

POWERSCREEN® TRAKPACTOR 290

HORIZONTAL IMPACTOR



TECHNICAL SPECIFICATION - REV 0 01-04-2020





TRAKPACTOR 290



OVERVIEW

SPECIFICATION

Total Weight	28,700kg (63,273lbs)
Transport	Length 9.97m (32' 9") Height 3.16m (10' 5") Width 2.55m (8' 4")
Working	Length 12.6m (41' 5") Height 3.7m (12' 2") Width 5.22m (17' 1")
Crusher Type:	Twin apron 4 bar impact crusher, feed opening 1030mm x 790mm (41" x 31")
Power Unit	Tier IIIA Volvo D8 235kW (315hp), Tier 4 Final Volvo D8 235kW (315hp) or Stage V Volvo D8 235kW (315hp)
Plant Colour	Blue RAL 5021, Grey RAL 7024, Black RAL 9005

FEATURES & BENEFITS

The Powerscreen® Trakpactor 290 Horizontal Shaft Impactor, is a highly compact tracked crusher designed to offer both excellent reduction & high consistency of product yield. The Powerscreen® Trakpactor 290 is designed mainly for the recycling & demolition markets & is an ideal contractor machine due to its compact design & mobility.

- Output potential 290 tph (320 US tph)
- Suitable for a variety of feed materials
- Ideal for recycling & demolition applications
- Fully enclosed hopper to eliminate spillage
- Integrated pre-screen for fines removal (Punch plate, grizzly bars & Blanking plate are all interchangeable)
- Feeder speed automatically regulates depending on engine load
- Proven Terex impact crusher with hydraulic overload protection, 4 bar rotor & twin aprons
- Simple intuitive push button operation
- HPTO clutch & highly fuel efficient direct drive system
- Modular conveyor with raise/lower facility to aid clearance of rebar
- Overband magnet (Optional)

APPLICATIONS



Aggregate
Blasted rock
River rock



Recycling
C&D waste
Foundry waste



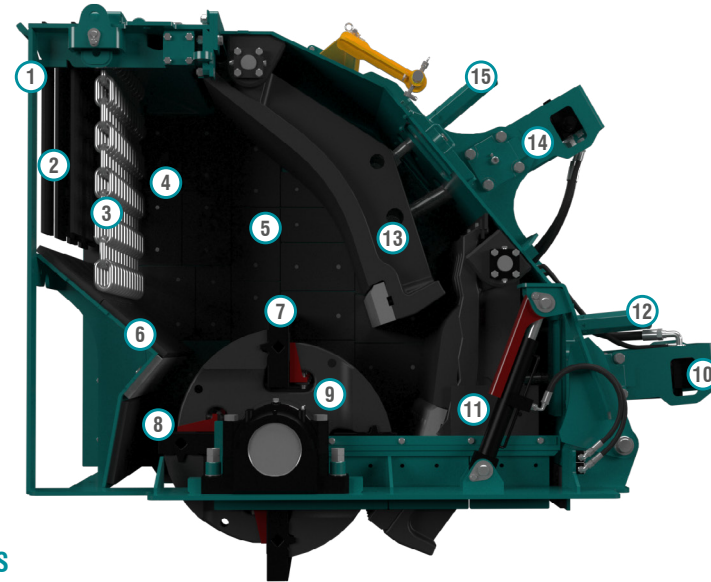
Mining
Processed ores
Processed minerals



TRAKPACTOR 290



↓ CRUSHER



PRINCIPAL COMPONENTS

- | | |
|--------------------|------------------------------|
| 1: Crusher Opening | 10: Control Cylinder |
| 2: Rubber Curtain | 11: Bottom Impact Apron |
| 3: Chain Curtain | 12: Apron Adjustment Spindle |
| 4-5: Wear Liners | 13: Top Impact Apron |
| 6: Inlet Chute | 14: Control Cylinder |
| 7: Full Blow Bar | 15: Apron Adjustment Spindle |
| 8: Half Blow Bar | |
| 9: Rotor | |

PRINCIPLES OF OPERATION

Material enters via the crusher opening & slides down the inlet chute where it is struck by the blow bar which is held within the rotor. This initial impact breaks the material which is then accelerated onto the top apron where more reduction takes place on impact. This material then falls back into the blow bars & the cycle repeated until the material is small enough to pass between the apron & the blow bar. Once through this gap, further reduction occurs on the bottom apron until the material

can again pass through the gap & discharge from the underside of the crusher.

