

EP450 Series Cone Crusher



ENDURON® EP Series Cone Crusher

ENDURON® EP series pedestal cone crushers, also known as fixed-shaft cone crushers, have been designed to achieve maximum size reduction at high production rates, and to meet customer requirements for cubical aggregate production.

Cast in high-strength steel and featuring an optimised design, ENDURON® EP series cone crushers deliver maximum strength, durability, and compact footprint in demanding applications.

All ENDURON® EP series cone crushers feature a steep crushing chamber angle, a large crushing throw, a high pivot point, and optimised speed to deliver a high reduction and better shaped product through increased inter-particle comminution.

The closed side setting (CSS) of ENDURON® EP series cone crushers can be easily adjusted via the new automation system using the threaded bowl and hydraulic gear drive. Siemens PLC hardware enables straightforward integration, interaction and control of ENDURON® cone crushers. The new HMI interface simplifies maintenance and servicing, improving operational efficiency while providing clear operator guidance and ease of use.

In addition, ENDURON® EP series cone crushers feature a self-contained, climate-controlled hydraulic and oil lubrication skid and condition monitoring I/O link sensors. To extend the life of your crusher even under maximum load, ENDURON® EP series cone crushers also feature cast bronze alloy bushings.

Design Features

- Adapter ring enables the use of a common bowl assembly with either standard or short head bowl liners
- High crushing force
- Large throw
- High pivot point allows increased rock-on-rock crushing higher up in the crushing chamber
- Ductile iron eccentric
- Bolt-on spiral cut bevel gear
- Cast steel counterweight
- Hydraulic push button control of CSS
- ESCO® range of crushing chamber profiles
- Compact Hydraulic and Lubrication Power Unit (H/LPU) with an improved sustainable footprint
- New automation platform with IO-Link technology

Applications

- Secondary stage crushing circuits
- Tertiary stage crushing circuits
- Quaternary stage crushing circuits
- Specification size and/or shape for aggregate crushing
- Crushing ore for maximum reduction, leaching or milling operation

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All key components feature a high-strength alloy steel construction for long and reliable performance under severe crushing conditions. The pedestal main shaft and spiral bevel gears are also machined from high-strength alloy steel forgings.

Designed to maximise performance, our entire range of crushing and grinding equipment is backed by Weir's unrivalled global service network, which means that our experts are here to support you every step of the way, regardless of your site's location.

Materials of Construction

Main frame	High strength cast steel
Main shaft	Alloy steel - forged
Bushings	Cast bronze alloy
Head	High strength cast steel
Bowl	High strength cast steel

Physical Properties

Head diameter	1250mm (49.2")
Weight	24,000kg (52,800lbs)
Throw	104.1mm (4.1")
Pinion speed	770- 1025rpm
Power	315kW (450hp)

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	Standard			Short head		
Chamber type	Coarse	Medium	Fine	Coarse	Medium	Fine
Closed side setting range	25-51mm	19-51mm	16-51mm	16-25mm	13-25mm	8-25mm
Max feed size	275-305mm	220-265mm	175-220mm	135-145mm	115-130mm	100-120mm
Capacity range	425-675mtph	330-610mtph	265-550mtph	320-425mtph	230-385mtph	150-345mtph

Note: All limits are with material that have a rating of 12 to 14 Wt.

Maximum feed size = (maximum open + maximum closed) / 2 @ given setting per cavity book.