POWERSCREEN®
PREMIERTRAK 600E

ELECTRIC DRIVE JAW CRUSHER

GET STARTED

TECHNICAL SPECIFICATION - REV 3. 01/01/2019

To use my interactive features I need to be opened in 'Adobe Acrobat Reader' click here to download

PREMIERTRAK 600E

OVERVIEW

SPECIFICATION

Total Weight	73,800kg (162,701lbs) Tier 4F, Pre-Screen, Long Hopper Extensions, Bypass Conveyor	
Transport	**Length**	17.1m (56' 1")
	Height	3.8m (12' 6")
	Width	3.12m (10' 3")
Working	**Length**	16.63m (54' 7")
	Height	4.49m (14' 9")
	Width	8.06m (26' 5")
Crusher Type:	Single toggle jaw, feed opening 1200mm x 820mm (47"x32")	
Power Unit	Tier 2 Scania DC13 331kW (444hp), Tier 4F Scania DC13 325hp (443kW) or Constant Speed Scania DC13 325kW (443hp)	
Plant Colour	RAL 5021, RAL 7024, RAL 9005	

FEATURES & BENEFITS

The Powerscreen® Premiertrak 600 range of high performance primary jaw crushing plants are designed for large and medium scale operators in quarrying, demolition, recycling & mining applications.

The range includes the Premiertrak 600 & Premiertrak 600E both equipped with the advanced high performance 1200mm x 820mm Terex chamber. Built for the toughest of applications, the robust construction and modern design of the Premiertrak 600 ensures optimum performance, reliability and efficiency.The Premiertrak 600E comes complete with an onboard diesel generator. The machine can be powered from this, or from an external power supply. There is sufficient excess power available to run a second machine such as a screener. This versatility along with the electrically driven crusher and conveyors makes the PT600E highly efficient, economical and environmentally friendly.

- Output potential of up to 600tph / 661 US tph - depending on material type & crusher settings
- Ground level quick set-up with hydraulic folding feed hopper with hydraulic locking system
- Heavy duty wear resistant feed hopper
- Stepped self cleaning grizzly feeder with under feeder screen
- Wide bypass chute to optimise material flow
- Aggressive crushing action with high swing jaw encouraging material entry into crushing chamber
- Fully hydraulic crusher setting adjustment
- Excellent under crusher access for removal of wire with hydraulic raise lower product conveyor
- Angle adjustable product conveyor, lowers for access & transport
- Low fuel consumption due to highly efficient direct drive system and low engine RPM
- Easily accessed power unit canopy
- Modern & user-friendly PLC control system with auto start facility
- Remote control via umbilical
- Dust suppression system

APPLICATIONS

Aggregate
Sand & gravel
Blasted rock
River rock

Recycling
C&D waste
Overburden
Foundry waste

Mining
Processed ores
Processed minerals

PREMIERTRAK 600E

HA JAW CRUSHER

Crusher type: Single toggle Jaw with hydraulic setting adjustment

Feed opening: 1200mm x 820mm (47" x 32")

Bearings: Self aligning spherical roller

Lubrication: Grease

Drive: High Performance wedge belts with screw adjust tensioner

Minimum setting: 75mm (3") CSS

All setting measured from root to tip & subject to suitability of feed material. This plant has been designed for both quarry & recycling applications where appropriate.

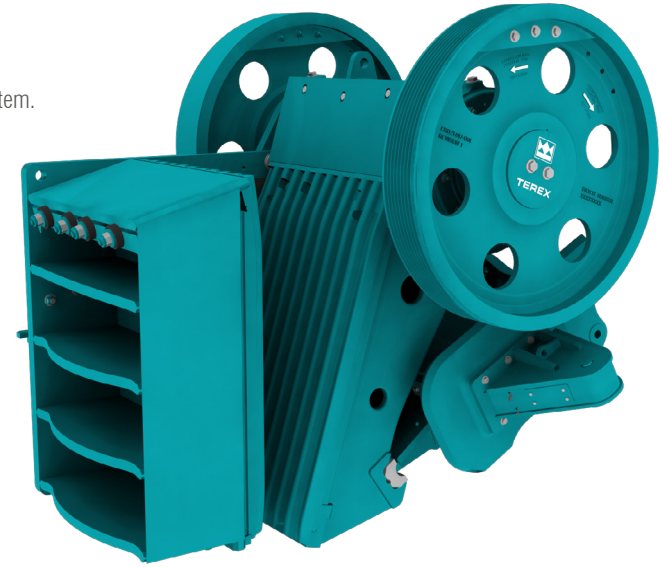
For maximum material strength of 500kN 10% Fines, 300MPa compressive strength. If in doubt please contact your dealer or Powerscreen.

