

POWERSCREEN® 1150 MAXTRAK (PRE-SCREEN)

CONE CRUSHER



TECHNICAL SPECIFICATION - REV 4.1 01/08/2019





1150 MAXTRAK PRE-SCREEN



OVERVIEW

SPECIFICATION

Total Weight	Tier 3: 42,900kg (94,578lbs) (No Options) Tier 4F: 42,540kg (93,785lbs) (No Options)
Transport	Length 16.9m (55' 5") Height 3.6m (11' 10") Width 3m (9' 10")
Working	Length 15.8m (51' 10") Height 5.22m (17' 1") Width 4.1m (13' 5")
Crusher Type:	1150 Automax® Crusher
Power Unit	Caterpillar C-13 ACERT 328kW (440hp), Scania DC13 331kW (450hp) or Scania DC13 Constant Speed 355kW (483hp)
Plant Colour	RAL 5021, RAL 7024, RAL 9005

FEATURES & BENEFITS

The Powerscreen® 1150 Maxtrak is a high performance, medium sized track mobile cone crusher. At the heart of the Maxtrak is the Automax® cone crusher with hydraulic setting, tramp release & unblocking system. Its unique crushing action provides excellent capacity, high reduction & good product cubicity for the production of high quality aggregate & sub-base materials. A level probe over the feed ring regulates the feed belt to ensure the cone chamber is choke fed, essential for maximum reduction, manganese life & optimal product shape.

- Output potential of up to 300 tph / 330 US tph - depending on material type & crusher settings
- Renowned Automax® crusher technology
- Accepts clean 'all in feed'
- Excellent product shape
- High reduction ratio
- Cone feed box level control to maintain choke feeding
- Hydraulic crusher setting. Can be adjusted on the fly
- Cone overload protection
- Heavy duty chassis & track frame
- Metal detector
- Dust suppression system
- Economical to operate with a highly fuel efficient direct drive system
- Heavy duty fabricated chassis & track frame
- Remote control via umbilical

APPLICATIONS



Aggregate

Sand & gravel
Blasted rock
River rock



Recycling

C&D waste
Foundry waste



Mining

Processed ores
Processed minerals



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CONE CRUSHER

- Crusher type:** 1150 Automax crusher fitted as standard with long throw eccentric
- Liners:** Manganese steel alloy mantle & concave
- Standard concave:** Medium Coarse (MC)
- Lubrication:** Pumped system having a chassis mounted lube tank with air blast cooler
- Adjustment:** Hydraulic setting adjustment, automatic overload release & hydraulic unblocking
- Control:** 2 Operating modes available:
 - Autaset Mode: fixed parameters
 - Maxset Mode: load sensing, parameters auto adjust & maximise performance. Variable speed
- Concave options:** Extra Coarse (XC)
 Fine (F)
 Common upper frame for all liners
- Eccentric option:** Short throw
- Drive:** Banded wedge belt drive from engine via clutch

CRUSHER OPTIONS

LINER PROFILE	MAXIMUM FEED SIZE	MAXIMUM RECOMMENDED CSS
Fine	120mm (4.7")	32mm (1.26")
Medium Coarse	190mm (7.5")	38mm (1.6")
Extra Coarse	220mm (8.7")	45mm (1.8")
Each of the above available with choice of long & short throw eccentrics		



