proven hydraulic design that ensures proper hole alignment across the entire drill plan, optimizing the drilled results while minimizing over brake
- **Nested galloway structure** — reduces the required bucket well diameter for easier drill access to the shaft bottom by using a jumbo nested within the galloway structure

Other mounting options available



ZM01: A shaft mucker designed for efficiency

Your operation can benefit from a mucker that is optimal for shaft mucking systems with two bucket options and long reach. This equipment can be used in larger diameter shafts, or the boom can also operate less than fully extended, reducing potential damage.

The ZM01 is a pneumatic powered, fast and effective mucker that complements the ZS02 for a combined shaft sinking cycle but can also be used as a stand alone mucking system.

Specifications - ZM01

Bucket capacity	0.4 m ³ *0.57 m ³	0.5 yd ³ *0.75 yd ³
Length	16510 mm	54 ft. 2 in
Boom extension	4267 mm	14 ft.
Width	1524 mm	5 ft.
Depth	965 mm	3 ft. 2 in
Extension	1633 kg	3,600 lbs.
Cage	2 585 kg	5,700 lbs.
Boom	4 400 kg	9,700 lbs.
Base machine weight	8 618 kg	19,000 lbs.

* Pending material density

Note: All machines are configurable to customer requirements so specific weights and dimensions may vary depending on the options selected

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

Key features:

- **Main cylinder stroke** — main cylinder has a stroke of 4.2 meters for a large coverage area and a reduced amount of muck handling required by personnel on the shaft bottom
- **Self-cleaning design** — ensures rocks clean out at the end of the main cylinder, helping to improve reliability and promote zero harm for your operation
- **Lowest cost, highest mean time to failure (MTBF)** — In field tests, the ZM01 has been shown to provide the lowest cost per ton with the highest MTBF compared to competitor mucker models
- **Ease of maintenance** — benefit from easier, fast servicing with replaceable bushings and grease fitting, along with heavy-duty bucket cylinder shock absorbers for increased reliability
- **14-foot extension boom** — design includes the entire boom extension at one constant thickness that helps minimize failures with potentially lower overall maintenance costs
- **Optimal bucket size** — half cubic yard bucket size reduces the jaws' weight — compared to competitor models — while still maintaining capacity and production cycles



Equipping the world to empower a sustainable future together

For the last century, the companies that power society and develop the world's infrastructure have relied on Komatsu to empower them. Through manufacturing, technology and service innovation with unmatched quality, reliability, insights and support, we work as your partner to create lasting value for your business.

Committed to enhancing your entire ownership experience, we leverage the intelligence of big data to deliver actionable insights and provide the technology needed to make sure you have the service, tech tools and parts you need to reduce downtime.

Your global partner

Tomorrow's mining demands ever-evolving technology 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.

A clear path forward

Scalable, sustainable solutions that prioritize safety and optimize your mining operations at every level. Contact your local Komatsu account representative today.

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