Maximum setting: 200mm (8") CSS standard jaws

Hydraulic adjustment: Hydraulically adjusted CSS using wedge system. Electric push button control

CHAMBER FEATURES

- Quick & easy setting adjustment
- Drawback rod hydraulic adjustments not required during setting changes
- Cartridge type bearings
- Overlap jaw protects tip of jawstock
- One piece fixed jaw support
- Proven manganese liner retention
- Replaceable bolt-on jawstock toe
- Proven manganese liner retention - through bolt design



PREMIERTRAK 600E

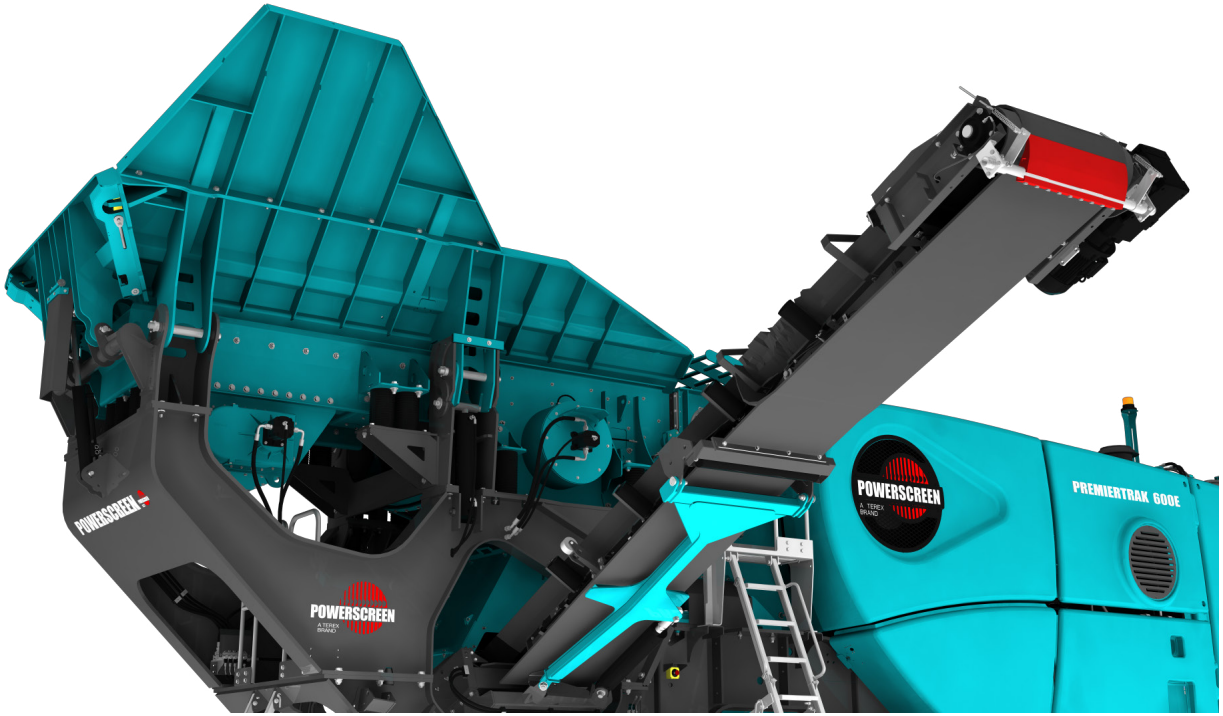
HOPPER

Hopper type:	Hydraulic locking from ground level
Hopper length:	4.82m (15' 10")
Hopper width:	2.2m (7' 3") standard
	4m (13' 1") with extensions
Hopper capacity:	9.3m³ (12.2 cu. yd.) / 14.2m³ (18.6 cu. yd.)
Hopper body:	Abrasion resistant feed hopper with hydraulic struts and pins

*Optional large flare hopper extensions:

Capacity: 10.8m³ (14.1 cu.yd.)

