

# POWERSCREEN<sup>®</sup> 1000 MAXTRAK

CONE CRUSHER



TECHNICAL SPECIFICATION - REV 14 01/05/2025





## 1000 MAXTRAK CONE



# OVERVIEW

## SPECIFICATION

<b>Total Weight</b>	Tier 3: 30,440kg (67,109lbs) (No Options)
	Tier 4F: 31,820kg (70,151lbs) (No Options)
<b>Transport</b>	<b>Length</b> 14.6m (47' 11")
	<b>Height</b> 3.45m (11' 4")
	<b>Width</b> 2.8m (9' 2")
<b>Working</b>	<b>Length</b> 14.6m (47' 11")
	<b>Height</b> 4.1m (13' 5")
	<b>Width</b> 3.46m (11' 4")
<b>Crusher Type:</b>	1000 Automax Crusher
<b>Power Unit</b>	Caterpillar C9.3 250kW (335hp) or Scania DC9 257kW (350hp)
<b>Plant Colour</b>	RAL 5021, RAL 7024, RAL 9005

## FEATURES & BENEFITS

The high performance Powerscreen® 1000 Maxtrak cone crusher has been designed for direct feed applications without pre-screening on clean rock. 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 Automax® is choke fed, essential for maximum reduction, manganese life & optimal product shape.

- Output potential of up to 230 tph / 253 US tph depending on feed material & 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
- 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
- Radio remote control as standard
- Powerscreen Pulse telemetry as standard

## APPLICATIONS



**Aggregate**  
Sand & gravel  
Blasted rock  
River rock



**Recycling**  
C&D waste  
Foundry waste



**Mining**  
Processed ores  
Processed minerals



## 1000 MAXTRAK CONE



# CONE CRUSHER

- Crusher type:** 1000 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:  
 - Autoset Mode: fixed parameters  
 - Maxset Mode: load sensing, parameters auto adjust & maximise performance
- Concave options:** Extra Coarse (XC)  
 Coarse (C)  
 Autosand (AS)
- Eccentric option:** Short throw
- Drive:** Wedge belt

LINER PROFILE	MAXIMUM FEED SIZE	MAXIMUM RECOMMENDED CSS
Medium Coarse	160mm (6.3")	38mm (1.6")
Coarse	175mm (6.9")	38mm (1.6")
Extra Coarse	195mm (7.7")	38mm (1.6")
Autosand	63mm (2.5")	32mm (1.25")
<i>Each of the above available with choice of long &amp; short throw eccentrics</i>		





## 1000 MAXTRAK CONE



## HOPPER

<b>Hopper type:</b>	Fixed feed hopper
<b>Hopper length:</b>	3.38m (11' 1")
<b>Hopper width:</b>	2.5m (8' 2")
<b>Feed in height (rear):</b>	2.8m (9' 2")
<b>Feed in height (rear with extensions):</b>	3.25m (10' 8")
<b>Hopper width (rear with extensions):</b>	3.9m (12' 10")
<b>Hopper capacity:</b>	Up to 4.4m <sup>3</sup> (5.8 cu. yd.) gross depending on method of feed
<b>Hopper body:</b>	Fabricated in 10mm thick wear resistant steel plate, with internal crash bars to minimise impact load on the feed conveyor





