MAGNA™
A TEREX BRAND

TECHNICAL
SPECIFICATION

MT130J

OVERVIEW

SPECIFICATION

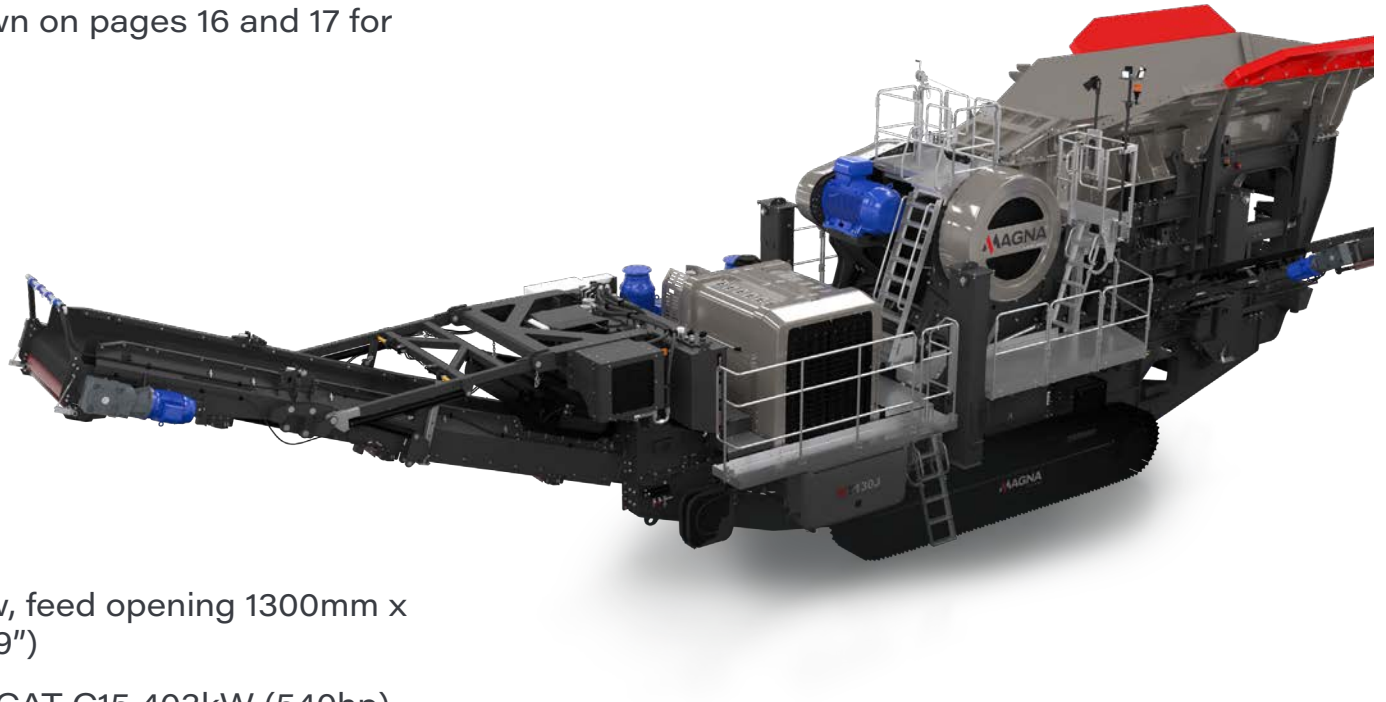
Total Weight 126,200kg (278,223lbs) Bypass Conveyor, Magnet options, Hopper extensions

Transport: Complete unit Dimensions shown. Module breakdown shown on pages 16 and 17 for Transport

Length: 19.5m (63'11")
Height: 5.1m (16'9")
Width 3.6m (11'8")

Working:

Length: 21.8m (71'6")
Height: 6.4m (21'3")
Width: 7.3m (24'1")



Crusher Type: Single toggle jaw, feed opening 1300mm x 1000mm (51" x 39")

Power Unit: Tier 3/Stage III: CAT C15 403kW (540hp)
Tier 4F/Stage IV: Scania DC13 410kW (550hp)

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

OVERVIEW

The MAGNA MT130J hybrid mobile jaw crusher has been developed for large-scale quarry and mining operations. The machine can operate as standalone primary crusher or integrated into a mobile or static crushing and screening plant.

The MT130J can be powered either by the onboard genset powerpack configuration or connected to an external power source. Both power options provide operators with significant power, servicing and maintenance cost savings in direct comparison to a diesel/ hydraulic powered plant. For easy transport movement between locations the plant can be split down and reassembled without the need for heavy crane assistance on site.