370mm (14.7'') higher feed in height over standard hopper



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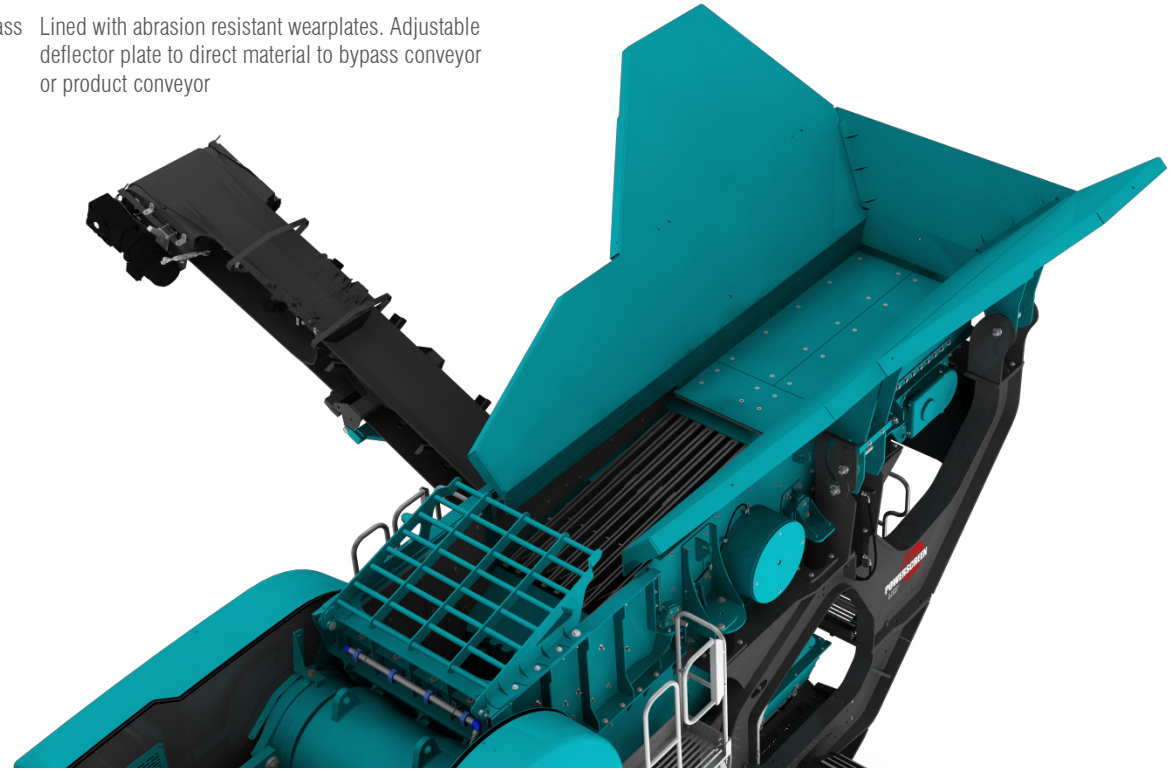
VIBRATING GRIZZLY FEEDER

Type:	Spring mounted vibrating pan & grizzly feeder
Vibrating unit:	Twin heavy duty cast eccentric shafts running in spherical roller bearings, gear coupled at drive end
Drive:	Flange mounted hydraulic motor
Length:	4.29m (14' 1")
Width:	1.16m (3' 10")
Grizzly:	2 replaceable stepped cartridge type grizzlies 75mm (3") nominal aperture, self cleaning
Grizzly length:	2.12m (6' 11")
Grizzly width:	1.16m (3' 10")
Under-screen:	40mm (1.6") mesh fitted as standard
Mesh deck:	1.38m (4' 6") long x 1.16m (3' 10") wide

PLANT CHUTE-WORK

Crusher feed chute:	Bolted assembly. 12mm mild steel side walls with 15mm wear plates
Grizzly fines/ bypass	Lined with abrasion resistant wearplates. Adjustable deflector plate to direct material to bypass conveyor or product conveyor



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PRODUCT CONVEYOR

Conveyor type: Troughed belt conveyor

Design: Hydraulic raise & lower facility to aid rebar removal & transportation. Can be raised or lowered whilst crushing. Fully removable modular unit to aid access & maintenance. Lower section raises & lowers for optimum ground clearance.