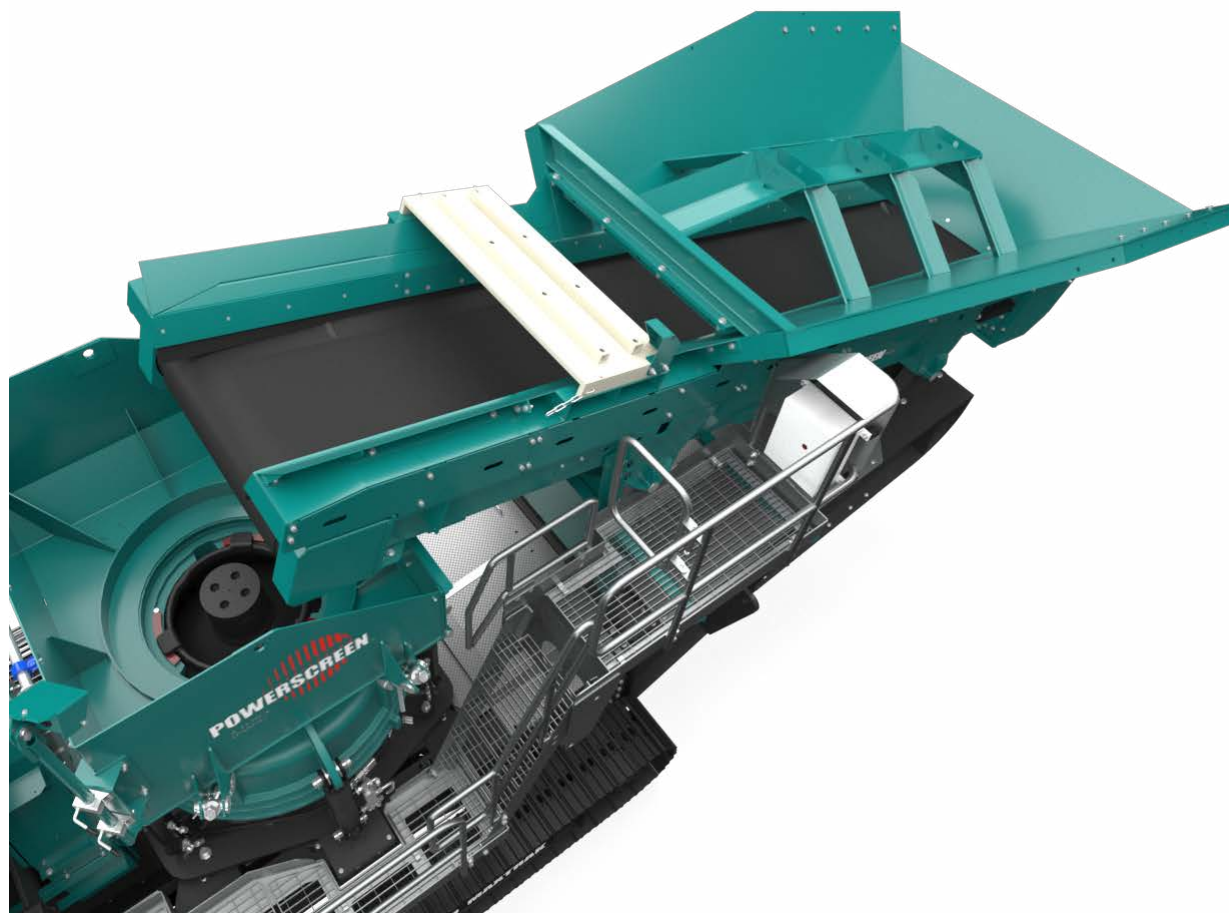
## 1000 MAXTRAK CONE



# FEED CONVEYOR

<b>Conveyor type:</b>	Shallow troughed belt, variable speed
<b>Design:</b>	Raises & lowers hydraulically for transport, operation & crusher maintenance
<b>Belt type:</b>	EP500/3 with 5mm top & 1.5mm bottom heavy-duty rubber covers, vulcanised joint
<b>Belt adjustment:</b>	Screw adjustment at the tail shaft
<b>Belt width:</b>	1000mm (40")
<b>Feed height:</b>	2.8m (9' 2")
<b>Drive:</b>	Hydraulic drive via flange mounted gearbox

<b>Impact rollers:</b>	Below feed hopper
<b>Metal detector:</b>	Suitable for detecting steel & manganese, complete with audible warning device & connected to stop the feed conveyor
<b>Barge boards:</b>	Extend from the feed conveyor to the conveyor head
<b>Lubrication:</b>	Oil lubricated head drum gearbox. Grease nipples for lubrication of shaft bearings
<b>Level probe:</b>	Crusher feed ring fitted with level probe designed to regulate & constantly choke feed the crusher