FEATURES & BENEFITS

- Output potential up to 1000tph / 1120 US tph - depending on material type & crusher settings.
- The plant's electrically driven power systems provide significant cost advantages and environmental efficiencies.
- The large feed width and gape enables the crusher to accept larger and coarser material reducing the need for hammering of oversized product
- Automatic variable speed VGF ensures continuous choke feeding of the crushing chamber for optimal productivity.
- High powered electric drive ensures precise chamber controls and reverse functionality for clearing blockages.
- Fully hydraulic crusher fitting adjustment
- Modern & user friendly PLC control system with auto start facility
- Dust suppression system
- MAGNA telemetry as standard
- Radio remote control as standard
- Mounted hydraulic breaker hammer, boom and controls (optional)

JAW CRUSHER

Crusher type: Single toggle Jaw with hydraulic setting adjustment

Feed opening: 1300mm x 1000mm (51″ x 39″)

Bearings: Self aligning spherical rollers

Lubrication: Grease

Drive: Electric variable speed drive with reversable operation (200kw 6 Pole drive motor)

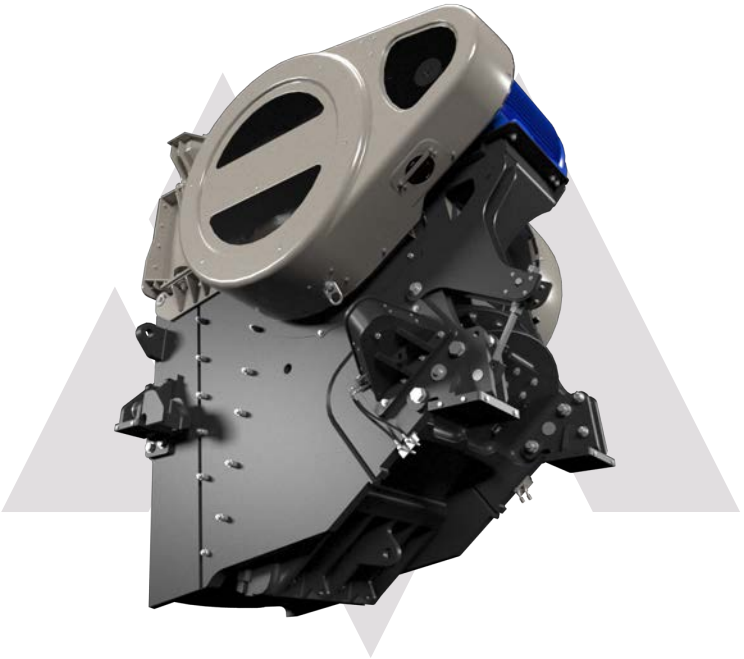
Minimum setting: 125mm (5″) CSS

- All setting measured from root to tip & subject to suitability of feed material.
- This plant has been designed for both heavy duty and mining applications where appropriate.
- For maximum material strength of 500kN 10% Fines, 300MPa compressive strength.

Maximum setting: 250mm (10″) CSS standard jaws

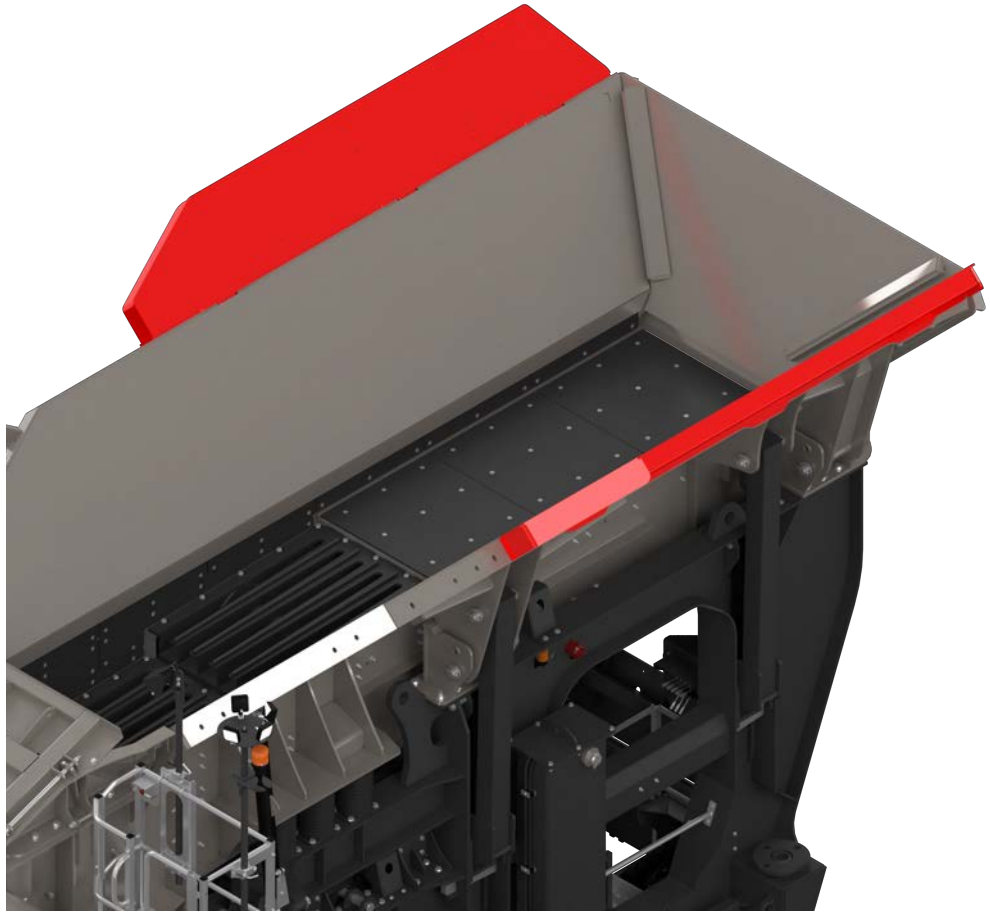
Hydraulic adjustment: Hydraulically adjusted CSS using wedge system.

