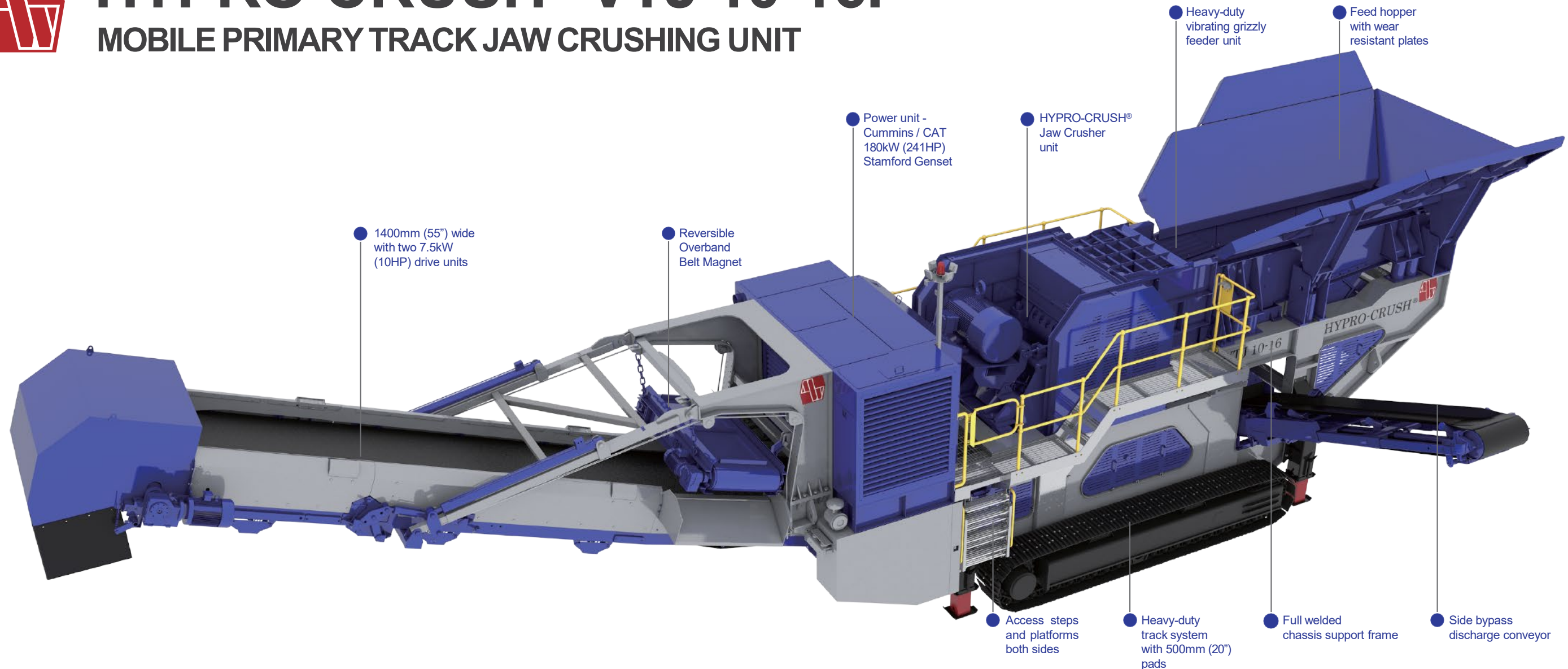




HYPRO-CRUSH® VTJ 10-16P

MOBILE PRIMARY TRACK JAW CRUSHING UNIT



Product Introduction

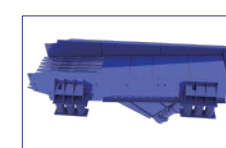
The new HYPRO-CRUSH® VTJ 10-16P Mobile Primary Track Jaw Crusher is equipped with the new HYPRO-CRUSH® single toggle jaw crusher with tapered frame and suspended jaw stock assembly. The newly designed tapered frame provides a larger crushing chamber and a wider discharge opening.



