MAGNA®
A TEREX BRAND

TECHNICAL
SPECIFICATION

MT400C

OVERVIEW

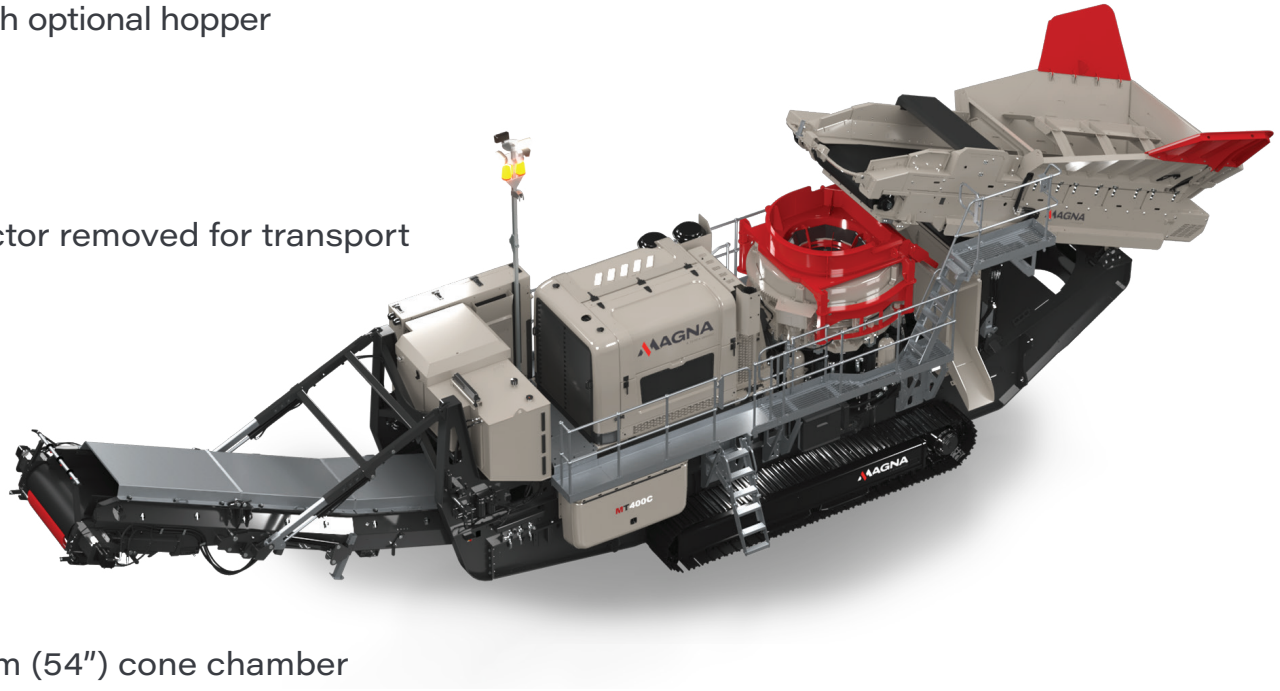
SPECIFICATION

Total Weight 60,260kg (132,850lbs) without options

61,060kg (134,614lbs) with optional hopper extensions

Transport:

Length: 17m (55'8")
Height: 3.8m (12'6") metal detector removed for transport
Width 3m (9'10")



Working:

Length: 18.5m (60'8")
Height: 6m (19'8")
Width: 4.2m (13'9")

Crusher Type: Terex MVP450x 1380mm (54") cone chamber

Power Unit: Tier 2: CAT C18 ACERT 571kW (765hp)
T4F / Stage V: Scania DC13 440KW (600hp)

Plant Colour: RAL 7030, RAL 3020, RAL 7024, RAL 9005

OVERVIEW

The MT400C is a large sized track mobile cone crusher, designed primarily for secondary applications, such as processing all in feed from a primary crusher. Equipped with the Terex MVP450x cone chamber, the MT400C excels in producing sub-base materials and aggregates, delivering outstanding cubicity, high throughput, and optimal reduction ratios in hard abrasive applications.