Belt type: EP500/3 with 8mm top & 2mm bottom cover, vulcanised

Belt width: 1200mm (3' 11")

Discharge height: 4m (13' 1")

Stockpile volume: 136m³ (178 cu. yd.)

Drive: Twin electric motor & planetary gearbox drive

Tunnel: Conveyor fitted with tunnel & side covers to minimise rebar snagging

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

Belt adjustment: Screw adjusters at head drum

Belt scraper: SCS style

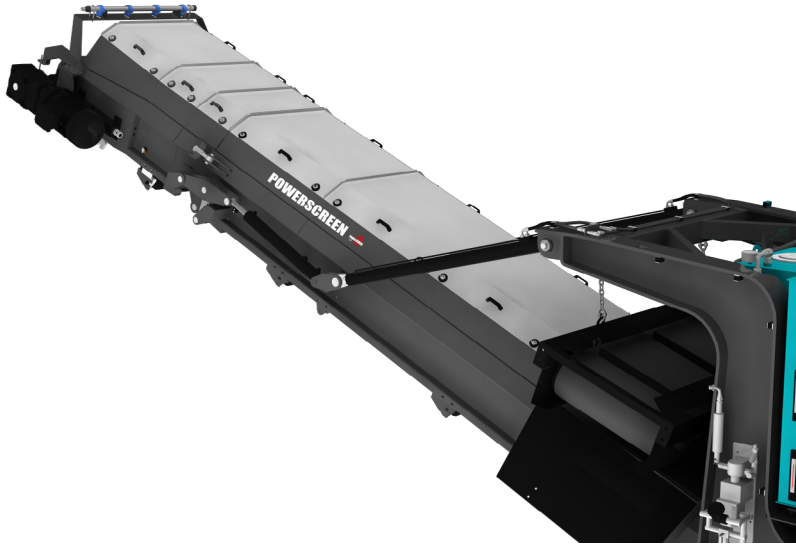
Lubrication: Low level remote head drum grease points

Skirting: Wear resistant rubber skirts fitted up to magnet

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



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POWER UNIT & HYDRAULICS

Tier 2 Equivalent: Scania DC13 74A, 6 cylinder, direct injection 331kW (444hp)
Operating conditions: Ambient temp. +30°C & –5°C (86ºF & 23ºF) altitudes up to 2000m (6562ft) above sea level
Operating rpm range: 1500rpm
Plant drive: Diesel-Electric
Fuel tank capacity: 750 L (198 US G)
Hydraulic tank capacity: 350 L (92 US G)

Tier 4F / Stage IV: Scania DC13 85A 6 cylinder, turbo, 325kW (443hp)
Operating conditions: Ambient temperature +30°C & –5°C (86ºF& 23ºF) at altitudes up to 2000m (6562ft) above sea level
Operating rpm: 1500rpm
Emission control technique: Selective Catalytic Reduction (SCR)
Reductant tank size: 60 L (16 US G)
Plant drive: Diesel-Electric
Fuel tank capacity: 750 L (198 US G)
Hydraulic tank capacity: 350 L (92 US G)

Tier IIIA Constant Speed: Scania DC13, 6 cylinder diesel engine, 325kW (443hp) @ 1500rpm

Alternator type: WEG G-Line 403kVA
Crusher drive: WEG 160kW 6pole 315 frame
WEG 160kW CFW11 VSD
Motor pulley diameter 355mm
Crusher pulley diameter 1568mm
Drive tensioning: Manual with adjustable threaded bar

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

For applications outside this range please consult with Powerscreen.

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 tracks
Sprocket centres:	4170mm (13’ 8’’)
Track width:	500 mm (1’ 8”)
Gradeability:	30˚ maximum
High speed:	0.8kph (0.5mph)
Drive:	Hydraulic motors
Tensioning:	Hydraulic adjuster, grease tensioned

PREMIERTRAK 600E

PLANT CONTROLS & OTHER

CHASSIS

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

GUARDS

Composite and 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

A folding access ladder is provided to gain access to each side of the powerunit. A maintenance platform is provided on one side of the feeder with double row handrails & access ladders. A platform is also included to gain access between the crusher & the powerunit.