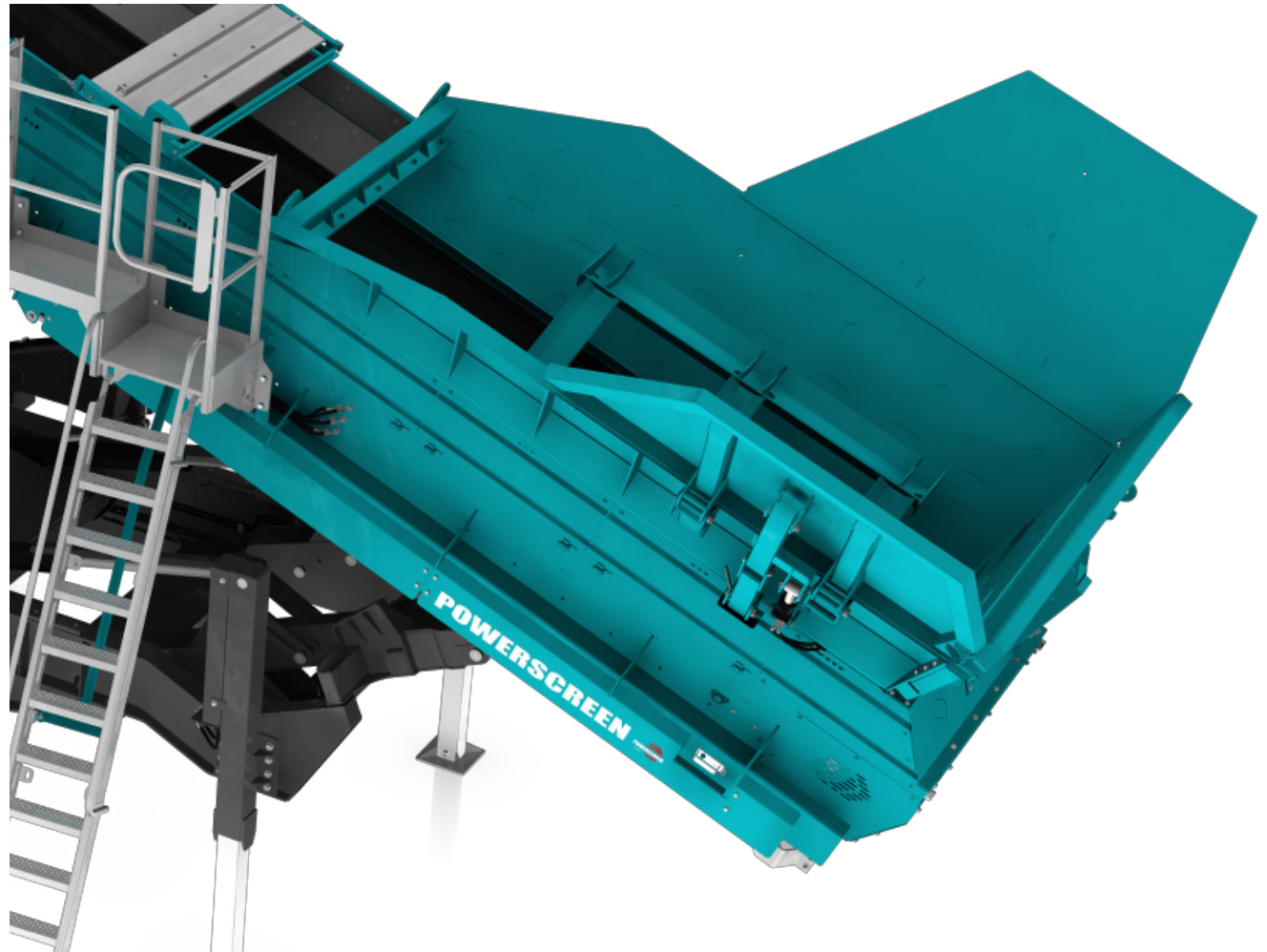


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↓ HOPPER

- Hopper type:** Fixed, tapered hopper to aid material flow
- Hopper length:** 3.5m (11' 6")
- Hopper width:** 2.25m (7' 5")
- Hopper capacity:** Up to 6m³ (7.8 cu. yd.) gross depending on method of feed
- Hopper body:** Fabricated in 10mm thick plate, with internal crash bars to minimise impact load on the feed conveyor. 10mm & 6mm wear resistant liners as standard.





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FEED CONVEYOR

Conveyor type: Shallow troughed belt, variable speed

Design: Raises & lowers hydraulically for transport, operation & crusher maintenance

Belt type: EP630/4 with 6mm top & 2mm bottom heavy-duty rubber covers, vulcanised joint

Belt adjustment: Screw adjustment at the tail shaft

Belt width: 1300mm (4' 3")

Feed height: 3.05m (10')