FEATURES & BENEFITS

- High capacity output potential
- Excellent product shape
- High reduction ratio
- Cone feed box level control to maintain choke feeding
- Hydraulic crusher setting
- Cone overload protection with automatic reset
- Multiple(5) liner configurations to suit a broad range of mining and aggregate applications
- Metal detector and purge system with auto-stop
- Dust suppression system
- Economical to operate with a highly fuel efficient direct drive system through a 'wet clutch'
- Heavy duty fabricated chassis & track frame
- Remote control via umbilical
- Radio remote control as standard
- MAGNA telemetry as standard

CONE CHAMBER

Crusher type: MVP450x (1380mm (54″) Cone Chamber)

Liner configuration: Coarse - Medium as standard

Counter shaft speed range: 661 - 861rpl (56T pulley) Standard
755 - 933 rpm (64T pulley)
Application specific option

Lubrication: Integrated cone oil lubrication tank with seperate oil cooler

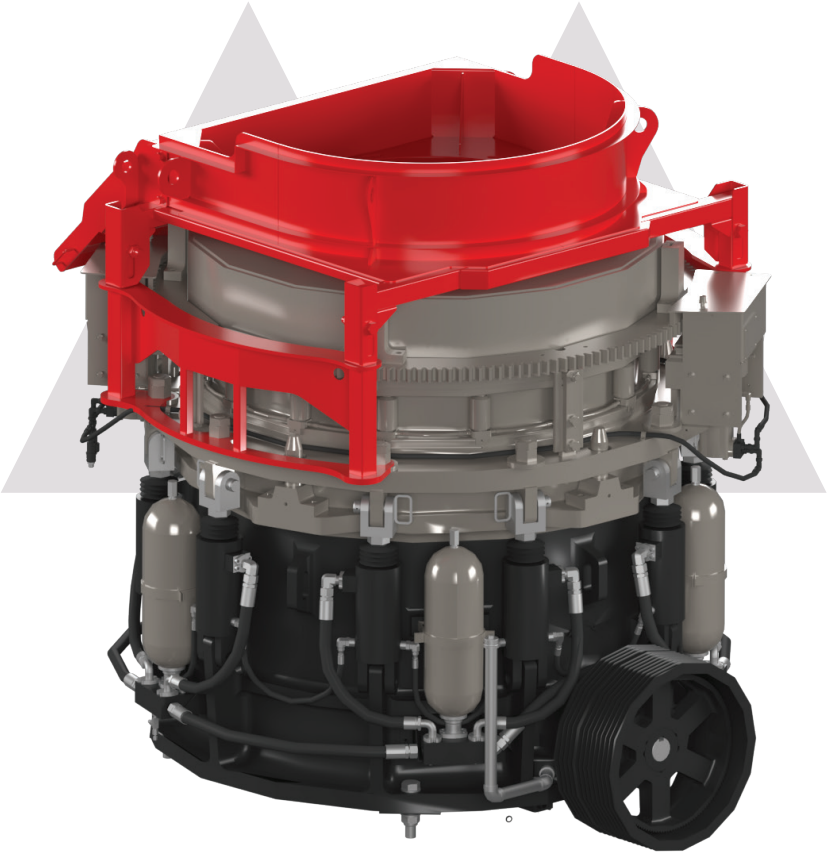
Adjustment: Hydraulic setting adjustment, automatic Tramp Iron Release (TIR) system with 114mm(4 1/2″) clearance & hydraulic unblocking

Drive: Direct Drive via clutch and belts

Level sensor: Fitted over inlet of feed box maintains optimum choke feed condition and maximising reduction

Dust suppression: Fitted at cone inlet and outlet

- Mantle/concave wear indicator
- Hydraulic overload protection with automatic reset. This allows the upper frame to lift up, to permit the passage of tramp iron and other un-crushable material. The system then automatically returns the upper frame to its original position
- Unrestricted feed opening reduces blockage, bridging and maximizes output for maximum material strength of 345Mp compressive strength
- ‘Anti-Spin’ brake technology