UMBILICAL CONTROL

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

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

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)
- Optional bypass conveyor (start/stop)
- Product conveyor (start/stop & raise/lower)
- Feeder (start/stop/speed) controls, located on the side of the plant

PREMIERTRAK 600E

OPTIONS 1

HOPPER EXTENSIONS

Hopper type:	Bolt-on extensions
Hopper length:	4820mm (15’ 10”)
Hopper width:	4000mm (13’ 1”)
Hopper body:	15mm wear resistant plate, steel ribs

EXTENDED PRODUCT CONVEYOR

Discharge Height: 4.6m (15’ 1”)

Stockpile Volume: 206m³ (268cu. yd.)

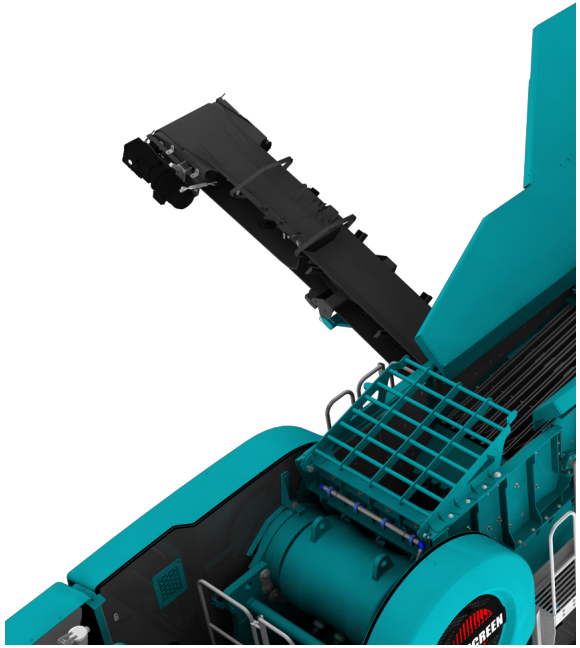
Hydraulically folds for transport.

BYPASS CONVEYOR

Conveyor type:	Troughed, modular with hydraulic folding for transport
Belt width:	750mm (2’ 5”)
Discharge height:	3.79m (12’ 5”)
Stockpile volume:	89m³ (117 cu. yd.)
Drive:	Electric motor & planetary gearbox drive

MAGNET

Options:	CP020 single pole (S.P.) TP020 twin pole (T.P.)
Belt width:	750mm (2’ 6”)
Centres:	1700mm (5’ 7”)
Drive / control:	Electric motor & planetary gearbox drive
Discharge:	RHS via stainless shedder plate
Weight:	S.P. 1175kg (2590lbs) T.P. 1700kg (3748lbs)



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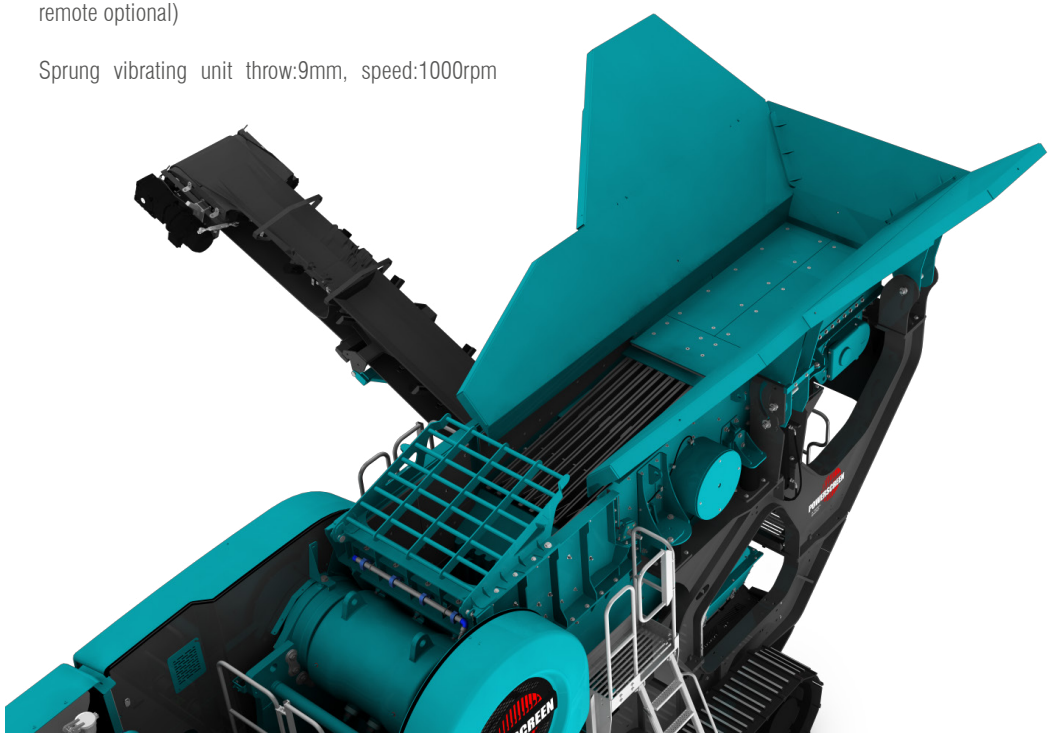
OPTIONS 2