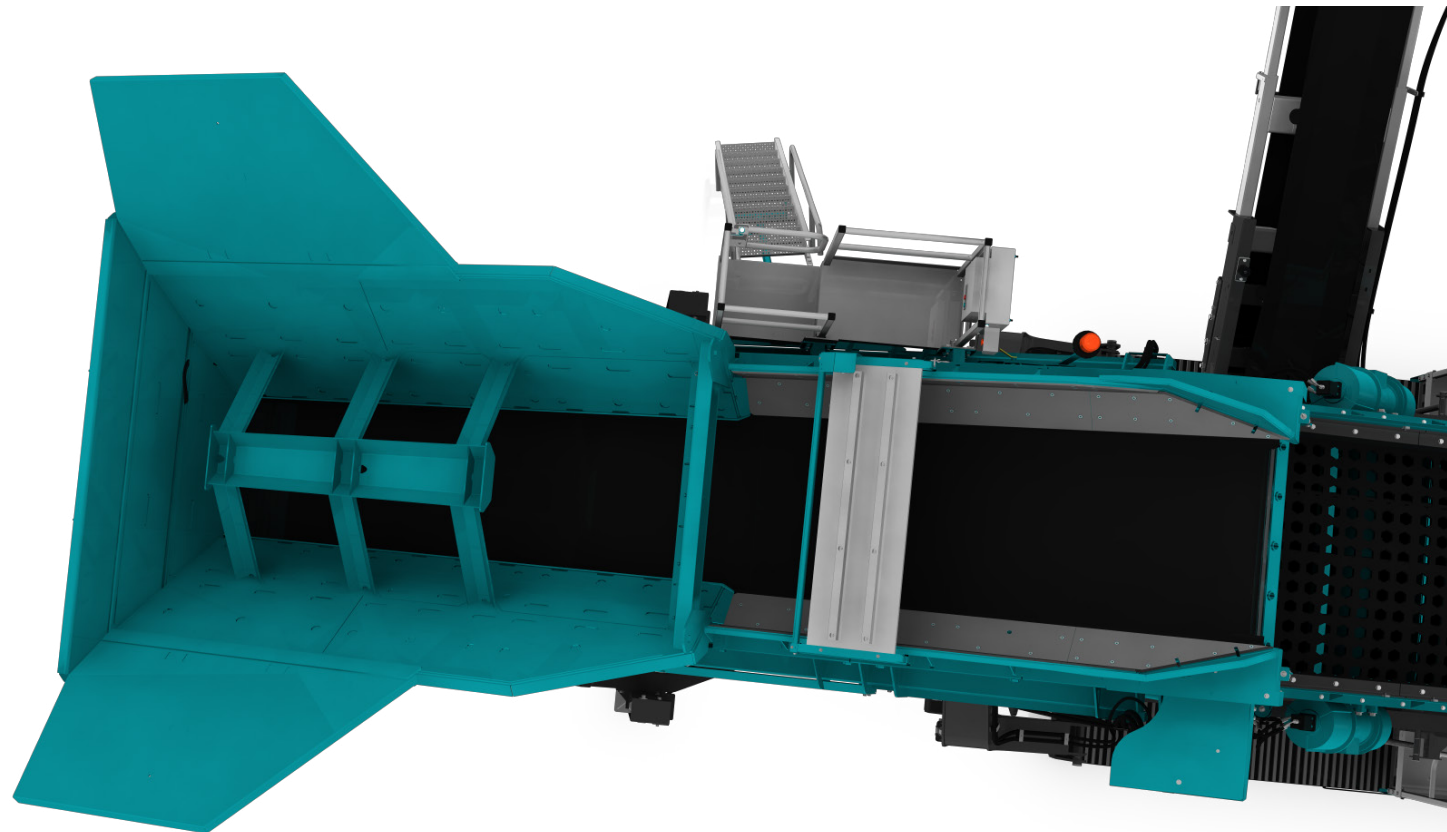
Drive: Hydraulic drive via gearbox

Impact rollers: Below feed hopper

Metal detector: Fitted with over & under belt detector. Complete with audible warning device & connected to stop the feed conveyor

Lubrication: Oil lubricated head drum gearbox. Low level greasing points for lubrication of shaft bearings

Level probe: Crusher feed ring fitted with ultrasonic level sensor designed to regulate & constantly choke feed the crusher





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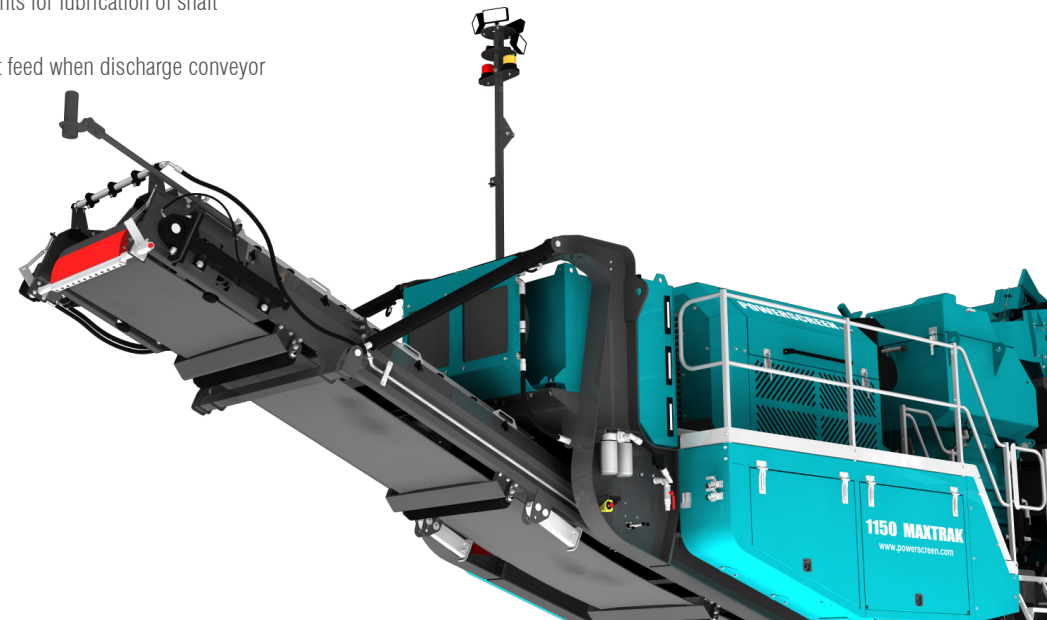
PRODUCT CONVEYOR

Conveyor type:	Troughed belt. Fixed speed conveyor with hydraulic drive. Fully lowers for service access & removable for maintenance
Belt type:	EP500/3 with 5mm top & 1.5mm bottom heavy duty rubber covers
Belt width:	1000mm (3' 3")
Discharge height:	3.3m (10' 10")
Stockpile volume:	66m ³ (86 cu. yd.)
Impact rollers:	Fitted immediately below the crusher outlet
Skirting:	Fully skirted rubber skirting along the conveyor length
Drive:	Direct drive hydraulic motor
Belt covers:	Aluminium (optional)
Belt adjustment:	Head drum screw adjusters
Dust suppression:	Spraybar fitted at head drum
Lubrication:	Low level greasing points for lubrication of shaft bearings
Speed sensor:	Designed to stop plant feed when discharge conveyor stops

DUST SUPPRESSION SYSTEM

Sprays bars with atomiser nozzles mounted over the crusher mouth, product conveyor feed & discharge points. Piped to an inlet manifold

Type:	Clean water atomising nozzles
Inlet:	Single point on chassis
Pressure required:	2.8 bar (42 psi)
Frost protection:	Via system drain valves
Pump:	Optional extra





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↓ PRE-SCREEN

PRE-SCREEN UNIT

Screening Area: 2.1m x 1.5m (7' x 5')

Screen Angle: 13° forward inclination

Drive: 2 x External Hydraulic Vibrators

Design: Patent pending hydraulic folding system allows for rapid conversion between pre-screen and direct feed configurations. Selectable discharge to side conveyor or main product conveyor.