Any un-crushable material entering the chamber will relieve the overload cylinders & allow the material to pass. The cylinders will then return to the pre-set crushing position. The pre-set gap is adjusted by turning the adjustment spindle whilst the weight of the apron is held on the cylinder (hydraulic assist).

The hydraulic cylinders are pre-loaded to minimise apron bounce & wear on the cylinders. This arrangement also greatly reduces the oversize produced & is Patented GB2455203



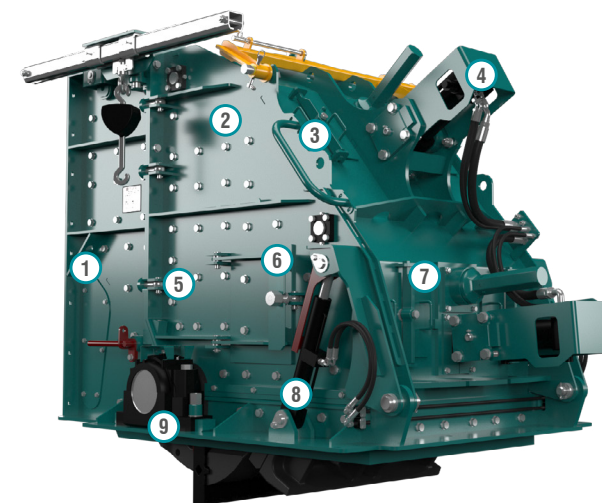
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CRUSHER SPECIFICATION

Feed opening:	1030mm x 790mm (41" x 31")
Max lump size*:	450mm ³ (18in ³) / 750mm (30") diagonally / 800x500x250mm (32x20x10") slab *depending on material & blow bar spec
Rotor width:	1000mm (40")
Rotor diameter:	1034mm (41.5")
Number of aprons:	2
Max apron setting - upper:	150mm (6")
Min apron setting - upper:	50mm (2")
Max apron setting - lower:	75mm (3")
Min apron setting - lower:	20mm (0.75")
Number of blow bars:	4
Blow bar removal:	Vertically
Blow bar configuration:	2 full & 2 half (Optional 4 full)
Setting adjustment:	Hydraulic assist
Overload protection:	Hydraulic
Rotor speeds:	630 - 800rpm (34 - 43 m/s)
Applications:	Demolition/Recycling/Quarry
Full blow bar weight:	205kg (492 lbs)
Side liners:	20mm (thick, abrasive resistant steel)

Optional tilted corrugated primary apron available.



PRINCIPAL COMPONENTS

- 1: Main welded body
- 2: Impactor hinged section
- 3: Inspector covers
- 4: Hydraulic overload & adjustment cylinders
- 5: Toggle bolts
- 6: Side door
- 7: Inspection covers
- 8: Hinged section opening cylinder
- 9: Bearings