PAN FEEDER & LIVE PRE-SCREEN

Pan type:	Sprung vibrating pan
Vibrating unit:	Twin heavy duty cast eccentric shafts running in spherical roller bearings, gear coupled at drive end, flange mounted hydraulic motor
Dimensions:	Length: 2.39m (7’ 10”) Width: 1.08m (3’ 7’’)
Pan:	15mm thick fully welded base plate with 12mm thick abrasion resistant liners
Pan:	Variable speed control though control panel & (radio remote optional)
Pre-screen:	Sprung vibrating unit throw:9mm, speed:1000rpm
Vibrating unit:	Single shaft, out of balance weights, flange mounted hydraulic motor
Top deck:	2 piece cartridge with 2.04m (6’ 8”) long self cleaning fingers 75mm (2”) nominal spacing Length: 2.04m (6’ 8”) Width: 1.2m (3’ 11’’)
Bottom deck:	16º Incline with 40mm (1.5”) mesh Length: 1.38m (4’ 6”) Width: 1.2m (3’ 11’’)
Chute:	Bypass chute with internal 5 position flap door fitted, 3 positions for material transfer and 2 positions for maintenance



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OPTIONS 3

FEEDER UNDER SCREEN MESH

Position: Optional aperture meshes fitted in lieu of the standard 40mm (1.6'') mesh.

Width: 1.16m (3' 10'')
Length: 1.38m (4' 6'')

JAW PROFILES

All jaw profiles supplied in 18% manganese as standard. This is the proven material for quarry & recycling 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.

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. (Minimum CSS is 50mm (2''))

Heavy Duty Jaws
New design of HD jaw plate for the fixed jaw. Designed to work with other profiles on the swing jaw. Aimed to bring the wear in line with the swing jaw and reduce the amount of liner changes required.

Pyramid Tooth Jaws
Designed as a Jaw for recycling applications or with rock that is difficult to fracture.

UNDER CRUSHER DEFLECTOR PLATE

A hydraulic adjustable deflector plate, increases belt protection in recycling applications. Situated immediately below the crusher outlet point & is fitted with a 15mm thick wear resistant plate. Deflector plate working angle can be adjusted from the PLC control system.

PREMIERTRAK 600E

OPTIONS 4

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.

RADIO REMOTE CONTROL

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:

- Auto (start/stop)

HOT/COLD CLIMATE OILS

Cold climate oils - (recommended for ambient temperatures between -20 to +30ºC) - 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 +50ºC)

ELETRIC REFUELING PUMP

A 24 volt refuelling pump, allows fuel to be drawn from a remote source. Fuel transfer rate of 50 L/min (13 G/min). Includes refuelling hose and end filter.

HYDRAULIC WATER PUMP

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

BELT WEIGHER

Type: Modular scale with stainless load cells, single idler speed wheel & display unit

Accuracy: + 1.0 + 0.5%

Load cells: 2 temperature compensated parallelogram-style, stainless steel

Display: Separate read out near control panel

OPTIONAL EXTRAS

- Pre-screen system
- Quarry tooth, multi tooth or shallow tooth jaw plates
- Deflector plate under crusher
- Bypass conveyor
- Single pole overband magnetic separator
- Hopper extensions
- Stockpile sensor
- Dust covers
- Magnet prepared
- Twin pole overband magnetic separator
- Belt weigher
- Electric refuelling pump
- Electric urea pump
- Water pump
- Radio remote control
- Jaw level sensor
- Extended product conveyor