## 1000 MAXTRAK CONE



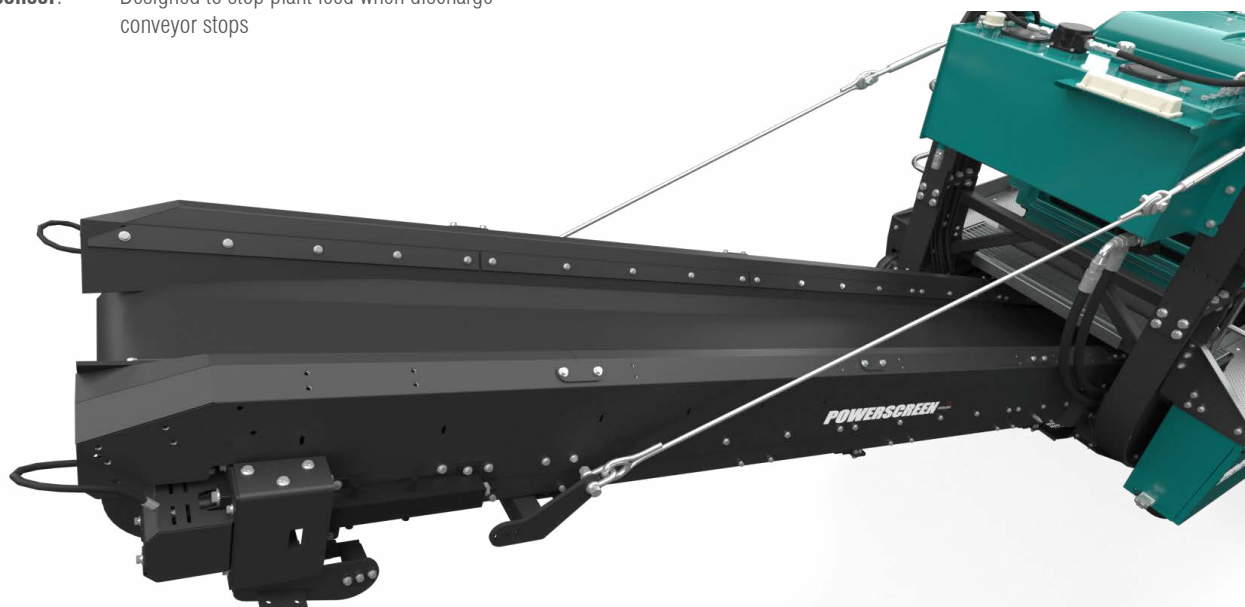
# PRODUCT CONVEYOR

<b>Conveyor type:</b>	Troughed belt. Fixed speed conveyor with hydraulic drive
<b>Belt type:</b>	EP400/3 with 4mm top & 2mm bottom heavy duty rubber covers, & vulcanised joint
<b>Belt width:</b>	800mm (32")
<b>Discharge height:</b>	3.25m (10' 8")
<b>Stockpile volume:</b>	63m³ (82 cu. yd.)
<b>Impact rollers:</b>	Fitted below the crusher outlet
<b>Skirting:</b>	Fully skirted rubber sealing along the conveyor length
<b>Drive:</b>	Direct drive hydraulic motor
<b>Belt covers:</b>	Canvas type removable dust covers are fitted over the exposed section of the conveyor
<b>Belt adjustment:</b>	Screw adjustment at the head drum
<b>Lubrication:</b>	Grease nipples for lubrication of shaft bearings
<b>Speed sensor:</b>	Designed to stop plant feed when discharge conveyor stops

## DUST SUPPRESSION SYSTEM

Spray 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





## 1000 MAXTRAK CONE



# POWER UNIT & HYDRAULICS

<b>Tier 3 Equivalent:</b>	Caterpillar C9.3 250kW (335hp)
<b>Operating Conditions:</b>	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.
<b>Operating rpm range:</b>	1750 - 1850rpm
<b>Plant drive:</b>	High quality pumps driven via belt drive from engine
<b>Fuel tank capacity:</b>	650 L (171 US Gal)
<b>Tier 4F/ Stage V:</b>	Scania DC9 257 kW (350hp)
<b>Operating conditions:</b>	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.
<b>Operating rpm range:</b>	1750 - 1850rpm
<b>Emission control technique:</b>	Selective Catalytic Reduction (SCR)
<b>Reductant tank size:</b>	60 L (16 US Gal)
<b>Plant drive:</b>	High quality pumps driven via engine PTOs
<b>Fuel tank capacity:</b>	650 L (171 US Gal)
<b>Hydraulic tank capacity:</b>	300 L (79 US Gal)
<b>Cone lube oil tank capacity:</b>	220 L (58 US Gal)
<b>Crusher drive:</b>	Direct drive via wedge belts
<b>Crusher drive tensioning:</b>	Manually adjustable screw tensioners located under power unit
<b>Clutch type:</b>	Highly efficient, self-adjusting HPTO 12 dry plate clutch with electro hydraulic operation

Scania industrial engines meet the requirements of Stage V 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 opening economy.