SCREEN MEDIA OPTIONS

Screen Media options available in various sizes which include:

Punch Plate: 16mm to 40mm (0.63" to 1.6")

PRE-SCREEN SIDE CONVEYOR (OPTIONAL)

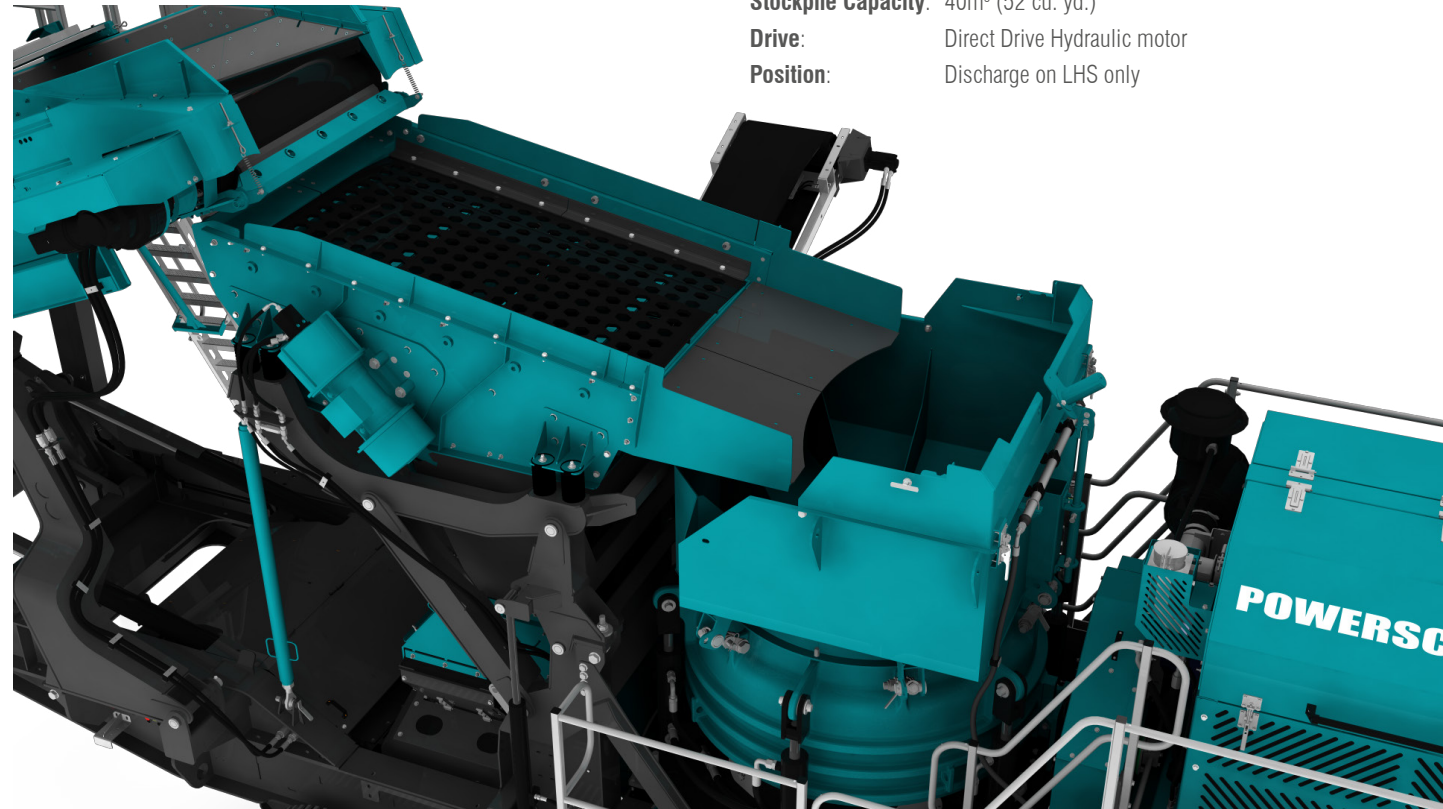
Width: 650mm (2' 2")

Discharge Height: 2.8m (9' 2")

Stockpile Capacity: 40m³ (52 cu. yd.)

Drive: Direct Drive Hydraulic motor

Position: Discharge on LHS only





1150 MAXTRAK PRE-SCREEN



POWER UNIT & HYDRAULICS

Tier 3 Equivalent: Caterpillar C-13 ACERT, 328 kW (440hp)
Operating conditions: Ambient temp. +30°C to -5°C (86°F to 23°F) at altitudes up to 2000m (6562ft) above sea level

- For applications outside this range please consult with Powerscreen as the plant performance / reliability may be affected.