Fitted as standard



Abrasion resistant feed hopper is fitted with extensions.



Variable speed control vibrating grizzly feeder.



Jaw Crusher / Conveyor dust suppression system.



Reversible Overband belt magnet.



Soft start, low kW energy heavy-duty jaw crusher. Complete with automatic greasing unit.



Chassis frame is fitted with four heavy-duty hydraulic type jack legs to enable stabilization and maintenance.



Digital belt weigher unit.



Heavy-duty variable speed track system. Remote control gradability 30 degrees. Tracking two speed: 1.2Kph (0.75Mph) to 2Kph (1.24Mph).

HYPRO-CRUSH® VTJ 10-16P model crusher throughput capacities

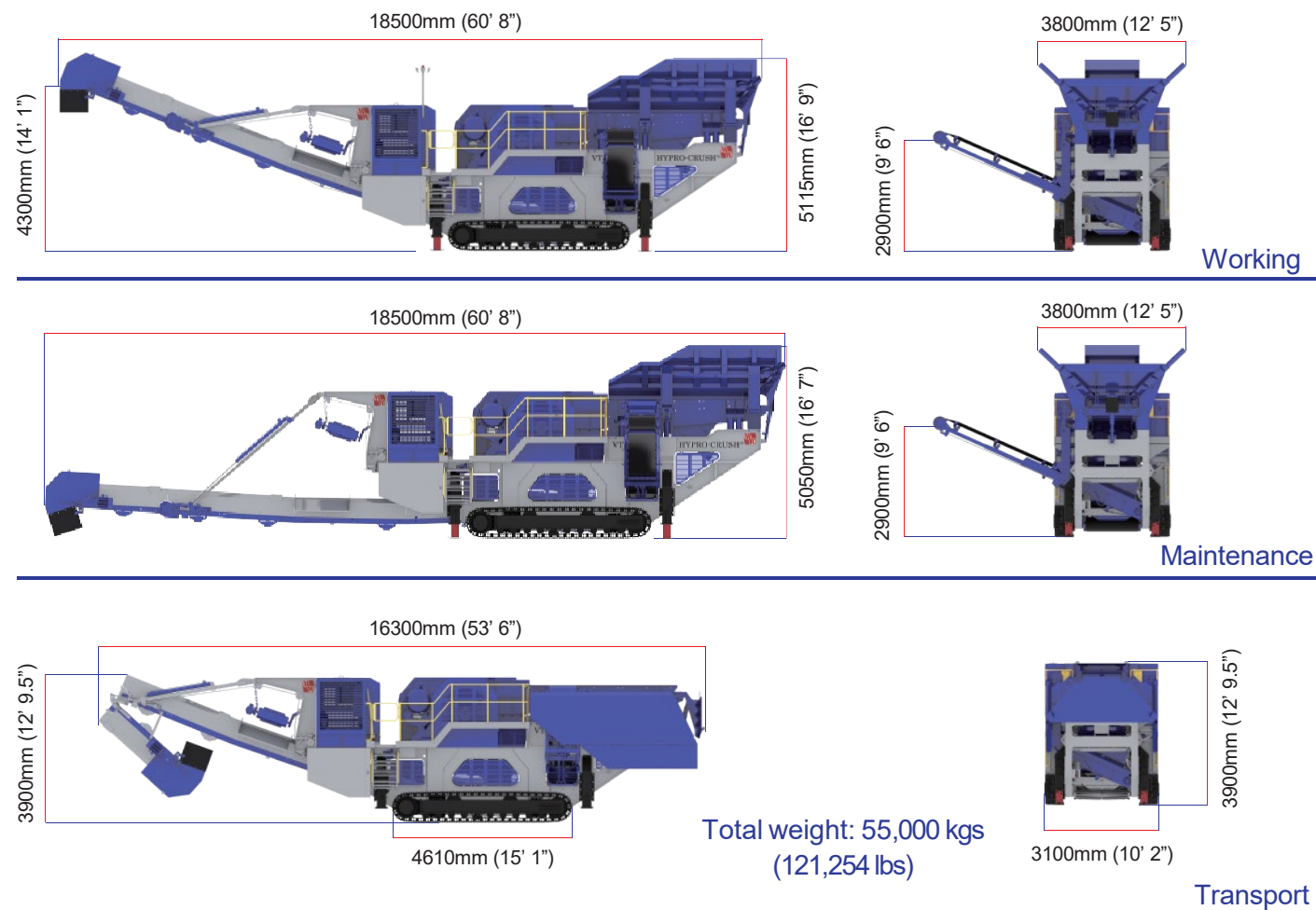
CSS	2"	3"	4"	5"	6"	7"	8"
	50mm	75mm	100mm	125mm	150mm	175mm	200mm
MTPH	290 - 320	330 - 345	420 - 465	475 - 520	545 - 600	610 - 670	675 - 745
STPH	320 - 352	363 - 380	462 - 512	523 - 573	600 - 661	672 - 738	744 - 821

