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scientific

ORBIS OM25

DUAL ACTION CRUSHER



OM100



OM25



SMART LSD/RSD



OM25 OVERVIEW

Dual Action Crushing

The efficiency of the dual action jaws allows for samples to be reduced by up to 35 times their original size

Compact Design

A smaller footprint without any compromise in crushing performance

Robust Design

Designed to withstand the harshest laboratory conditions, for maximum uptime



Automated Splitting

With smart RSD or LSD. Option to collect split sample in customised jars

Operator Safety

Reduce operator exposure to manual handling risks with automated sample loaders

LIMS Connectivity

Designed to be fully integrated with your LIMS, to improve sample tracking, increase automation and reduce operator error

OM25 OVERVIEW

Mining-Proven Crushing, Now in a Smaller Footprint

Orbis is bringing its proven double-action jaw crushing technology beyond the mining industry, making this high-performance crushing concept available to a much broader range of laboratories and industrial applications.

Designed for industries including cement, construction materials, environmental and recycling, geology and metallurgy, and glass and ceramics, the new Orbis crusher combines powerful size reduction with simple and reliable operation.

At the heart of the crusher is Orbis' unique double-action jaw design, where both jaws move simultaneously. Unlike conventional single-toggle jaw crushers, this technology provides an exceptional reduction ratio of up to 35:1 in a single pass.

The double-action crushing mechanism also provides smooth, low-vibration operation while significantly reducing the risk of material blockage, resulting in faster and more reliable sample preparation.



Key Advantages

- Up to 35:1 reduction ratio in a single pass
- Unique double-action moving jaw technology
- Smooth operation with minimal vibration
- Reduced risk of sample blockage
- Fast and efficient sample size reduction
- Mining-proven technology adapted for a wider range of laboratory applications

The crushing performance developed for demanding mining applications — now available for your industry.

ORBIS RANGE FEATURES



Large Dual Action Jaws

Most jaw crushers are designed so that a single moving plate crushes samples against a fixed plate. Our dual moving plates dramatically increase crushing efficiency and yields. Wear plates can be rotated for additional life. The flagship OM100 crusher is large enough to take up to 15kg of sample.

Automated & Accurate Sample Splitting

Orbis crushers feature both Rotary Sample Dividers (RSD) and Linear Sample Dividers (LSD) options. Splitting can be automated with the addition of a PLC controlled smart unit. Samples are weighed, which then allows the system to perform an automated split. Smart systems can be set up in dual configurations, with one central unit controlling two crusher/splitting units.

LIMS Connectivity

Orbis crushers are designed to be fully integrated with your LIMS, to improve sample tracking, increase automation and reduce operator error. Sample weights and split parameters can be directly imported into the system's PLC, removing the requirement for manual data entry.

Robust and Safe Design

Our crushers were designed to withstand harsh mining conditions, processing a high volume of samples around the clock. Maintenance is quick and easy by design, to ensure maximum uptime for laboratories of all sizes. Ergonomics can be improved through the addition of a sample lifting accessory.

SPECIFICATIONS



	OM25	OM50	OM50 WM	OM100
Motor power	5.5kW, 3 phase	5.5kW, 3 phase	7.5kW, 3 phase	7.5kW, 3 phase
Maximum input lump size	70mm	70mm	70mm	110mm
Product size	-2mm passing up to 90% (sample size dependent)	-2mm passing up to 90% (sample size dependent)	-2mm passing up to 90% (sample size dependent)	-2mm passing up to 90% (sample size dependent)
Jaw width	200mm	300mm	400mm	400mm
Hopper capacity	5kg	10kg	10kg	15kg
Wear Plates	High or Low Chrome	High or Low Chrome	High or Low Chrome	High or Low Chrome
Dust extraction	50mm Dust Outlet	50mm Dust Outlet	50mm Dust Outlet	50mm Dust Outlet
Weight	700kg	750kg	850kg	1200kg
Product Dimensions - Width × Depth × Height (mm)	608 × 1006 × 1293	708 × 1006 × 1293	808 × 1006 × 1293	808 × 1006 × 1393
Shipping Dimensions - Width × Depth × Height (mm)	1400 × 1200 × 1590	1400 × 1200 × 1590	1400 × 1200 × 1590	1400 × 1200 × 1590

We reserve the right to change the design or specification of our products without notice. Some of the information contained in this brochure is general in nature and customers should check that it is applicable to their individual circumstances.

Options

- RSD or LSD sample splitters, with the option of smart automated PLC control. Single or duplicate sample split options.
- Smart systems can be configured to include 1 or 2 crushers, controlled by a central cabinet and weigh station(s).
- Sample lifters for transferring each sample into the jaw crusher hopper.
- Customised sample collection options such as photon assay jars.