Operating rpm range: 1750 - 1900rpm
Plant drive: High quality pumps driven via engine PTOs
Fuel tank capacity: 1000 L (264 US Gal)
Tier 4F/ Stage IV: Scania DC13, 331 kW (450hp)
Operating conditions: Ambient temp. +30°C to -23°C (86°F to 23°F) at altitudes up to 2000m (6562ft) above sea level - For applications outside this range please consult with Powerscreen as the plant performance / reliability may be affected.

Operating rpm range: 1550rpm - 1700rpm
Emission control technique: Selective Catalytic Reduction (SCR)
Reductant tank size: 60 L (16 US Gal)
Plant drive: High quality pumps driven via engine PTOs
Fuel tank capacity: 1000 L (264 US Gal)
Hydraulic tank capacity: 660 L (174 US Gal)
Cone lube oil tank capacity: 275 L (72 US Gal)
Crusher drive: Direct drive via wedge belts
Crusher drive tensioning: Pulley tensioning system with banded belts
Clutch type: Highly efficient, self adjusting HPTO 12 dry plate clutch with electro hydraulic operation

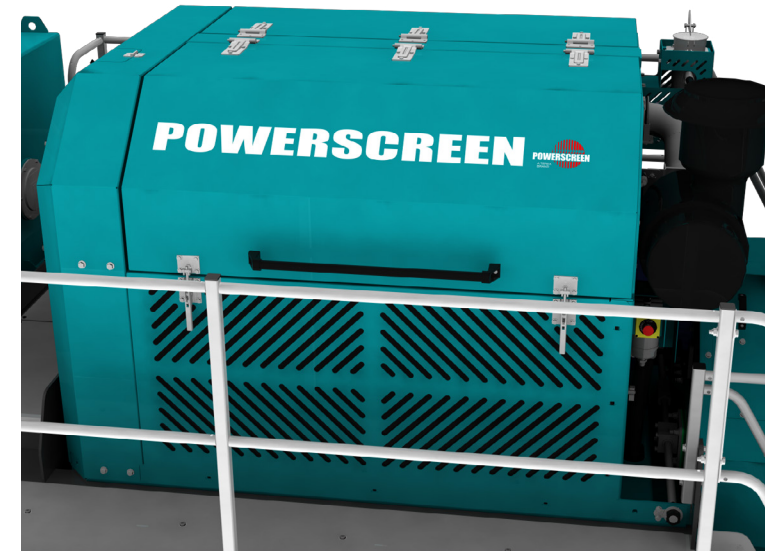
Stage IIIA Constant Speed: Scania DC13, 355 kW (483hp)
Operating rpm range: 1600rpm

Scania Stage IV / Tier 4 Final Technology

Scania industrial engines meet the requirements of Stage IV and Tier 4 Final without the need for a particulate filter. With only EGR and SCR technology, the installation will be unaffected. Scania developed systems for engine management and emission control ensure an attractive blend of performance and operating economy.

The function of the SCR system is based on the injection of a urea solution (AdBlue or DEF, Diesel Exhaust Fluid) into the after-treatment system.

With EGR, a small amount of exhaust gases is returned to the intake of the engine, diluting the intake air and reducing the oxygen concentration. This will reduce the combustion temperature and further reduce emissions.





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TRACKS

Type: Heavy duty bolt on tracks

Sprocket centres: 3800mm (12' 6")

Track width: 500mm (1' 8")

Gradeability: 30° maximum

High speed: 1.1kph (0.7mph)

Drive: Hydraulic, proportional control

Track tensioning: Hydraulic adjuster, grease tensioned





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PLANT CONTROLS & OTHER

CHASSIS

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

Transport tie down and cross tie points.

Internal steel pipes.

Heavy duty chamber anti-vibration mounts.

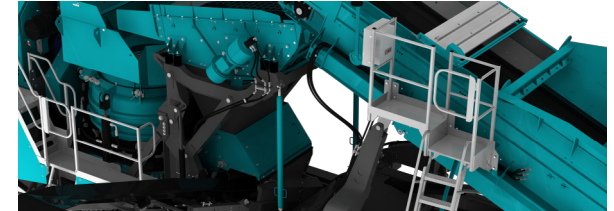
CHUTES

Feed box: Quick release system to aid removal of feed-in box for wear part changes

Product conveyor: Fabricated in 10mm mild steel plate with 10mm wear resistant replaceable liners. Diverging taper along belt direction to reduce friction

GUARDS

Sheet metal guards are provided for all drives, pulleys & couplings



PLATFORMS

Platforms are provided for inspection & maintenance, allowing access all round the engine and both sides of the crusher, along with 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, high grip steps & access ladders

UMBILICAL CONTROL

A Scanreco umbilical control unit is also supplied with the plant. This is used to control the tracking function & is also fitted with a stop button for the plant



PLANT CONTROLS

Full PLC control panel

Full system diagnostics & monitoring

Key functions controlled from the panel include:

- Automatic sequential start/stop
- Feed conveyor start/stop
- Feed conveyor speed control
- Engine speed control
- Crusher level settings
- Crusher CSS control
- Calibration & monitoring of liner wear
- Tracking mode on/off



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OPTIONS

FEED HOPPER EXTENSIONS

Hydraulically folding and locking rear extensions. Provides a loading width of 4.1m (13' 5") at the rear of the feeder.