The above figures are based on crushing feed material in broken form with an average specific gravity of 2.7 t/m³ fed consistently into the crusher without blockages and with fines removed. Actual capacities may vary depending on factors such as the feeding method, material gradation and characteristics like density, moisture content, clay presence and the material's crushability.

The measurement of the crusher's closed side setting can vary depending on the jaw profile being used, which may affect the crusher's capacity and product gradation.



Primary Track Jaw Crusher dimensions & weight



Advantages:

- The HYPRO-CRUSH® VTJ 10-16P Mobile Primary Track Jaw Crusher is designed for high performance production at low power demand for mining and quarrying applications and for processing demolition and recycling materials.
- The innovatively designed jaw crusher side frames are tapered to precise specification providing a large volume crushing chamber to suit the wider jaw stock assembly, which is suspended by a series of springs. The inlet width is 1000mm (40") and the discharge width is 1600mm (62").
- The single toggle jaw crusher has a large, closed side setting range from 50mm (2") to 200mm (8") and is equipped with an electrically controlled heavy-duty screw adjustment system.
- The HYPRO-CRUSH® VTJ 10-16P Mobile Primary Track Jaw Crusher unit is powered by a diesel-electric powerpack with an electric plug-in option.
- The main discharge conveyor can be raised and lowered for inspection and easy removal of contaminated items.

- ❑ The new HYPRO-CRUSH® VTJ 10-16P Mobile Primary Track Jaw Crusher is designed to suit mobile track, wheeled and modular installations. Patents pending.
- ❑ A single toggle type jaw crusher with tapered side frame and suspended jaw stock assembly.
- ❑ Material feed opening: 1000mm x 700mm (40" x 28")
Discharge material opening: 1600mm (62")
- ❑ Crusher weight: 23,500 kgs (51,808 lbs)
- ❑ Closed side setting range: 50mm to 200mm (2" to 8")
- ❑ Heavy-duty rear mounted electrical CSS self-locking screw adjustment system.
- ❑ Drive Motor: 132kW (175HP) – 6Pole 50Hz (60Hz) 3 phase.
- ❑ Main Frame:
The main frame is a robust steel fabricated, stress relieved design.
The frame is tapered providing a larger crushing chamber and wide discharge opening.
- ❑ Eccentric Shaft:
The eccentric shaft is steel forged, machined to specification, heat treated and designed to accept four heavy-duty self-aligning double row roller bearings and flywheels.
- ❑ Jawstock:
Precision machined heavy-duty jawstock steel casting, suspended by robust coil springs and fitted with drawback rods and tension springs.
The crusher CSS is easily adjusted with an electrically operated heavy-duty screw self-locking adjustment system.
- ❑ Jaw Plates:
High quality cast manganese jaw plates accurately machined to ensure firm support. Designed to be fitted in three sections.