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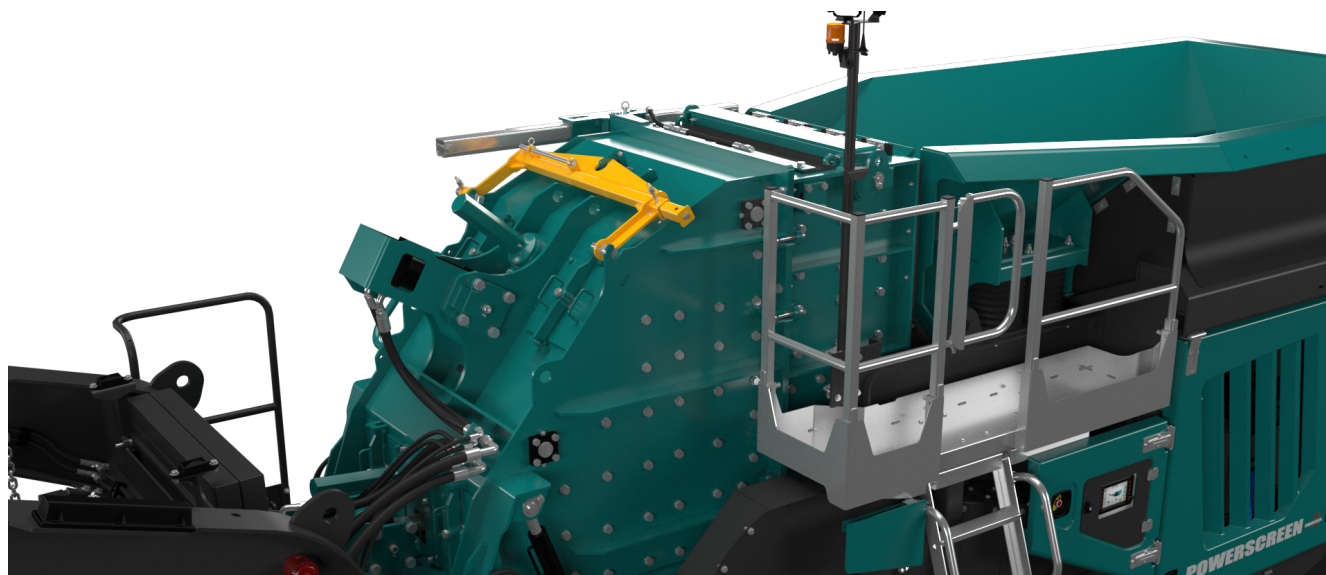
CRUSHER FEATURES

- Crusher body:** Fabricated from steel plate & fully lined with replaceable abrasion resistant liner plates. Hinged side door allows access to apron tips & rotor for gap measurements & inspection. Complete hinged section opens hydraulically to allow blow bar removal & replacement, apron & liner replacement or major maintenance.
- Rotor:** Cast steel fitted with 4 reversible & replaceable blow bars
- Bearings:** Double row self aligning spherical roller bearing fitted each end of rotor
- Aprons:** Cast steel aprons with replaceable abrasion resistant wear plate on tip of bottom apron
- Drive:** Direct through wedge belts with tensioning system on the power unit
- Lubrication:** Grease filled rotor bearings fitted with inner & outer labyrinth seals
- Blow bars:** Standard blow bar is martensitic steel, options are available in martensitic ceramic, medium chrome, medium chrome ceramic, high chrome, high chrome ceramic & toughened chrome

APPLICATIONS

This plant is designed for both demolition & quarrying applications. When fitted with martensitic or ceramic blow bars the crusher will tolerate small quantities of steel reinforcing bar in the feed. However, the machine is not designed to accept large pieces of steel or other un-crushable objects, & the feed material should be assessed / inspected for suitability prior to crushing. It is vitally important that large pieces of steel or similar un-crushable objects are not allowed to enter the crushing chamber as severe damage & injury may occur.

When high chrome bars are fitted, all steel should be removed from the feed material & the machine should only be used on quarry applications, or clean materials such as asphalt.





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HOPPER

Hopper width: 2m (6' 7")

Hopper length: 3.8m (12' 6")

Hopper capacity: Up to 3.3m³ (4.3 cu. Yd.)

