



Bison 160 Technical Presentation

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[terex.com/EvoQuip](https://www.terex.com/EvoQuip)

**Bison 160
Hybrid Hook
lift Jaw
Crusher**



Features & Benefits

- Hybrid design delivers a low fuel and quiet operation crusher suitable for inner city areas.
- Suitable for hard rock and rubble crushing
- Up to 100tph (110 US tph)
- Crusher reverse function
- Excellent serviceability access & centralised greasing
- Feeder auto starts based on load or jaw level
- Excellent under-crusher clearance
- Easily transported, simple auto-start and operation
- Low feed in height
- Main conveyor drops on hydraulic rams for access under feeder and jaw. (Also used for folding conveyor for transport.)
- Impact bars under crusher
- Full length conveyor skirting



Hopper

- Fixed hopper bin
- Hopper Capacity (Heaped): 2.0m³ (2.6 Cubic yards)
- Hopper Width: 1.8m (5' 11")
- Hopper Length 2.8m (9' 2")
- Loading Height: 2.6m (8' 6")
- Bolt-in Hardox Liners on wear areas



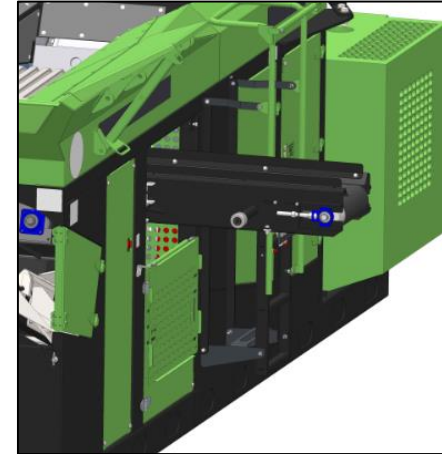
Vibrating Feeder / Hopper

- Integrated Pre-Screen for removal of fines
- Bolt in Hardox Grizzly cassette
- Angled end to turn material into crusher
- Area: 2700mm (8' 10") x 660mm(2' 2")
- Twin out of balance motor drive
- Feeder auto re-start based on load or jaw level
- Feeder can be started and stopped using feeder remote control



By-pass Conveyor (Option)

- Belt width: 400mm (16")
- Belt specification: EP250 2ply 3+1.5mm
- Discharge height: 1600mm (63")
- Mounting: Slides from chassis on rails
(LHS/RHS/Transport)
- Discharge side: LHS & RHS at switch
- By-pass to MC Reverse belt direction at switch



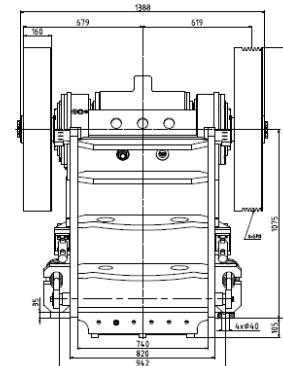
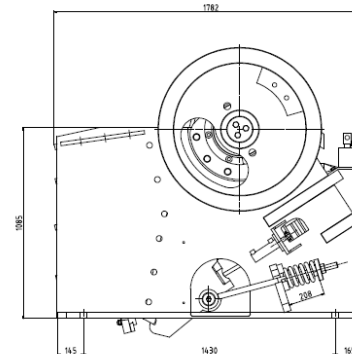
Inlet Chute

- Inlet chute lined with Hardox bolt-on tiles
- Top cover plate hinged and pinned