Electric push button control



- Quick & easy setting adjustment
- Maximum under jaw clearance with wide access points
- Optional split jaw liners
- Feed material level sensor
- Camera of chamber inlet and viewing screen
- Jaw Speed Max 235 RPM
- Nominal stroke 41mm
- Soft start and unblocking features

HOPPER



Hopper type:	Hydraulic locking from ground level
Hopper length:	6.1m (20′)
Hopper width:	2.8m (9′2″) standard
	3.7m (12′ 2″) with extensions
Hopper feed heights:	6.35m (20′ 10″) - with extensions fitted
Hopper capacity:	13.5m³ (17.64 cu.yds³)
Hopper body:	Abrasion resistant feed hopper with hydraulic struts and pins

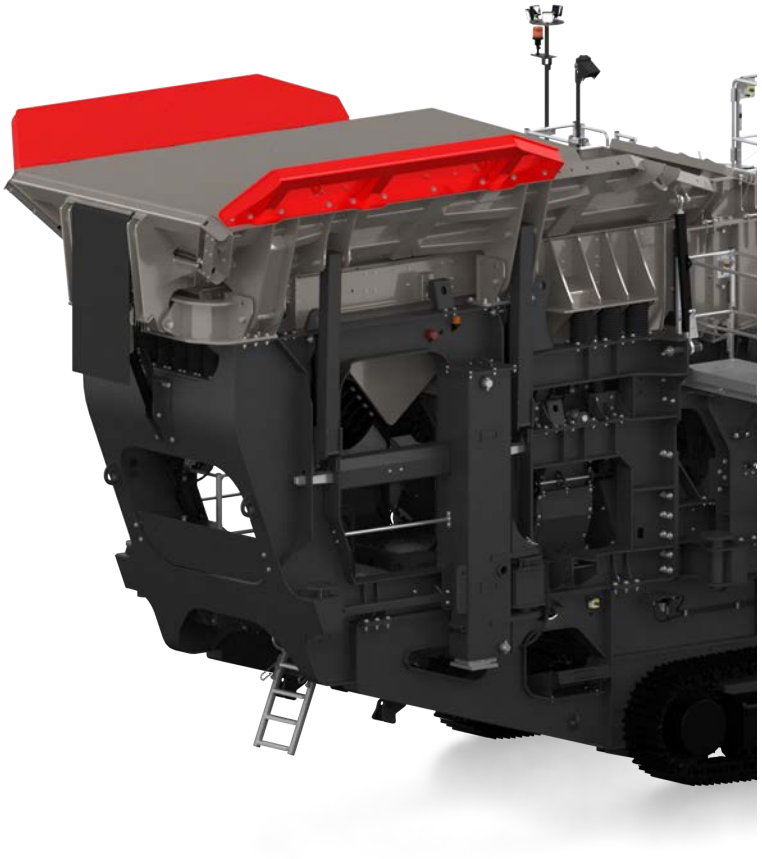
- Reinforced hopper side walls
- 15mm (5/8″) AR450 wear resistant steel plate

***Optional large flare hopper extensions:**

Capacity:	15.3m³ (20.01 cu.yd.)

VIBRATING GRIZZLY FEEDER

TECHNICAL SPECIFICATION



Type:	Spring mounted vibrating pan & grizzly feeder
	Electric driven independent screen below VGF
Vibrating Unit:	Twin electric vibrator motors
Length:	5.5m (18″)
Width:	1.35m (4′ 5″) standard
Drive:	Electric
Grizzly:	2 replaceable stepped cartridge type grizzlies 75mm (3″) nominal aperture, self cleaning
Underscreen:	50mm (1.6″) rubber screen cloth fitted as standard
Feeder speed range:	450-900 RPM
VGF Feed area:	2.7m x 1.38m (8′10″ x 4′6″)
VGF Screening area:	2.9m x 1.38m (9′6″ x 4′6″)

PRODUCT CONVEYOR

Conveyor type: Troughed plain belt conveyor

Design:

- Hydraulic raise & lower facility from 2.6m(8′ 6″) to 4.2m(13′ 7″)
- Can be raised or lowered while crushing.
- Fully removable modular unit to aid access & maintenance.
- Lower section raises & lowers for optimum ground clearance.