Loading height: 3.13m (10' 3")

Fully enclosed hopper / feeder to eliminate spillage

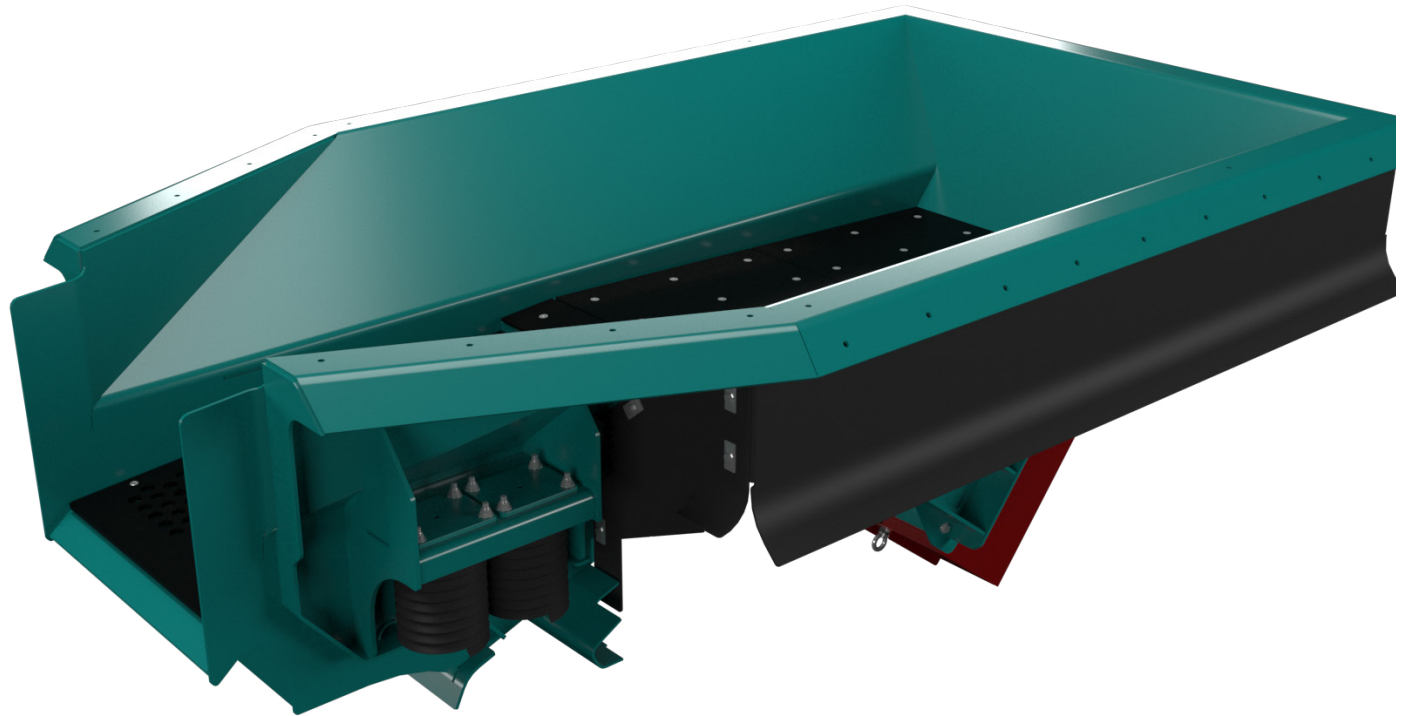
Fabricated from 10mm (3/8") thick wear resistant steel

Replaceable 10mm (3/8") wear liners on feeder flow

Proven twin shaft geared vibrator assembly

Feeder speed automatically regulates depending on engine load

Optional bolt on hopper extensions (must be removed for transport)





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VIBRATING GRIZZLY FEEDER

Screen area: 1500mm x 950mm (5' x 3' 2")