HOPPER/FEEDER

Hopper type: Fixed feed hopper with direct feed rear door

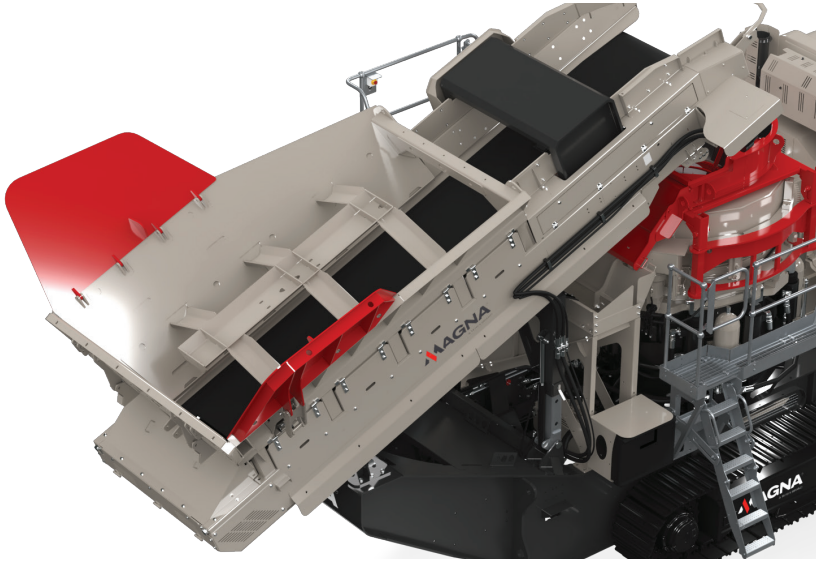
Hopper length: 3.3m (10′10″)

Hopper width: 2.5m (8′2″)/ 4.16m (13′8″) at rear with optional hopper extensions

Feed height: 3.4m (11′2″)/3.8m (12′6″) with optional extension

Hopper capacity: 8m³ (10.4yds³)

Hopper body: Fabricated in 10mm mild steel plate, with combination of 15mm, 10mm & 6mm wear resistant steel liners at impact point.



Design: Raise & lower hydraulically for transport, operation & crusher maintenance

Belt Spec: Plain

Belt Width: 1.2m (48″)

Speed range: Variable, 0 - 43 m/min (0 - 141 ft/min)

Working Angle: 22°

Drive: Hydraulic variable speed drive via gearbox

- Drop down rear door for auxiliary crusher feed
- Crash bar fitted to reduce impact load on feed conveyor
- Rubber covered impact rollers fitted
- Hydraulic retraction system for ease of movement between transport and working modes
- Full length skirting to head drum
- Automatic variable speed conveyor ensures maximum output from plant
- Metal detection system with 'auto-stop' feature is suitable for detecting steel and manganese steel contained in the feed material
- Controllable discharge system to purge metal contaminants. This feature allows the operator to clear metal from the feed conveyor when it is detected. The contaminated material is dumped to the side of the machine. This can be done on the main control panel or remotely via the optional radio remote.

MAIN CONVEYOR

Belt width: 1.2m (48″)

Belt spec: Plain

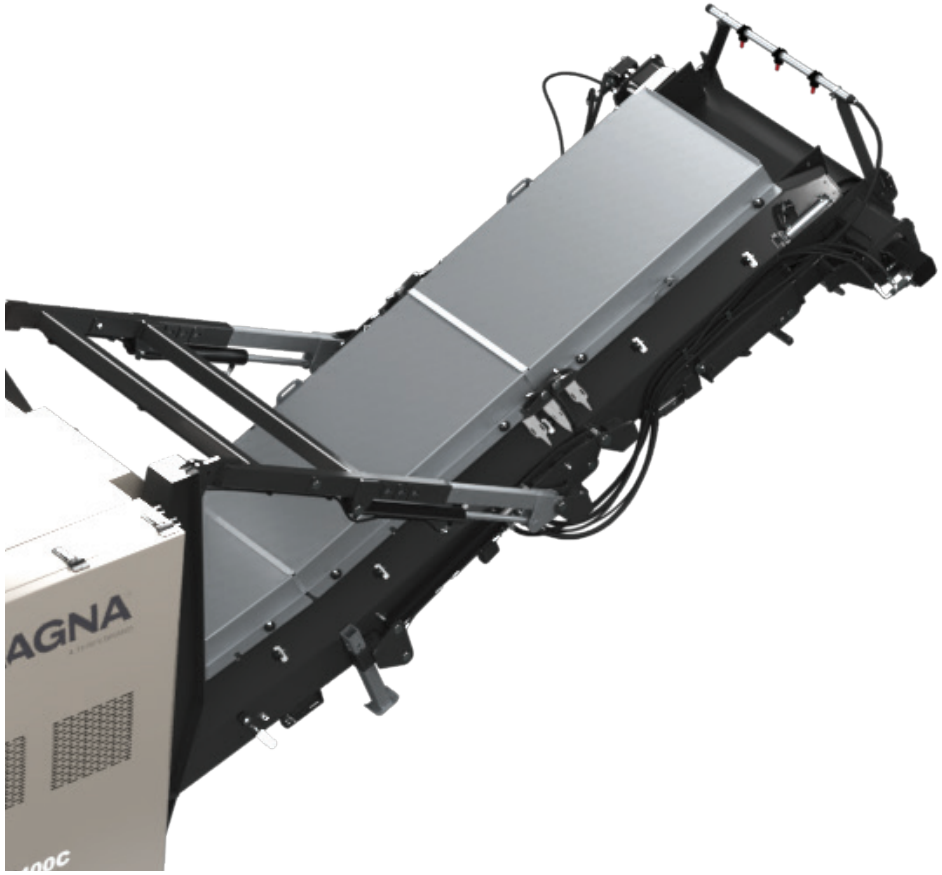
Working angle: 26°

Speed: 108-114 m/min (354-374 ft/min)