The HYPRO-CRUSH® Jaw Crusher features an innovative design where the eccentric shaft and flywheels are accurately balanced before the roller bearings are fitted onto the shaft and positioned within the jawstock bearing housing. The jawstock is fully suspended by coil springs, ensuring that when the flywheels stop rotating, the jawstock has reached the top of its stroke, with the drawback rod springs fully tensioned. This design offers a significant advantage in energy efficiency during startup. Both the jawstock's total weight and the drawback rod tensioned coil springs assist the electric motor by reducing the overall energy required on start-up.

The manganese crusher jaw plates are designed with a convex shape, ensuring even distribution of feed material throughout the crushing chamber.

The HYPRO-CRUSH® VTJ 10-16P Mobile Primary Track Jaw Crusher is equipped with a calibrated belt weigher on its main product conveyor. The main operation control panel displays the energy consumption in kilowatts for the vibrating grizzly feeder, jaw crusher and main conveyor individually, along with the total kilowatt energy requirement from the 180kW (241HP) diesel-electric powerpack.

An additional 60% at the CSS discharge opening, combined with the increased RPM of the balanced eccentric shaft and flywheels, enhances production by up to 55-65%.

- The main conveyor can be raised and lowered hydraulically to a suitable level for safe and easy maintenance.
- An additional wire rope system is also fitted on the main conveyor for the safety locking system during hydraulic cylinder removal.
- Belt type:
Main conveyor - 1400mm (55") wide NN200/6 PLY 7mm top and 2mm bottom cover
Side conveyor - 700mm (28") wide NN100/5 PLY 3mm top and 1.5mm bottom cover, vulcanised.
- Belt adjustment: A hydraulic cylinder is used to adjust the conveyor belt by extending the movement of the tail drum on both conveyors.
- Access ladders are provided to gain access to each side of the track crusher unit, with suitable platforms fitted with kickplates and handrails around the crusher feed area and between the power unit and crusher.
- Suitable guards are fitted for all drives, flywheels, pulleys and couplings. The guards provided are designed and manufactured to meet with CE & ANSI standards.
- Safety alarms and lights are fitted as standard.
- Remote control unit – operating tracking system, folding and locking hopper side and rear sections, hydraulic jacks, lowering and folding conveyors and variable speed on vibrating grizzly feeder.
- Belt weigher unit fitted on the main discharge conveyor.



Feed Hopper

- 9.5m³ (12.4yd³) capacity with remote control hydraulic folding and locking system.
- Vibrating grizzly feeder with two 5.5kW (7.5HP) motors with variable speed control.



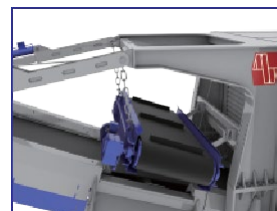
Jaw Crusher

- Feed opening 1000mm x 700mm (40" x 28") with 1600mm (62") wide discharge opening.
- Tapered side frames with larger crushing chamber and suspended jaw stock assembly.
- Heavy-duty rear mounted electrical screw adjustment and locking system.



Drive System

- Power unit - 180kW (241HP) Cummins / CAT Tier3, Tier4 & Stage V diesel engine with Stamford genset and 45kW (60HP) hydraulic system.
- Jaw Crusher Drive Motor: 132kW (175HP) - 6pole 50Hz (60Hz) 380/440 volts 3-phase.
- Main Discharge Conveyor: Two 7.5kW (10HP) helical-bevel shaft mounted drive units.



Discharge Conveyors and Magnet

- Main Discharge Conveyor: 1400mm (55") wide equipped with a digital belt weigher system.
- Hydraulically lowered for maintenance and folded for transportation.
- Side Discharge Conveyor: 700mm (28") wide fitted with hydraulic tension and drive system.
- Adjustable and Reversible Overband Magnet unit with 4kW (5.5HP) helical-bevel shaft mounted drive unit.