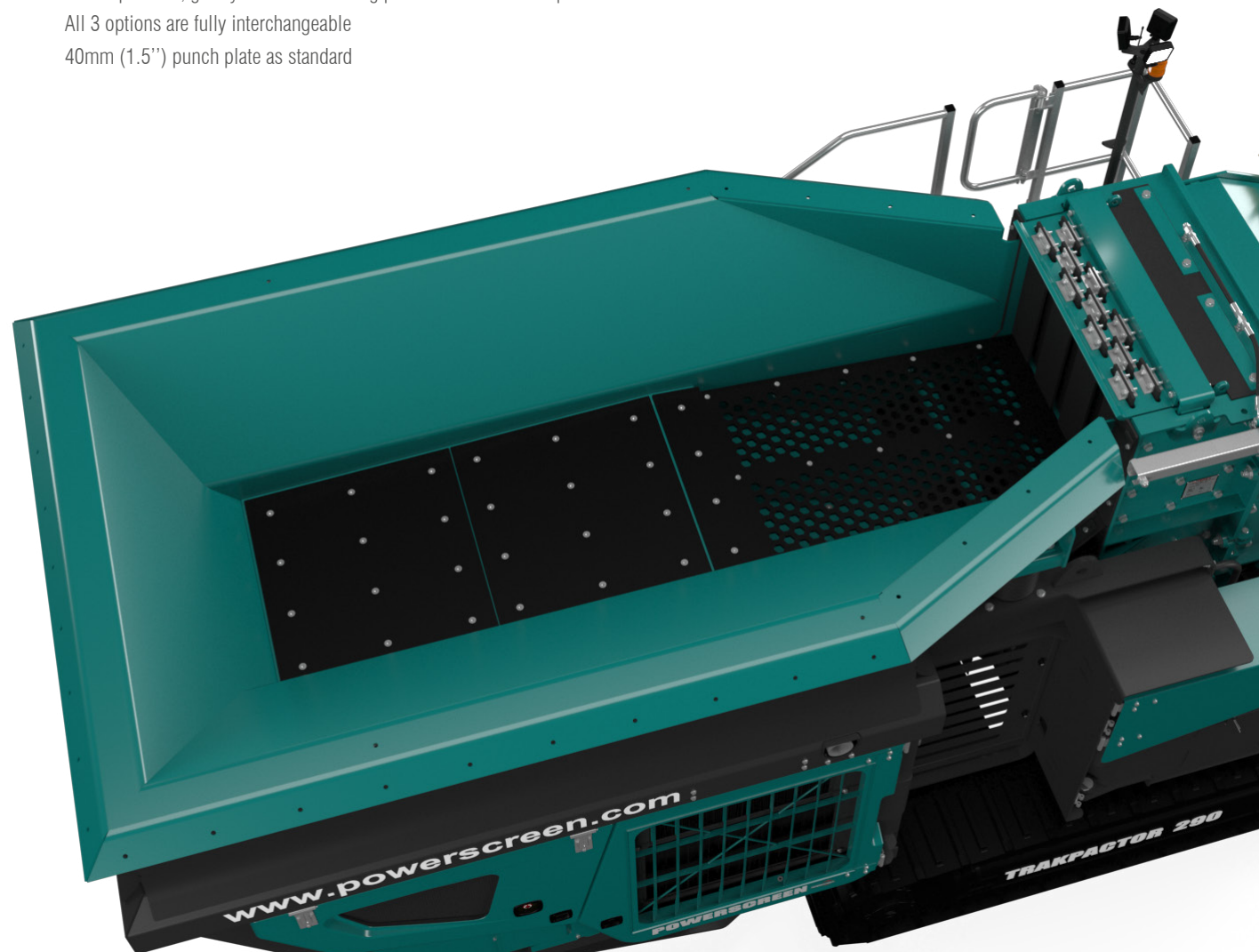
Length: 3.8m (12' 6")

Integrated pre-screen for removal of fines

Other apertures, grizzly bars or a blanking plate are available as options

All 3 options are fully interchangeable

40mm (1.5") punch plate as standard





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PRODUCT CONVEYOR

Belt width: 1000mm (40")

Belt specification: EP500/3, 8+2 (steel wire breaker ply)

Discharge height: 3.42m (11' 3") folding head section for transport

Stockpile volume: 74m³ (96 cu. yd.)