Discharge Height: 3.55m (11′ 8″)

- Twin Drive Head Drum
- Impact bars and wear resistant liners at feed point
- High spec scraper at head drum
- Dust suppression: fitted with hose and spraybars as standard (no pump supplied)
- Full length skirting to head drum
- Aluminium dust covers

Stockpile capacity: 69.4m³ (90.8yds³) @ 40°



POWER UNIT & DRIVE

Tier 2:	CAT C18 ACERT 571 kW (765hp)
Operating rpm:	1700-2100 rpm
T4F / Stage V:	Scania DC13 440KW (600hp)
Operating rpm:	1700-2100rpm

Variable engine speed to provide chamber speed range

Fuel tank capacity:	1100 L 242 UKG (290 US G)
Hydraulic tank capacity:	850 L 187 UKG (225 US G)

Cone lube oil tank capacity:	265 L (70 US Gal)
Crusher drive:	Direct drive via clutch & toothed belts
Crusher drive tensioning:	Pulley tensioning system
Clutch type:	Highly efficient, HPTO 14 Wet plate clutch

TRACKS

Type:	Heavy duty bolt on tracks
Sprocket centers:	4200mm (13’9”)
Track width:	500 mm (20”)
Gradeability:	25˚ maximum
High speed:	1.1kph (0.7mph)
Drive:	Hydraulic

PLANT CONTROLS & OTHER

CHASSIS

Heavy duty I-section welded construction, provides maximum strength & accessibility.

GUARDS

Wire mesh or steel guards are provided for all drives, pulleys & couplings.

PLATFORMS

Platforms are provided for inspection & maintenance, allowing access to each side of the engine, crusher & one side of the feed conveyor head section.

All platforms are galvanised as standard & are made from steel flooring with steel toe boards, double row handrails & access ladders

UMBILICAL CONTROL

An umbilical control unit is also supplied as standard with the plant.

Controls tracking function & has a stop button for the plant.

RADIO REMOTE CONTROL

Complete with integrated tracking functions & plant stop button.

- Auto start / stop
- Feed conveyor start / stop
- Metal purge sequence (if selected)
- Tracking

PLANT CONTROLS

Full PLC control panel

Full system diagnostics

Controls fitted to the plant include:

- Sequential start up
- Engine (start/stop/speed)
- Crusher (start/stop)
- Product conveyor (start/stop & raise/lower)
- Feeder (start/stop/speed) controls, located on the side of the plant

PLANT CONTROLS & OTHER

CONTROL SYSTEM

- Advanced CANBUS compliant system
- Large colour display screen
- Main menu consists of five modes:

Automatic mode: For automatically starting the machine in a set sequence

Track mode: For moving machine

Setup mode: For folding / setting up machine

Cone setup mode: For testing / setting of cone

Config mode: For testing / setting individual components / monitoring engine performance and faults / monitoring machine faults

- User friendly incremental selection of feeder and engine speed, enable the operator to achieve the optimal throughput and product shape
- The main control panel is mounted to the side of the machine in a lockable compartment

UMBILICAL CONTROL

- Complete with integrated tracking function and plant stop button

TOOL BOX

- Mounted lockable toolbox
- Tool kit and flogging spanners

CHUTES

- Cone chamber feed box fabricated in mostly 5mm mild steel plate with 15mm wear resistant steel sections at high impact areas
- Cone chamber discharge chute fabricated in 10mm mild steel plate with 15mm wear resistant steel liners at impact point
- Contamination chute fabricated in 6mm mild steel plate

Note: If metal detection system is de-selected the contamination chute will not be fitted.