The function of the SCR system is based on the injection of a urea solution (AdBlue of 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.





## 1000 MAXTRAK CONE



# TRACKS

**Type:** Heavy duty bolt on tracks fitted

**Sprocket centres:** 3240mm (10' 8")

**Track width:** 400mm (1' 4")

**Gradeability:** 25° maximum

**High speed:** 1.2kph (0.7mph)

**Drive:** Hydraulic

**Tensioning:** Hydraulic adjuster, grease tensioned







## 1000 MAXTRAK CONE



# PLANT CONTROLS & OTHER

## CHASSIS

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

## CHUTES

**Feed box:** Fabricated in 6mm mild steel plate. Hinge down back plate to lower feed conveyor head section for transportation

**Product conveyor:** Fabricated in 10mm mild steel plate with replaceable 10mm wear resistant liners at impact points

## GUARDS

Wire mesh or sheet metal guards are provided for all drives, flywheels, pulleys & couplings.



## RADIO REMOTE CONTROL

Complete with integrated tracking functions & plant stop button. NB - Only available in certain countries where type approval has been obtained  
Remote can also be used to:  
Start/Stop feeder



## 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 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



## 1000 MAXTRAK CONE



## ↓ OPTIONS

### 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.

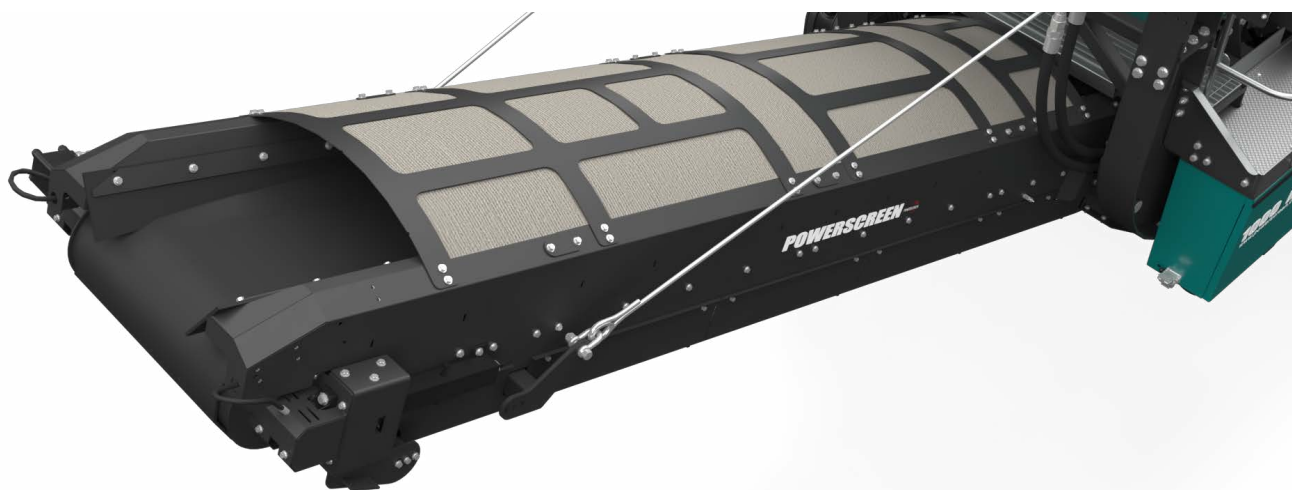
Hot climate oils - (recommended for ambient temperatures between +15 to +50°C)

### ELECTRIC WATER PUMP

Electric powered water pump is available to power the dust suppression system

### OPTIONAL EXTRAS

- Automax Extra Coarse (XC) concave
- Automax Coarse (C) concave
- Autosand (AS) concave
- Short throw eccentric
- Feed hopper extensions plates (remove for transport)
- Hot/cold climate oils
- Control panel positive pressurisation
- Camera & viewing screen
- Lighting mast
- Product conveyor belt weigher
- Electric water pump