Belt type: EP630 with 8mm top & 2mm bottom cover, vulcanised

Belt width: 1400mm (4′ 6″)

Discharge height: 4.2m (13′7″) to the underside of drum

Stockpile volume: 136m³ (178yds³) @ 40°

Drive: 15kw twin electric motor & planetary gearbox drive

Tunnel: Fully tunnelled lower section

Feedboot: Mild steel plate with abrasion resistant steel liners at feed point

Belt adjustment: Screw adjusters at head drum

Belt scraper: SCS style

Lubrication: Low level remote head drum grease points

Skirting:

- Wear resistant rubber skirts fitted up to magnet
- Impact bars and wear resistant liners at feed point

DUST SUPPRESSION SYSTEM

Sprays bars with atomiser nozzles mounted over crusher mouth, product conveyor feed & discharge points. Piped to an inlet manifold for client's pressured water supply.

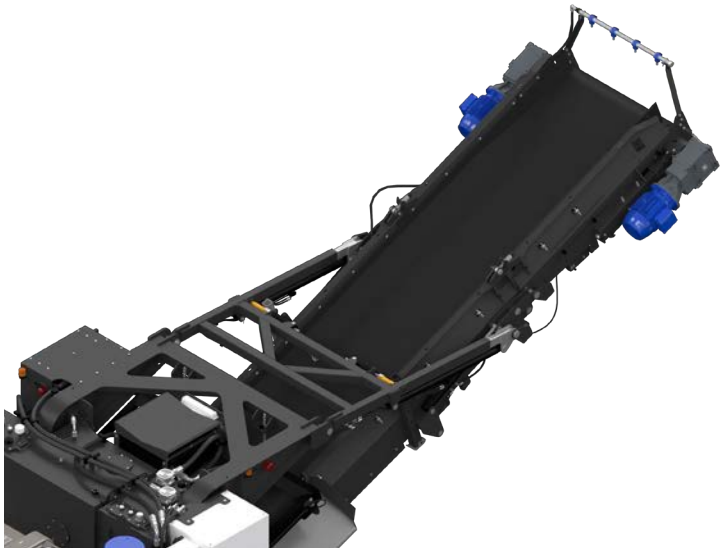
Type: Clean water multi-atomising nozzles

Inlet: Single filtered inlet point on chassis

Pressure: 2.8 bar (42 psi)

Frost protection: Via system drain valves

Pump: Optional extra



POWER UNIT & DRIVE

Tier 3 / Stage III: CAT C15 403kW (540hp)
Operating rpm range: 50Hz - 1500rpm 60Hz - 1800rpm
Plant drive: Diesel-Electric

Tier 4F / Stage IV: Scania DC13 410kW (550hp)
Operating rpm: 50Hz - 1500rpm 60Hz- 1800rpm
Plant drive: Diesel-Electric

Stage V: Scania DC13 410kW (550hp)
Operating rpm: 1800rpm
Plant drive: Diesel-Electric

Fuel tank capacity: 1165 L (308 US G)
Hydraulic tank capacity: 460 L (121 US G)

Emission control technique:
Selective Catalytic Reduction (SCR)

Alternator type: WEG G-Line 490kVA

Crusher drive: WEG 220kW 6pole 355 frame
WEG 160kW CFW11 VSD
Motor pulley diameter 400mm
Crusher pulley diameter 1700mm