PRODUCT CONVEYOR DUST COVERS

Aluminium dust covers along discharge end of conveyor.

PRODUCT CONVEYOR STOCKPILE SENSOR

Ultrasonic level sensor designed to control the up-stream functions of the machine when the stockpile reaches a predefined level.

CAMERA OVER CRUSHER

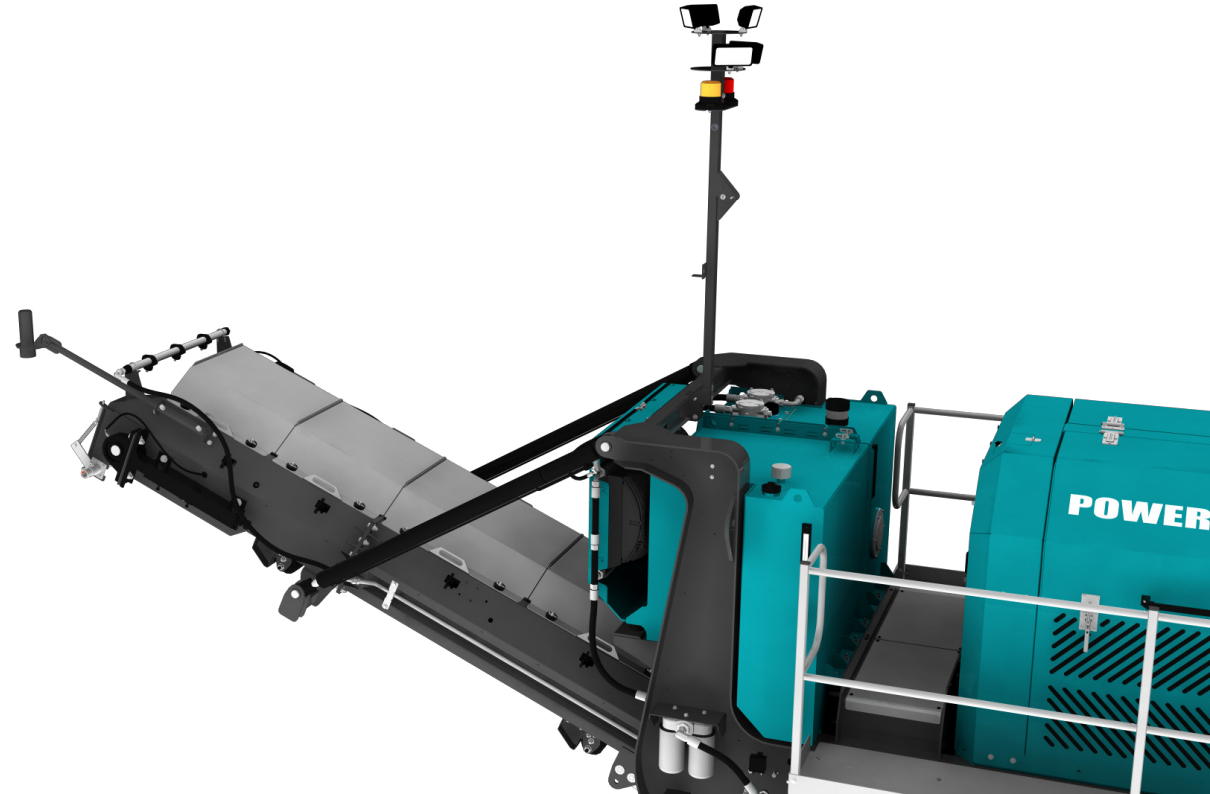
A camera mounted on the feed-in box provides the operator with an excellent view of the material entering the cone. The 5.6" heavy duty screen is mounted beside the main control panel.

HYDRAULIC WATER PUMP

A hydraulically powered water pump is available to power the dust suppression system

LIGHTING MAST

Lighting tower complete with 5 15W LED 900lm lights





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OPTIONS 2

RADIO REMOTE CONTROL

Scanreco unit complete with integrated tracking functions & plant stop button.

Note - Only available in certain countries where type approval has been obtained

Remote can also be used to start and stop the feeder

ELECTRIC REFUELLING PUMP

A 24 volt refuelling pump, allows fuel to be drawn from a remote source. Fuel transfer rate of 100 L/min.

Available for urea refilling also.

CONTROL PANEL POSITIVE PRESSURISATION

An additional unit designed to reduce dust particles within the control panel.

A continuous flow of clean air is passed through the cabinet whilst the unit simultaneously filters out any particulate laden air.

HOT/COLD CLIMATE OILS

Cold climate oils - (recommended for ambient temperatures between -20 to +30°C)

- Hydraulic & lubrication oils only. Other component modifications may be required for low temperature operations. Please contact the Powerscreen sales & applications department with any queries.