OPTIONS

Alternative cone liner configurations

Liner Configuration	Maximum Feed Size	Maximum CSS	Minimum Recommended CSS
Coarse - Medium	280mm (11″)	75mm (3″)	19mm (3/4″)
Medium - Medium	255mm (10″)	75mm (3″)	16mm (5/8″)
Medium Fine - Medium	155mm (6 1/8″)	50mm (2″)	13mm (1/2″)
Fine - Medium	210mm (8 1/4″)	50mm (2″)	13mm (1/2″)
Extra Fine - Medium	180mm (7″)	50mm (2″)	6mm (1/4″)

- Cone chamber camera & viewing screen
- Hydraulic hopper extensions
- Belt weigher
- Stockpile level sensor
- Hot climate lubrication kit (Recommended for ambient temperatures between +15 to +50°C)
- Cold climate lubrication kit (Recommended for ambient temperatures between -20 to +30°C)
- Hot climate cooler pack c/w hot climate lubrication kit (Recommended for ambient temperatures >+35°C)
- Hydraulic driven water pump
- Electric Re-fuelling pump
- Control panel positive air pressurization
- Lighting mast

TELEMETRY

TELEMATICS

A number of MAGNA products can also be fitted with T-Link telemetry system which provides the customer with real time information on the performance of their machine.

Telematics maximises uptime, parts and service availability and provides factual up to date information from the field.