Drive tensioning: Manual with adjustable threaded bar

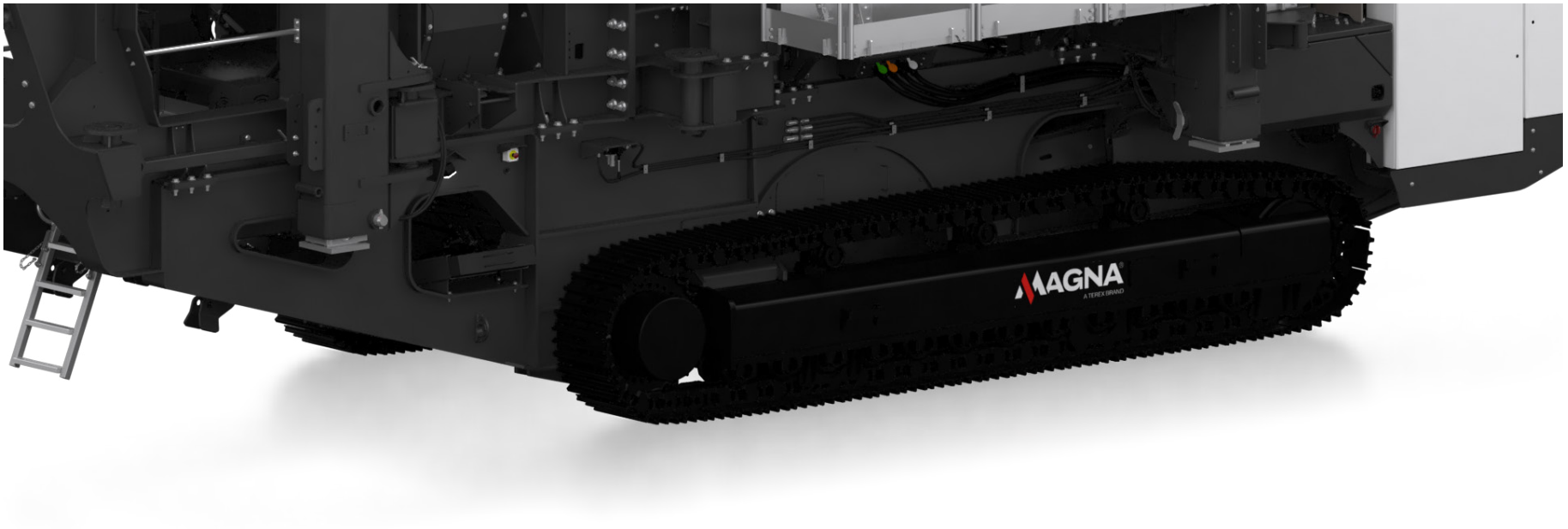
The Variable Speed Drive enables the crusher chamber to run in reverse, run at variable speed and unblock when required.

ELECTRICAL SPECIFICATION

- Main Conveyor: 2 x 15kW Motors
- Magnet: 1.5kW
- By-Pass Conveyor: 7.5kW motor
- Tracking motors 2 x 75kW
- Crusher Motor: 200kW controlled via VSD (Variable Speed Drive) (Speed Control, Ability to run in Reverse, Unblock Feature)

TRACKS

Type:	Heavy-duty tracks	**High speed:**	0.7kph (0.4mph)
Sprocket centers:	5050mm (16′ 5″)	**Drive:**	Hydraulic motors
Track width:	500 mm (20″)	**Tensioning:**	Hydraulic adjuster, grease tensioned
Gradeability:	30˚ maximum		



PLANT CONTROLS & OTHER

CONTROL SYSTEM

- Advanced CANBUS compliant system Large display screen(IP67 Rated)
- Five simple operating modes with menu driven graphic user interface:
  - **Track mode:** For moving machine
  - **Manual mode:** For manually starting machine
  - **Automatic mode:** For automatically starting the machine in predetermined sequence
  - **Configuration mode:** For testing/setting individual components
  - **Language selection:** For setting languages
- User friendly incremental selection of feeder and crusher speed enable the operator to achieve the optimal throughput
- Detachable doglead control for tracking
- Integrated machine and engine control panel
- Lockable compartment
- Auto regulating feeder selectable for improved throughput control
- Emergency stops: 8 off (5 on the primary module and 3 on the upper / secondary module)

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 and Auto start / stop capabilities

CHASSIS

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

PLANT CONTROLS & OTHER

GUARDS

Composite guards are provided for all drives, flywheels, pulleys & couplings. The guards provided are designed & manufactured to meet CE & ANSI standards. Hinged access guards are provided on the top, side & both ends of the engine.

PLATFORMS

- Inclined step access on LHS and RHS of machine
- Access steps to rear maintenance platform under feeder
- Full catwalk access to RHS & LHS of Jaw chamber with 3 side maintenance platforms
- 3 side access to powerunit
- Full compliance with EN1009 crusher standards

TOOL BOX

- Mounted lockable toolbox
- Tool kit and flogging spanners
- Grease gun
- Manuals

CHUTES

- Heavy duty inlet chute with bolt-up construction, and liner plates
- By-pass chute with selectable discharge flop gate, to either by-pass conveyor or main conveyor

OPTIONS

BY-PASS CONVEYOR

Belt Width: 750mm (26″)
Belt Spec: Plain
Working Angle: 24° max
Hydraulically folds for transport
Discharge Height: 4m (13′1″) under drum
Stockpile capacity: 89m³ (117yds³)@ 40°

MAGNETIC SEPARATOR

Belt Width: 750mm (26″)
Belt Spec: Cleated
Drive: Electric motor & planetary gearbox drive

- Heavy duty twin pole magnet
- Right hand side discharge standard

REMOTE CONTROL UNIT

- Full function radio remote unit
- Machine can be switched from crushing mode into track mode, moved and switched back to operating mode from remote control unit
- Feeder stop / start