## 1000 MAXTRAK CONE

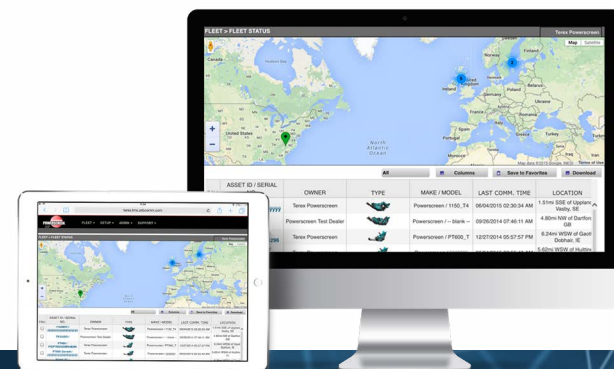


# POWERSCREEN PULSE


## RECORD, DISPLAY AND ANALYSE DATA:

HIGH EFFICIENCY THROUGH PRECISE INFORMATION

Available online anywhere and at any time: comprehensive information on the GPS location, start and stop times, fuel consumption, tonnages, cone settings, wear ratings, operating hours, maintenance status, and much more.



  
**AVAILABLE  
ANYWHERE  
AND AT ANY TIME**

  
**DASHBOARD  
DISPLAY**

  
**FLEET  
OVERVIEW**

  