Hot climate oils - (recommended for ambient temperatures between +15 to +50°C)



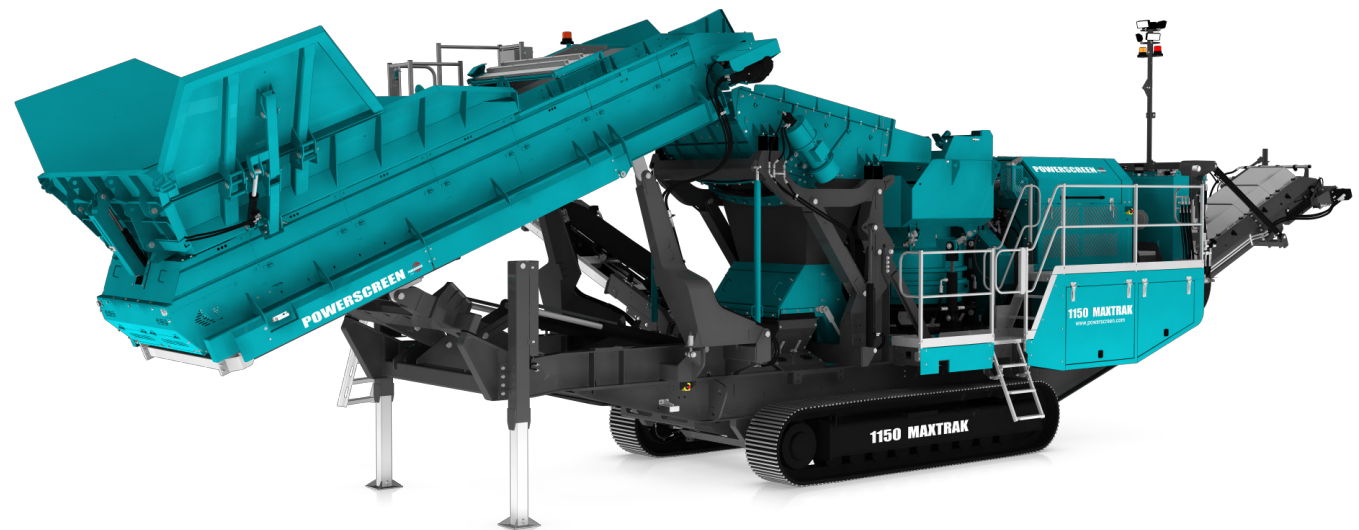
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OPTIONS 3

OPTIONAL EXTRAS

- Extra Coarse (XC) concave
- Fine (F) concave
- Short throw eccentric
- Pre-screen bypass conveyor
- Cold climate oils
- Hot climate oils
- Hot climate coolers
- Product conveyor belt weigher
- Hydraulic water pump
- Control panel positive pressurisation
- Belt weigher





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↓ POWERSCREEN PULSE

RECORD, DISPLAY AND ANALYSE DATA:

HIGH EFFICIENCY THROUGH PRECISE INFORMATION

Powerscreen Pulse is a system which allows the machine to relay performance and production data via phone networks, or by satellite when there's no cellular signal, to any device with a web browser, such as a PC, tablet or Smartphone.