ADDITIONAL OPTIONAL EXTRAS

- Hydraulically adjustable deflector plate, lined with replaceable wear resistant plate
- Mounted hydraulic breaker hammer (650kg), boom and controls
- Wear resistant hopper extensions
- Grizzly cartridge with 75mm (3″) nominal spacing
- Grizzly cartridge with 125mm (5″) nominal spacing
- 40mm rubber mesh on independent screen below VGF
- Belt weigher - Belt scale with speed wheel
- Hot climate lubrication kit (Recommended for ambient temperature between +15 and +50°C ambient)
- Cold climate lubrication kit (Recommended for ambient temperature between -20 and +30°C ambient)
- Piped for Dust Suppression complete with Spray bars for bypass conveyor
- Water pump
- Fast Fill Fuel Kit
- Radio Remote system
- Control panel positive air pressurization

JAW PROFILES

All jaw profiles supplied in 18% manganese as standard. This is the proven material for quarry & mining applications with an initial hardness of around 230BHN (Brinell Hardness)

SUPER TOOTH JAWS (STANDARD OFFERING)

For extended life across most quarrying applications. Super tooth has a significantly increased wear life using a deeper profile without comprising strength or product shape. Available in both 18% & 22% managanese.

QUARRY TOOTH JAWS

Quarry tooth jaws are suitable for use in medium rock, hard rock and high abrasion applications. Will provide a longer wear life due to the additional material on the teeth of the jaw. Available in both 18% & 22% managanese.

HEAVY DUTY JAWS

A new design of HD jaw plates have been designed for the fixed jaw, specifically engineered to complement other profiles on the swing jaw. This design aims to align wear rates between the fixed and swing jaws, reducing the frequency of liner changes. Available in both 18% & 22% managanese.

SPLIT LINER CONFIGURATION

- 2 Piece Quarry Tooth 18% (Fixed & Swing)
- 2 Piece Heavy Duty 18% (Fixed) & 2 Piece Quarry Tooth 18% (Swing)