**WEEKLY REPORT  
DIRECT TO YOUR  
INBOX**

  
**GPS: MACHINE  
TRACKING**

  
**REPORTING  
UTILISATION, PERFORMANCE  
& PART SPECIFIC**



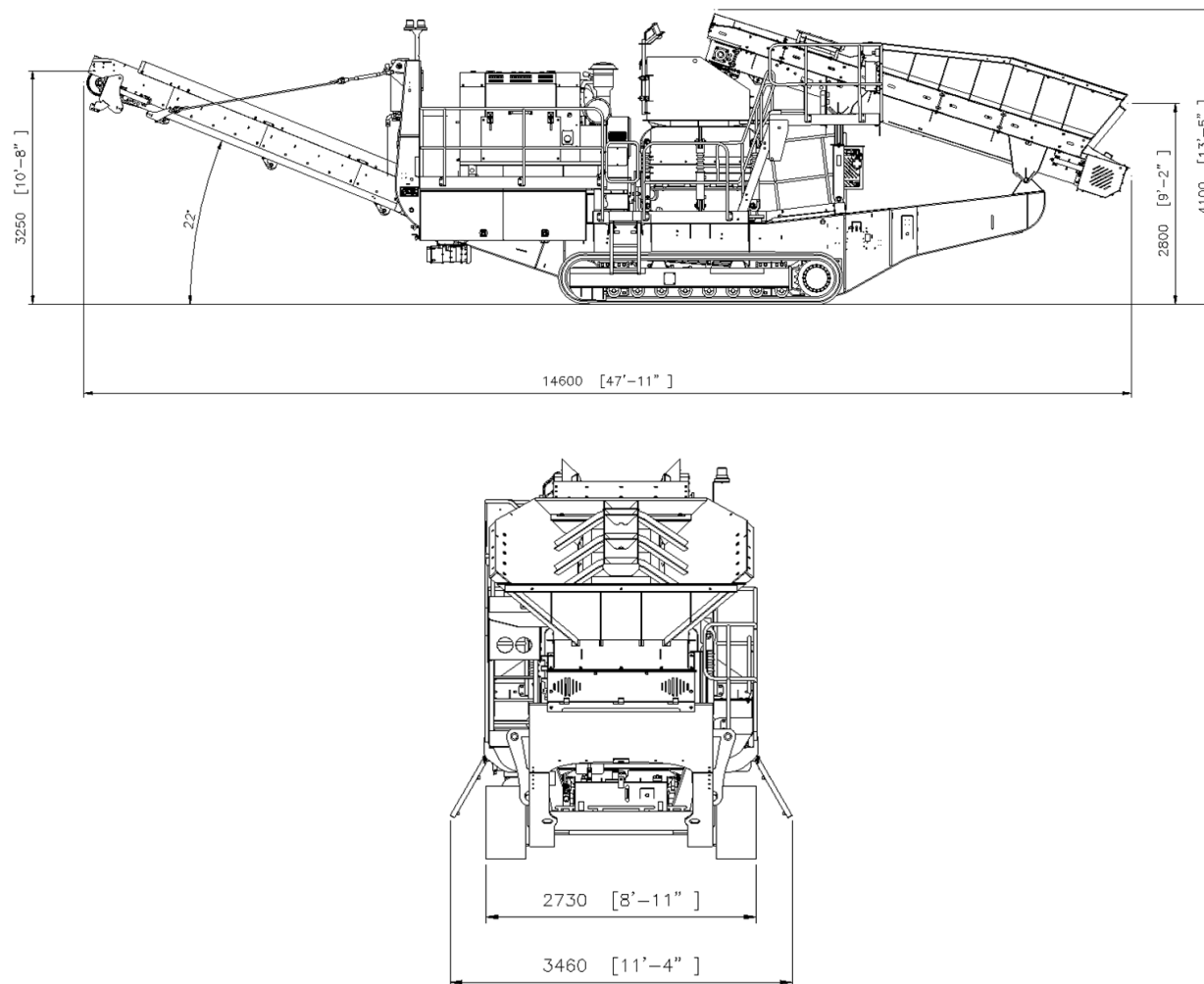


## 1000 MAXTRAK CONE



## DIMENSIONS

Figure 1: 1000 Maxtrak  
Working Position



MORE DIMENSIONS OVERLEAF

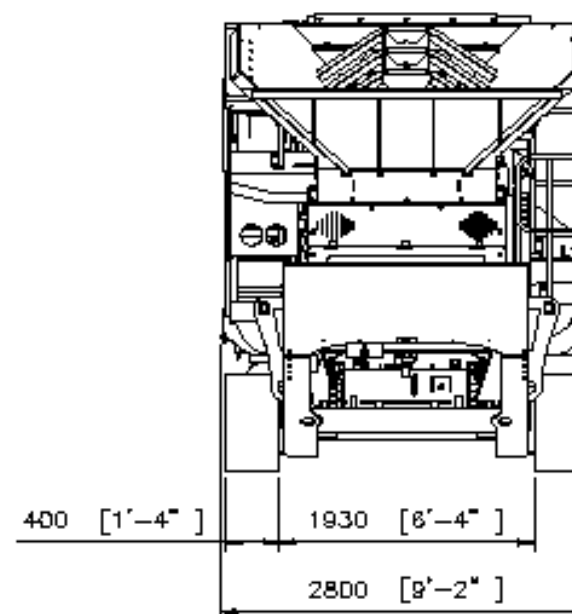
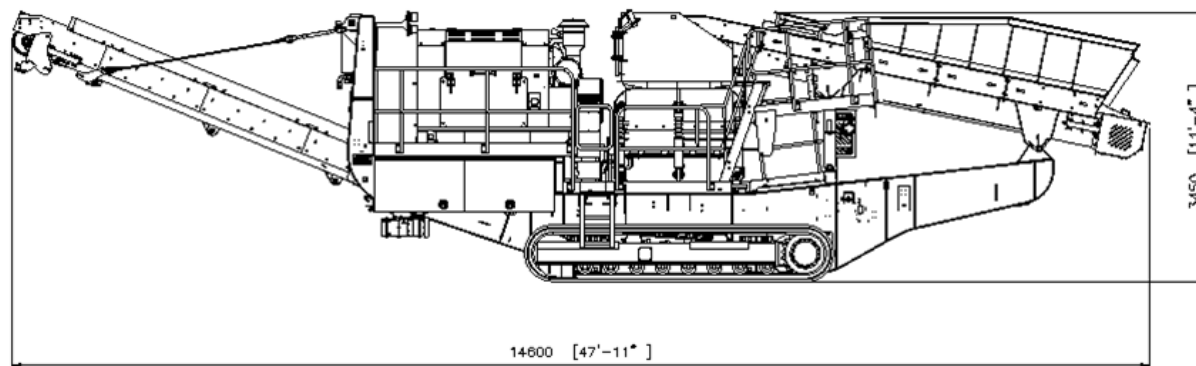


## 1000 MAXTRAK CONE



## ↓ DIMENSIONS

Figure 2: 1000 Maxtrak  
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