Can be lowered whilst running to aid removal of blockages and also to improve service

Conveyor can be removed as a unit if required. All electrical / hydraulic connections have connection points on chassis.

High specification head drum scraper

DUST SUPPRESSION SYSTEM

Spray bars with atomiser nozzles mounted over the product conveyor feed & discharge points, piped to an inlet manifold for customer water supply.

Type: Clean water multi atomising nozzles

Inlet: Single point

Inlet pressure: 3 bar (44psi)

Water supply: 24 L/min (6.34 G/min)

Frost protection: Via system main valves





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POWER UNIT & HYDRAULICS

Engine:	Tier IIIA: Volvo D8 235kW (315hp)
Operating rpm range:	1500 - 1800rpm
Operating conditions:	Ambient temperature +30°C & -5°C (86F & 23F) at altitudes up to 2000m (6562ft) above sea level #
Engine:	Tier 4 Final: Volvo D8 235kW (315hp)
Operating rpm range:	1500 - 1800pm
Operating conditions:	Ambient temperature +30°C & -5°C (86F & 23F) at altitudes up to 2000m (6562ft) above sea level #
Engine:	Stage V: Volvo D8 235kW (315hp)
Operating rpm range:	1500 - 1800pm
Operating conditions:	Ambient temperature +30°C & -5°C (86F & 23F) at altitudes up to 2000m (6562ft) above sea level #

Auxiliary components are powered hydraulically

Reductant tank size:	45L (12 US G)
Plant drive:	High quality tandem pumps Driven via engine PTO's
Fuel tank capacity:	450L (119 US G) - Hinged to access skirting rubber
Hydraulic tank capacity:	280L (74 US G)
Crusher drive:	Direct drive via 6 SPC drive belts Easily adjustable belt back tensioner for easy tensioning and belt replacement
Clutch type:	Highly efficient, self adjusting HPTO 12" dry plate clutch with electro hydraulic operation

Easy service access with 'walk in' ability at rear to access engine dipstick / filters etc.

Hydraulic components grouped together and electrical components grouped together for easy troubleshooting.

Hinged cooler pack to improve serviceability access and to aid cleaning

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





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TRACKS

Type:	Heavy duty, 2 speed, bolt on
Sprocket centres:	3.29m (10' 10")
Track width:	400mm (1' 4")
Gradeability:	30° maximum
Max speed:	1km/h





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PLANT CONTROLS & OTHER

GUARDS

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

The guards provided are designed & manufactured to CE & ANSI standards

PLATFORMS

Ground level access to power unit

Right hand side chamber access via fold out ladders and handrails

Left hand side access via fixed steps

PLANT CONTROLS

- Intuitive 'push button' control system
- The main control panel uses a printed circuit board (PCB) solution to improve reliability
- Machine start up can be completed by 2 button presses
- The main operating information screens are navigated by the operating mode selector switch

UMBILICAL CONTROL

An umbilical control unit is supplied with the plant

This is used to control the tracking function & is also fitted with a stop button for the plant

UNDER CRUSHER CHUTE

Replaceable liners on all sides: 15mm (3/5") impact zone, 10mm (2/5") at bypass chute

Good clearance from rotor to belt: 400mm (16")

Minimal snagging points for rebar / material in recycling applications





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↓ OPTIONS

BYPASS CONVEYOR

Width:	500mm (20")
Discharge height:	2.48m (8' 2")
Stockpile volume:	28m ³ (36 cu. yd.)