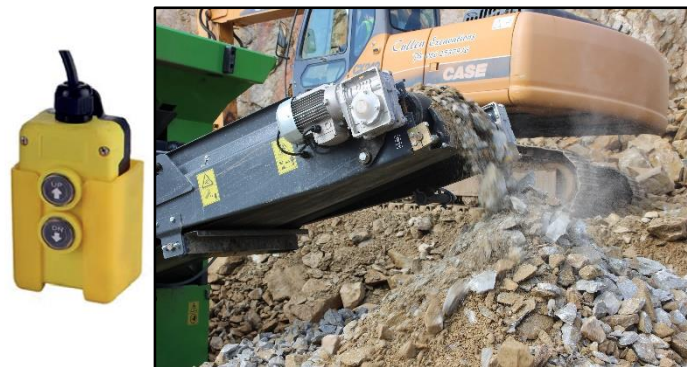
Jaw Chamber

- High capacity single toggle jaw crusher
- 700mm x 500mm (28" x 20") Jaw Inlet
- CSS Range: 30mm (1.2") to 70mm (2.75")
- Up to CSS 110mm (4.3") with short toggle
- 240MPa Compressive Strength. (For applications outside this range please contact EvoQuip)
- Feed size: 550mm (22") x 400mm (16") x 400mm (16")
- Crusher weight 6,300kg (13, 889 lbs)
- 12 tooth / 11 tooth configuration
- Electric Motor Drive 45kW
- Vee belt and pulley drive
- Reverse drive function
- Re-bar deflector on swing jaw (option)
- Hydraulic handpump and shim adjust



Product Conveyor

- Belt width: 700mm (28")
- Belt specification: EP400/3ply 4+2mm
- Stockpile height: 2.4m (7' 10")
- Impact bars at jaw discharge point
- 400mm (16") clearance from jaw to conveyor
- Side skirting to over band magnet area
- High grade belt scraper
- Folds for transport with 12v electric hydraulic power pack
- Belt speed 1.0m/sec
- The conveyor can be raised & lowered for access and folded for transport, using the umbilical Conveyor Remote.



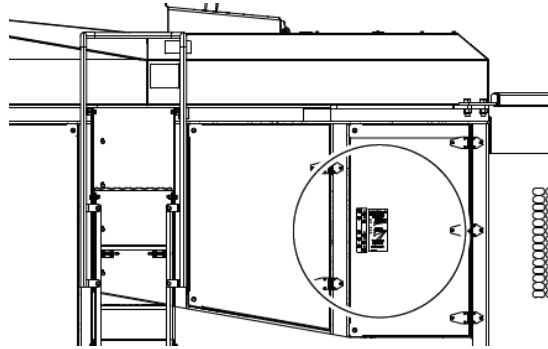
Power Unit

- Gen set incorporating Leroy alternator (88KVA standby)
- CAT C4.4 70kW Constant Speed LRC c/w 88kVA Generator
- CAT C4.4 70kW Constant Speed T3a c/w 88kVA Generator
- CAT C4.4 70kW Constant Speed T4 c/w 88kVA Generator
- CAT C3.6 70kW Constant Speed eu5 c/w 88kVA Generator
- Aluzinc enclosure, direct bolted to chassis
- Clear access to controls and maintenance from one side
- Inbuilt 160 litre fuel tank in base
- Ground level service access for one side
- Trailing lead socket also suitable for mains connection



Power unit

- Excellent service access
- Central Greasing - For convenience the crusher, labyrinth seal grease and main conveyor tail drum bearings points have been fitted with extension pipes. The TWELVE grease points are located to the opposite side to the electrical control panel, indented in the main access door to the tool box area.



Magnet (Option)

- Overband magnet option
- 1.5kW electric
- 750mm (30") Belt width
- Twin stainless steel chute
- RHS or LHS Discharge with flick of a switch



Access Platforms

- Maintenance steps and platform both sides
- Bolt on and hinged access doors both sides