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

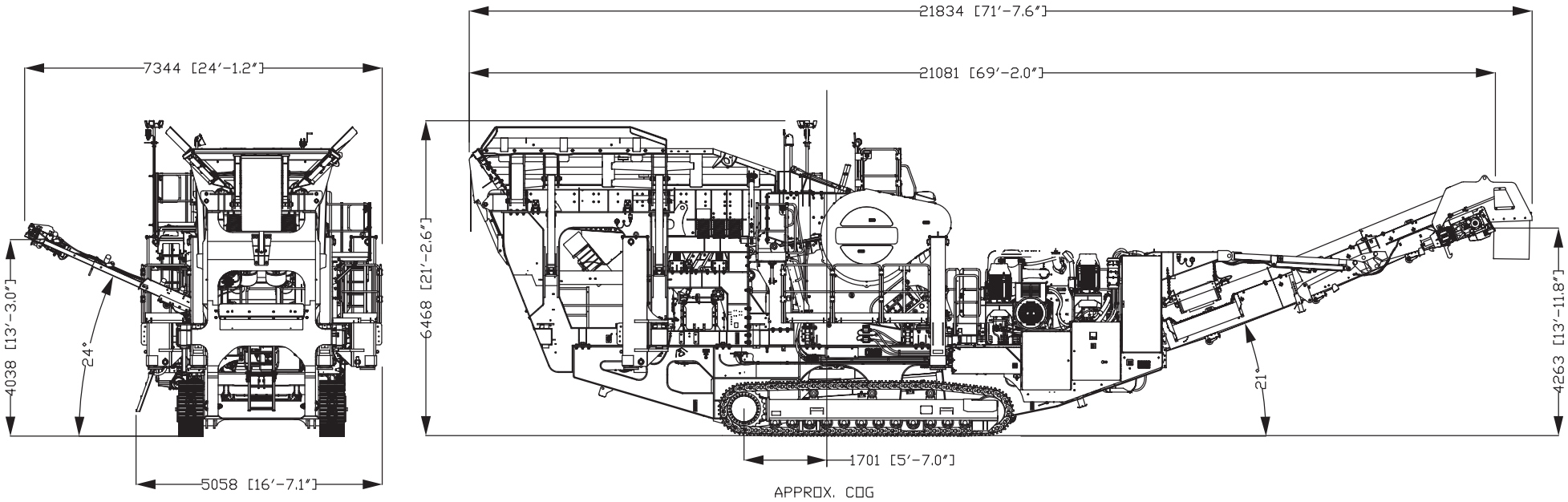
USEFUL REPORTING

ENHANCED USABILITY

T-LINK

WEIGHT & DIMENSIONS

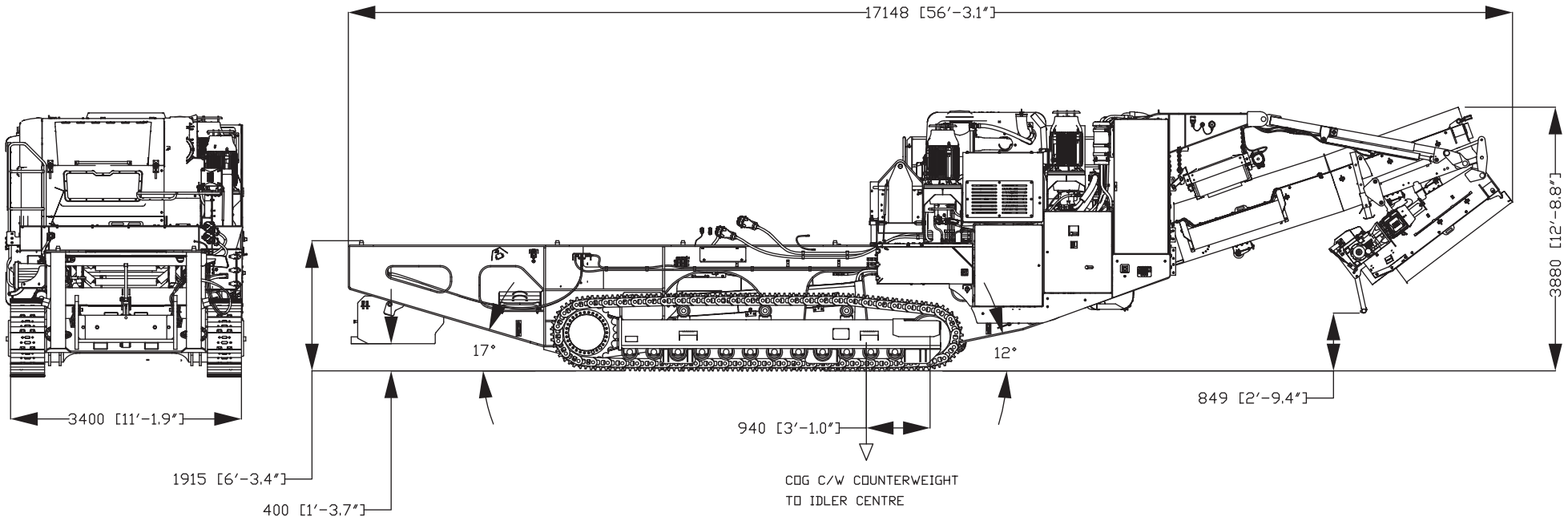
WORKING



Weight: 120,000 - 130,000kg option dependant

WEIGHT & DIMENSIONS

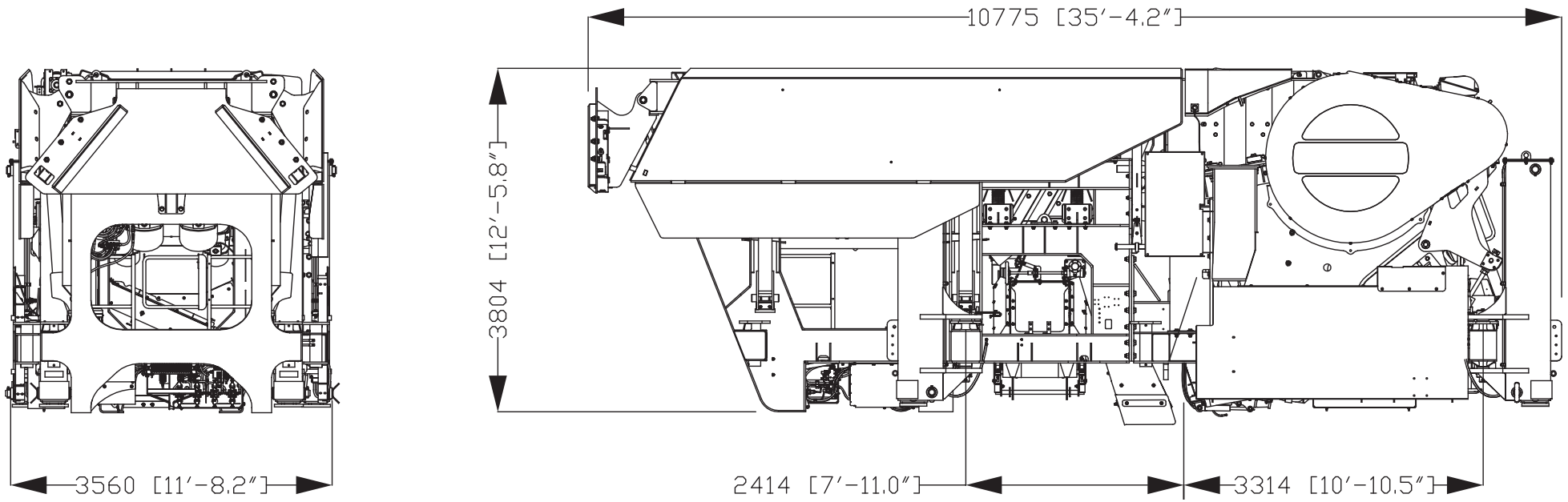
TRANSPORT – TRACK/POWERUNIT/CONVEYOR MODULE