Hydraulically folds for transport

MAGNET

Magnet type:	Suspended self cleaning over band with endless belt
Belt width:	750mm (2'6")
Drive:	Direct drive hydraulic motor
Control:	Pre-set variable speed
Discharge:	Via stainless shedder plate
Twin pole:	Also available

BLOW BARS

2 full size martensitic & 2 half size manganese blow bars fitted as standard. 2 further options available:

High Chrome:	Suitable for medium to hard rock applications where there is no steel present in feed material. Good wear characteristics
Ceramic:	Suitable for applications with limited steel in feed. Improved wear characteristics over standard martensitic blow bars
4 full blow bars:	Available in all options

UNDERPAN

Length:	1970mm (6' 6")
Width:	1030mm (3' 5")
Angle:	12.5°
	275mm (11") clearance between rotor and underpan floor
	10mm (2/5") wear liners

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.





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OPTIONS 2

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 and Applications department with any queries.

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

RADIO REMOTE CONTROL

Complete with integrated tracking functions & plant stop function. NB: only available in certain countries where type approval has been obtained.

Remote can also be used to:

- Start/stop feeder
- Control feeder speed
- Open top apron

BELT WEIGHER

Belt weigher system can be fitted to the product conveyor.

Display: Separate read out near control panel

PLANT LIGHTING

Lights mounted over the crusher & on the cowls at the front of the plant. These are directional & are controlled from within the control panel.

OPTIONAL EXTRAS

- High chrome blow bars
- Ceramic blow bars
- 4 full size hammers in lieu of 2 full & 2 half hammers
- Blow Bar Extractor Kit
- Overband magnetic separator
- Twin pole overband magnetic separator
- Bypass conveyor
- Plant lighting
- Feeder under screen mesh
- Belt weigh
- Radio remote control
- Ability to order unit prepped for afterscreen
- Air knife (available late 2020)
- Powerscreen Pulse





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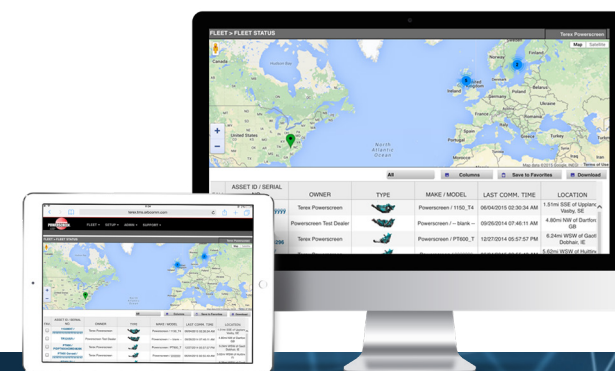