AVAILABLE ANYWHERE AND AT ANY TIME



DASHBOARD DISPLAY



FLEET OVERVIEW



WEEKLY REPORT DIRECT TO YOUR INBOX



GPS: MACHINE TRACKING



REPORTING UTILISATION, PERFORMANCE & PART SPECIFIC

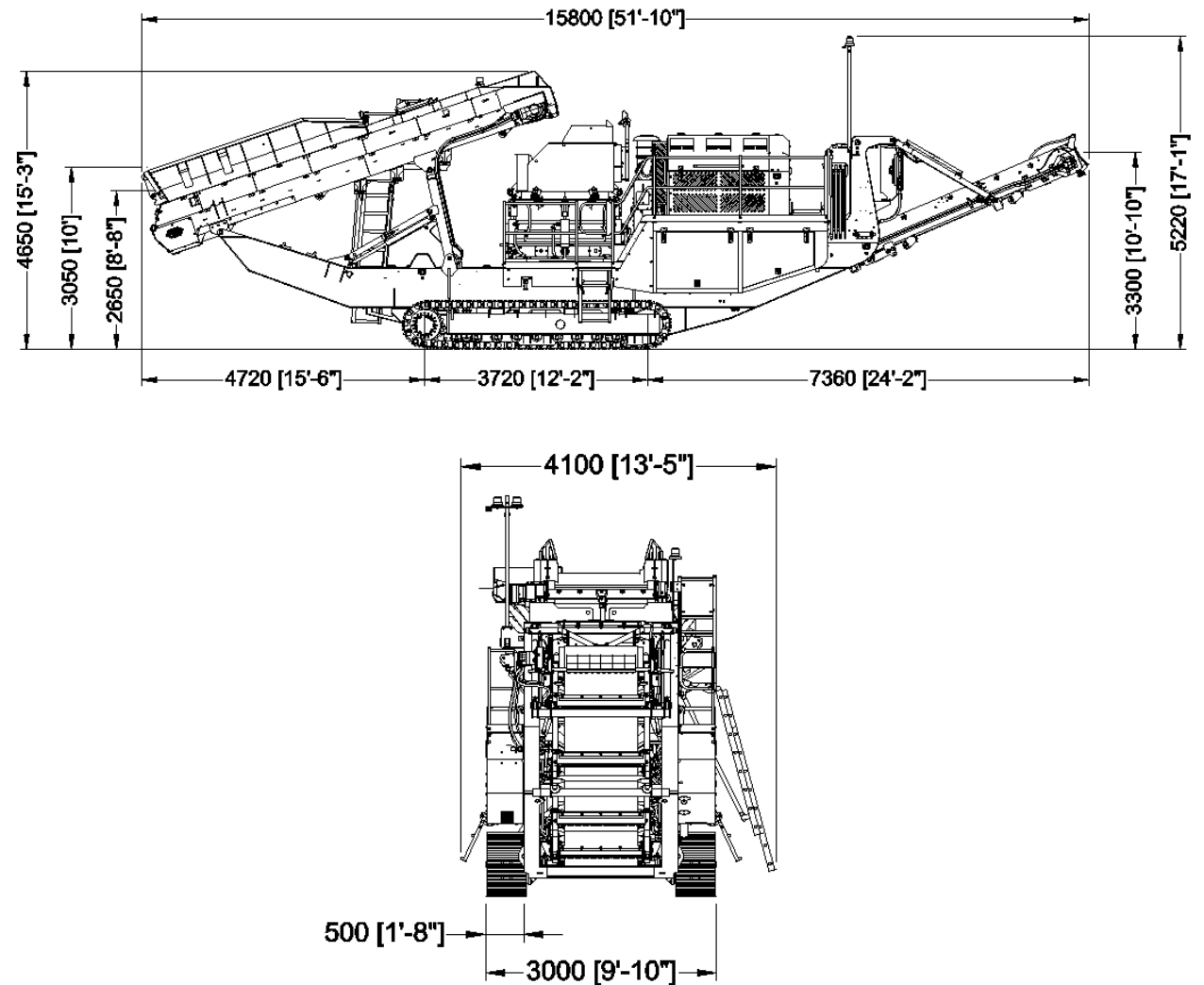


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WEIGHT & DIMENSIONS

Figure 1: 1150 Maxtrak Pre-Screen
Working Position



MORE DIMENSIONS OVERLEAF

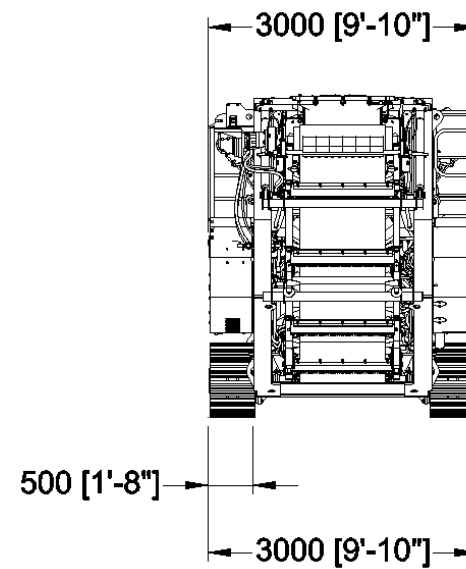
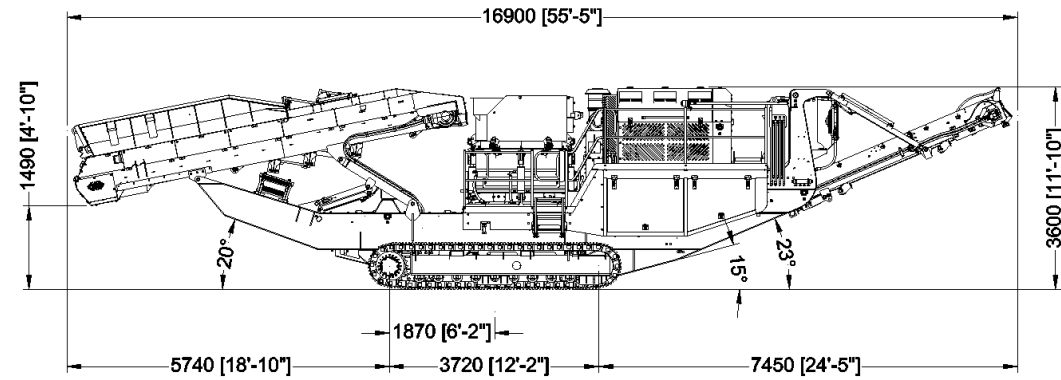


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WEIGHT & DIMENSIONS

Figure 2: 1150 Maxtrak Pre-Screen
Transport Position





Powerscreen equipment complies with CE requirements.

Please consult Powerscreen if you have any other specific requirements in respect of guarding, noise or vibration levels, dust emissions, or any other factors relevant to health and safety measures or environmental protection needs. On receipt of specific requests, we will endeavour to ascertain the need for additional equipment and, if appropriate, quote extra to contract prices.

All reasonable steps have been taken to ensure the accuracy of this publication, however due to a policy of continual product development we reserve the right to change specifications without notice.

It is the importers' responsibility to check that all equipment supplied complies with local legislation regulatory requirements.

Plant performance figures given in this brochure are for illustration purposes only and will vary depending upon various factors, including feed material gradings and characteristics. Information relating to capacity or performance contained within this publication is not intended to be, nor will be, legally binding.

GET IN TOUCH

Dungannon

200 Coalisland Road, Dungannon,
Co Tyrone, BT71 4DR, Northern Ireland
Tel: +44 (0) 28 87 718 500
Fax: +44 (0) 28 87 747 231

Louisville

11001 Electron Drive,
Louisville, Kentucky, 40299 USA
Tel: +1 502 736 5200
Fax: +1 502 736 5202