GPS MACHINE TRACKING

MACHINE DATA

FLEET OVERVIEW

DASHBOARD DISPLAY

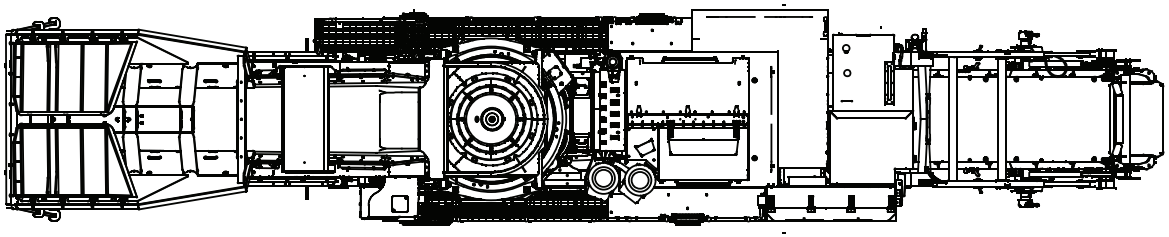
USEFUL REPORTING

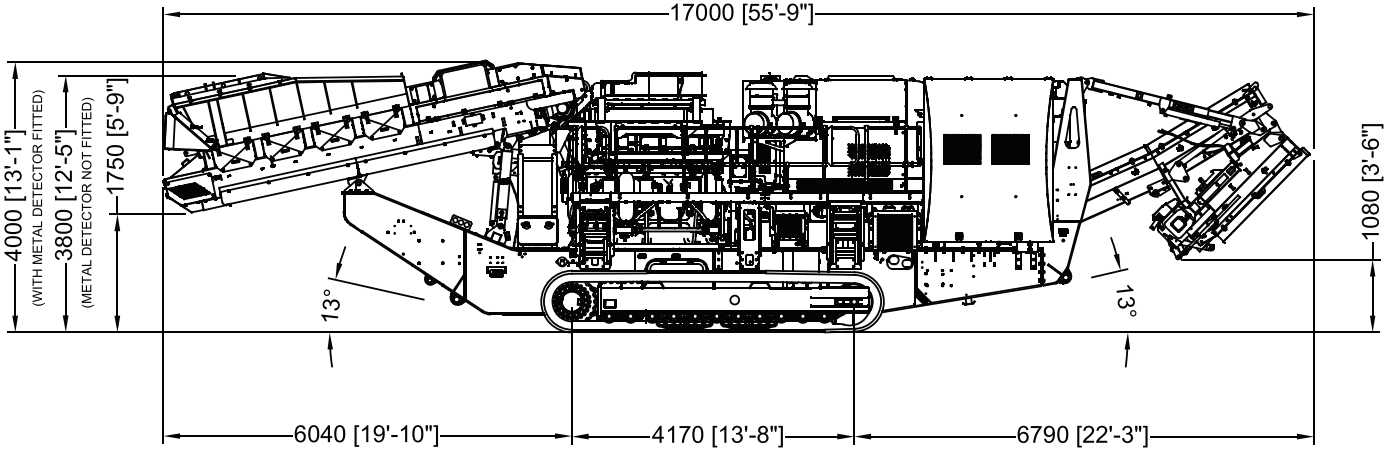
ENHANCED USABILITY

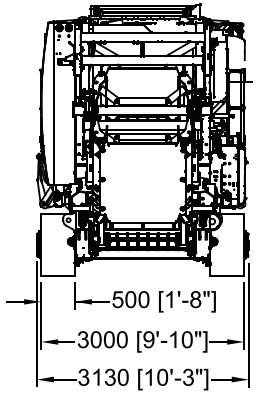
T-LINK

WEIGHT & DIMENSIONS

TRANSPORT



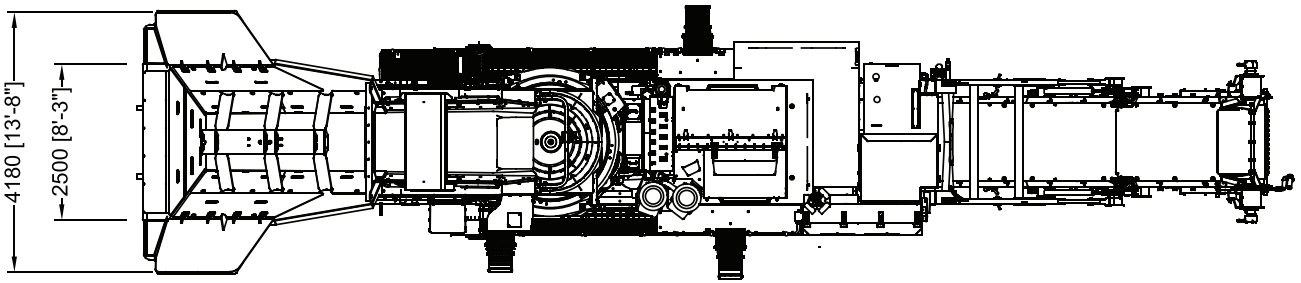


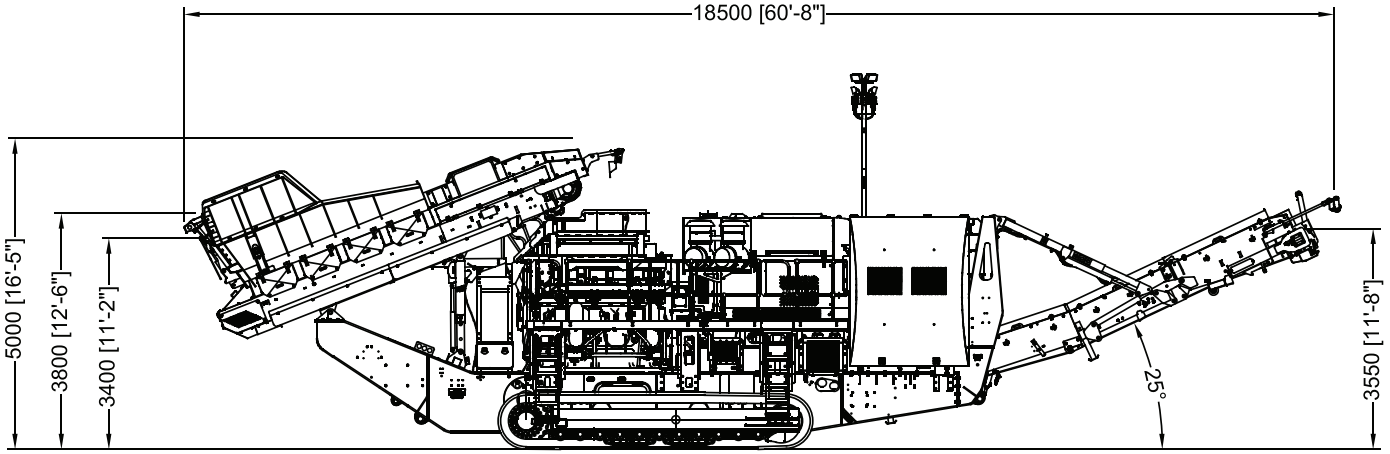


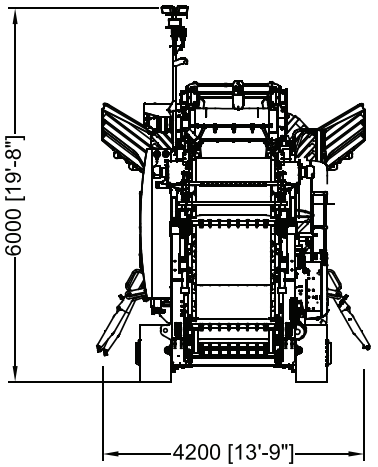
Weight: 60,000 - 62,000kg option dependant

WEIGHT & DIMENSIONS

WORKING







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