POWERSCREEN PULSE


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**



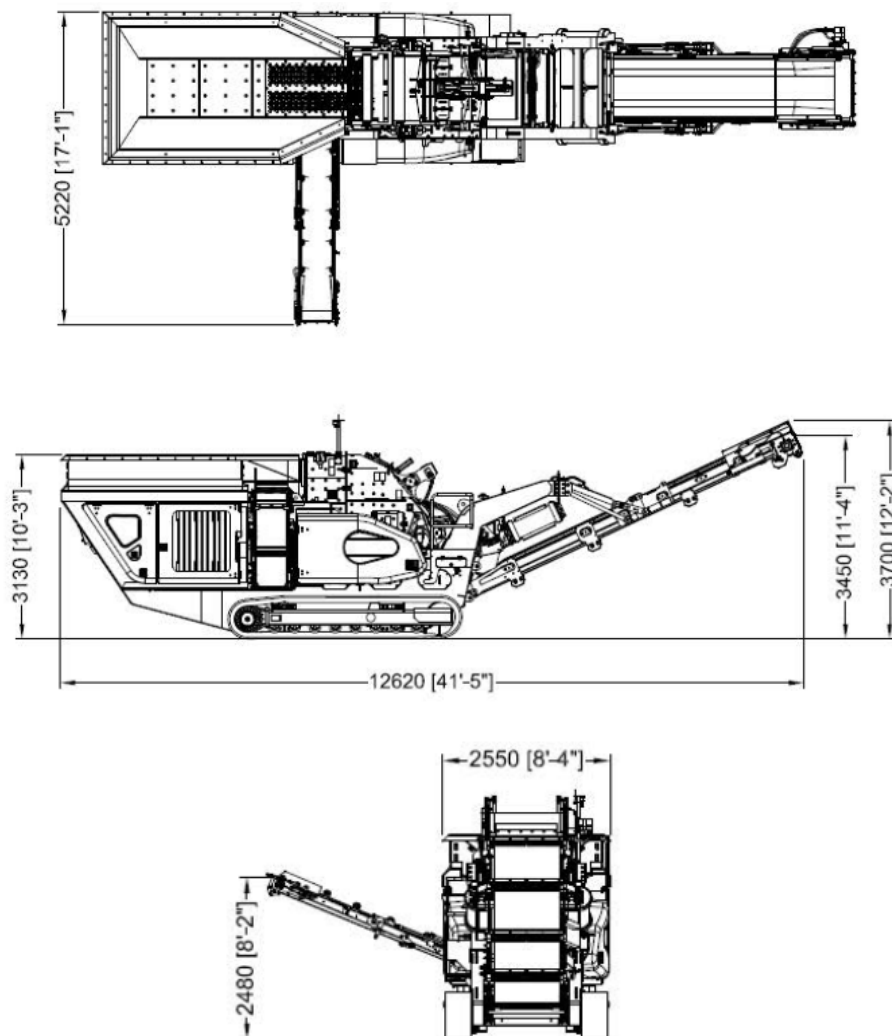


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DIMENSIONS

TRAKPACTOR 290 WORKING DIMENSIONS



MORE DIMENSIONS OVERLEAF

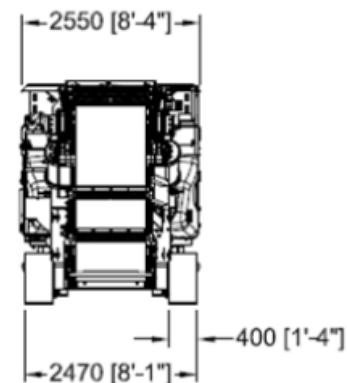
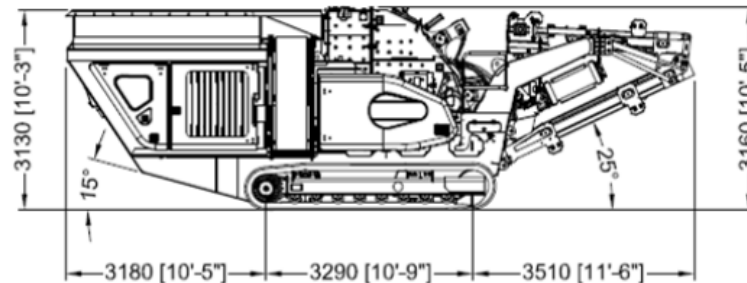
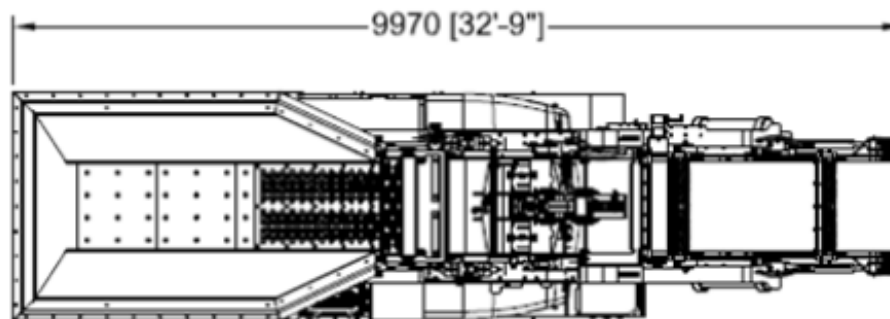


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DIMENSIONS

TRAKPACTOR 290 TRANSPORT DIMENSIONS





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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