Weight: 42,000 - 44,000kg option dependant

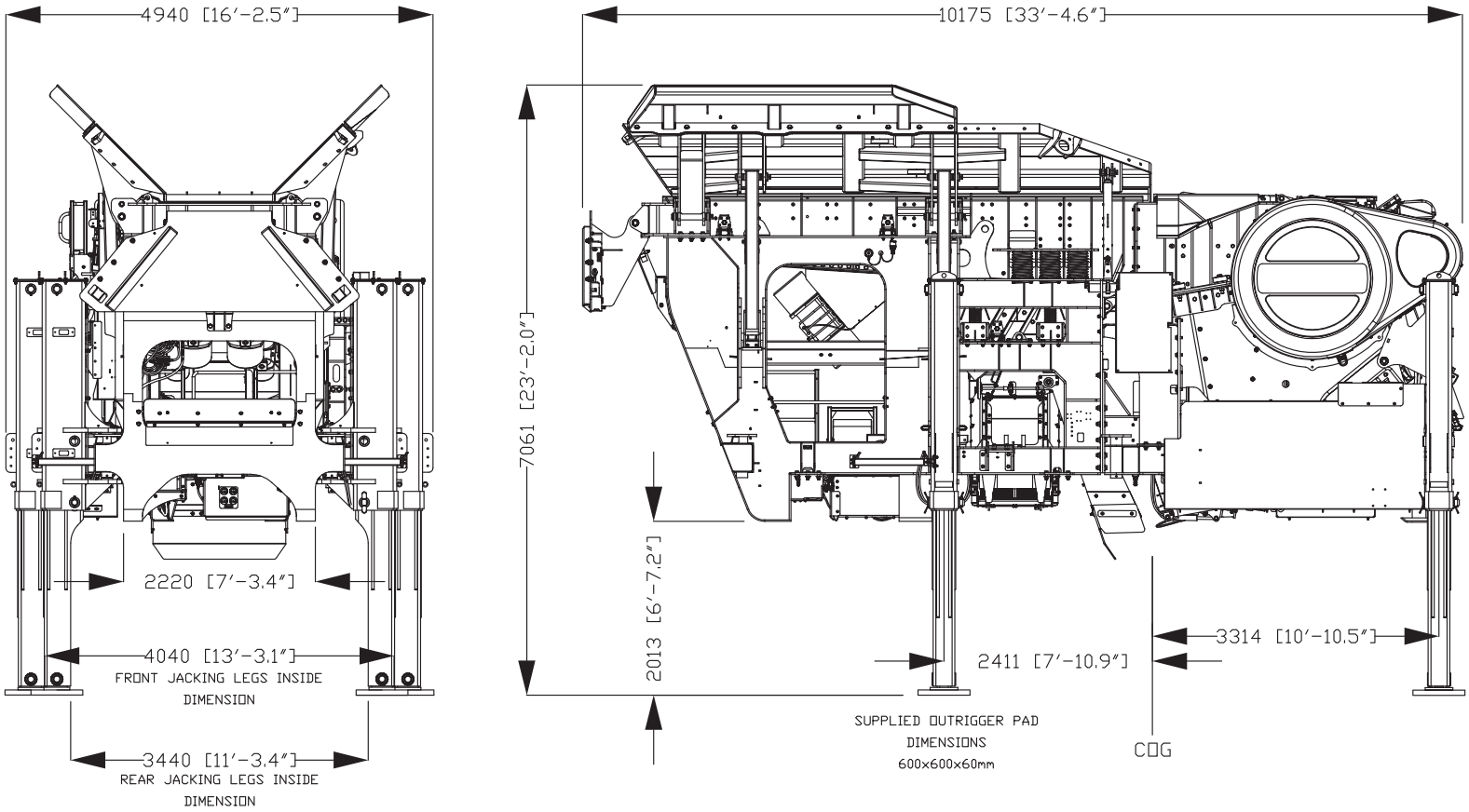
WEIGHT & DIMENSIONS

TRANSPORT – HOPPER/FEEDER/CRUSHER MODULE (LOWERED)



Weight: 83,000 - 88,000kg option dependant

TRANSPORT – HOPPER/FEEDER/CRUSHER MODULE (RAISED)



Omagh, UK
Drumquin Road
Omagh
Co. Tyrone
BT78 5PN

Tel: +44 (0) 28 8241 8700
Email: magna@terex.com

terex.com/magna