PREMIERTRAK 600E

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

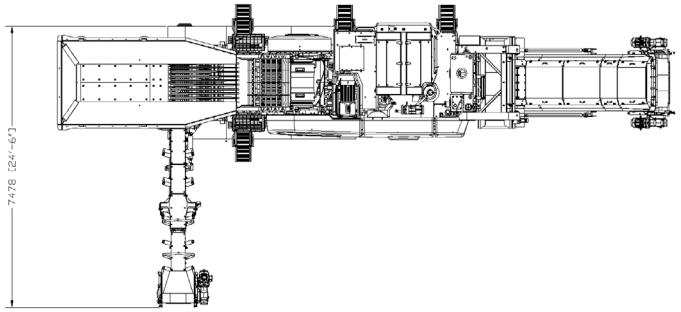
GPS: MACHINE TRACKING

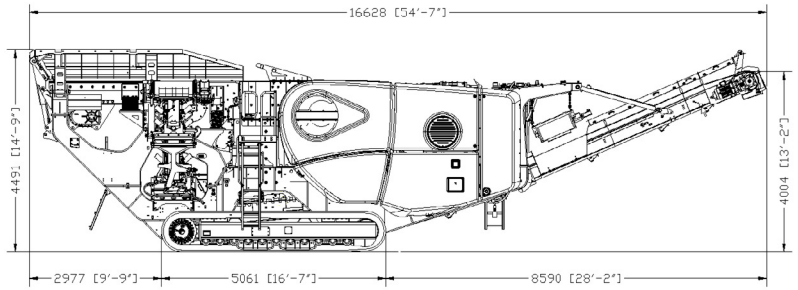
REPORTING
UTILISATION, PERFORMANCE & PART SPECIFIC

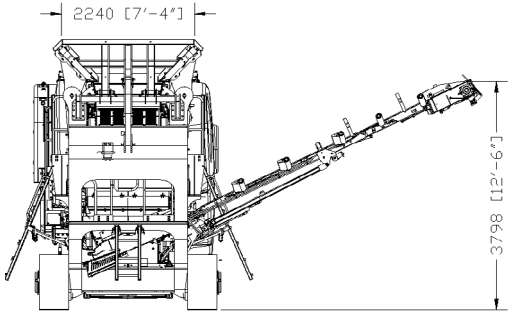
PREMIERTRAK 600E

DIMENSIONS

Figure 1: Premiertrak 600E
Pre-screen & Bypass Conveyor
Working Position



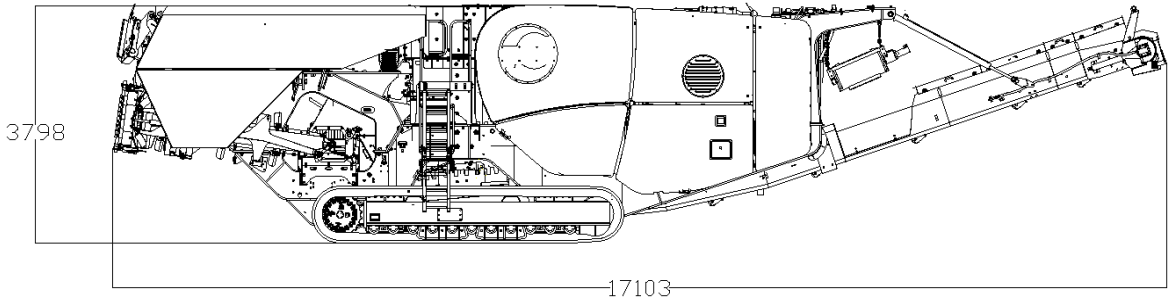


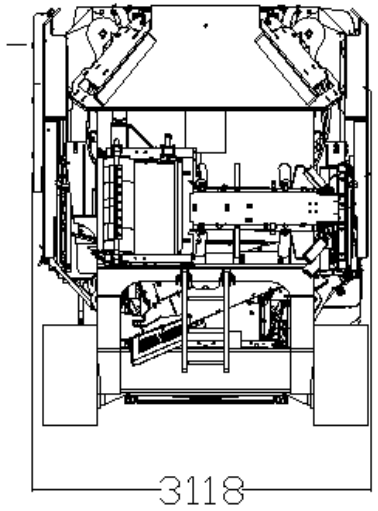


MORE DIMENSIONS OVERLEAF

DIMENSIONS

Figure 2: Premiertrak 600
Pre-screen & Bypass Conveyor
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.

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