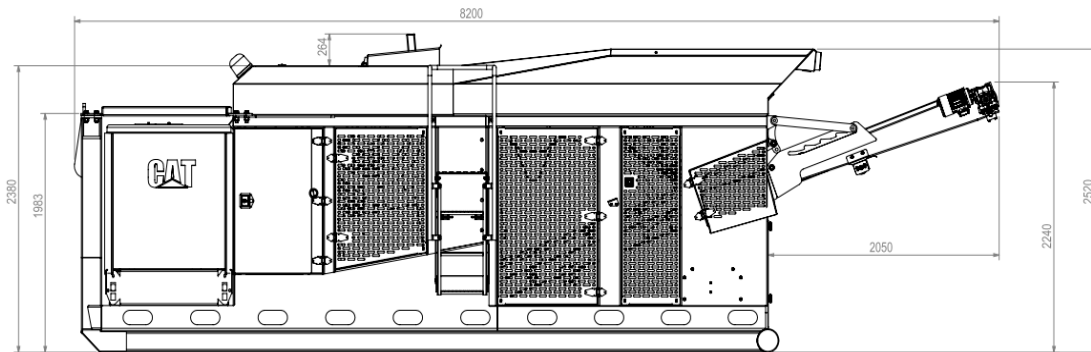


Electrical Control System

- The machine isolator is located adjacent to the battery in the Generator Enclosure.
- Engine is through a toggle switch at the main control panel, fitted at ground level.
- Remaining machine start-up is by a series of push buttons located on this electrical control panel.
- The jaw crusher is driven by a 45kW electric motor through pulleys and V belts. This allows for reverse crushing.
- The 45kW motor is fitted with an “over current relay”. This stops the feed should the crusher process very tough material causing high current draw on the motor. When the electrical current reduces the feeder will restart.

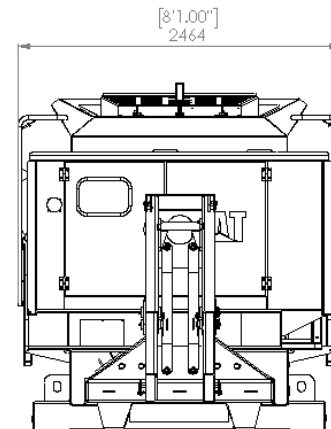


Working Dimensions



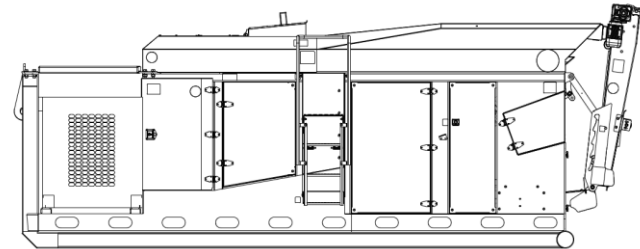
Working Dimensions

- Length 8.4m (27' 7")
- Width 2.5m (8' 2")
- Height 2.6m (8' 6")



Transport Dimensions

- Suitable for hook lift transporter & high cube container
- Length 6.9m (22' 8")
- Width 2.3m (7' 7")
- Height 2.6m (8' 6")
- Weight 13,500kgs (14.8 US Ton)



Options

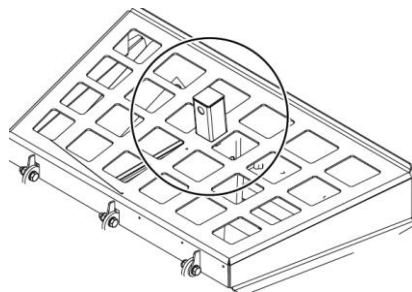
- VGF
 - Optional Screening media
- By-Pass Conveyor (fines belt)
 - 400mm wide c/w 750W electric drive
- Over band magnet
- Jaw Crusher
 - Jaw level sensor
 - Under Crusher Hydraulic Deflector Plate
- Main Conveyor
 - Hydraulic Raise and Lower of Product Conveyor
- Dust suppression
- ANSI / CHEM / DIMS Chassis
- Radio remote for tracking



Jaw Chamber Options

➤ Jaw level sensor

Located above the crusher inlet. This automatically stops the feeder should the material level build up inside the crusher chamber. The crusher will restart when the material has passed through the crushing chamber.



➤ Under Crusher Deflector Plate (on moving jaw)

