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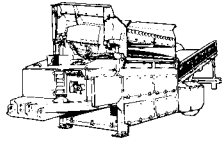
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INTRODUCING THE

Powergrid



All specifications subject to change without prior notice.



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Powergrid

Technical Specification



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FEATURES

- Total weight 16,600kg (26,485lbs)
- Width (transport) 2.47m (8' 1")
- Length (transport) 10.435m (34' 3")
- Height (transport) 3.625m (11' 10")
- Screenunit 2 deck 2 bearing 3.048m x 2.134m (10' x 7")
- Powerunit Deutz BF4L1011f (70 Hp)

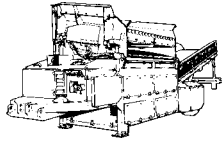
ADVANTAGES

- High capacity 600+ TPH, (depending on mesh sizes and material type).
- Quick set up time typically under 5 minutes.
- Maximum mobility with fifth wheel, jacking legs, road wheels, springs, brakes and mudguards.
- High performance hydraulic system – David Brown pumps, Danfoss motors and Commercial control valves.
- Angle adjustable screenbox
- Optional fully track mobile version.

APPLICATIONS

- Sand and gravel
- Topsoil
- Coal
- Crushed stone
- Recycling
- Demolition

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The Powerscreen Powergrid is a high capacity heavy duty mobile scalping and conveying unit and has replaced the original MK2 since its introduction in 1993.

Built to withstand the rigours of handling materials like rip-rock or demolition concrete, this machine is equally at home when fine screening down to 1/4" product size.

The product design allows the machine to operate in very confined spaces and the high mobility factor eliminates set up time.

This means: Drive onto a level site, switch on the machine and produce graded material in under 2 minutes.

Scalping Unit:

The scalping unit is constructed from heavy duty plate and box sections having two screening surfaces 10' x 7' long each.

Scalping action is provided by out of balance flywheels and an eccentric screenshaft in a conventional 2 bearing screen arrangement.

An fixed loading plate is standard equipment. A range of mesh sizes from 4" to 1/4" are available and are end tension design to facilitate replacement. A bofor steel grizzly bar reject grid is fitted to the top deck.

The screening angle may be adjusted from 12 to 25 degrees by means of two hydraulic rams.

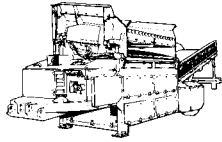
Wear plates for screenbox sides and loading plate are optionally available.

Powerunit:

Power is provided by a 70 Hp turbo diesel hydraulic unit. The Powerunit including engine, hydraulic tank, pump, control valves, starter panel; and battery is enclosed in a vandal proof cabinet mounted directly on top of the front chassis assembly. This allows much easier access for operation and maintenance purposes.

Hopper and Conveyor:

A steel plate hopper mounted under the screen directs the material onto the conveyor and rubber skirting eliminates spillage. The conveyor is 1500mm (5') wide and discharges at a height of 2.55m (8' - 4"). The belt is a 3 ply heavy duty with vulcanised joint and fitted with self adjusting belt cleaner. The conveyor is fully skirted to prevent material spillage.



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Transport:

The Powergrid is fitted with super single road wheels and hydraulic jacking legs to facilitate portability.

The 5th wheel kingpin is standard and is part of the overall chassis of the machine.

Operation:

Output of 600 tonnes + per hour are achievable with a competent shovel operator loading material evenly onto the screen.

There are many different applications and the variables within these can affect tonnage's achieved

OPTIONS

Transport:

The Powergrid is offered with a number of transport options including spring suspension, brakes and lights to EEC specification and full TUV specification.

Top deck Screens:

The Powergrid screenbox has a number of different of screen types apart from conventional wire meshes. A heavy duty Bofor grid is available featuring a tapered opening from 90mm to 110mm (3.5" to 4.3") nominal aperture. Punched plate screens are available with a range of opening sizes up to 152mm (6") (hexagonal). A heavy duty solid steel plate finger screen is available with a range of apertures.

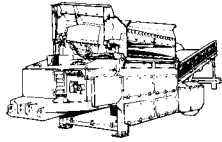
Bottom deck Screens:

The Powergrid also has the option of finger screens on the bottom deck instead of conventional wire meshes.

Hydraulics:

An optional Hydraulic fan assisted oil cooler is available.
(Electric/Hydraulic option)

Variable speed control of main belt is available.



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DIESEL / HYDRAULIC DRIVE

Engine:

Deutz BF4L1011F running at 2300 rpm developing 52 kW (70 Hp)

HYDRAULICS

Hydraulic Pump:

David Brown QR 4032/4032 clockwise tandem pump, driving two deck screen on one circuit and main conveyor on the other circuit. Both circuits having a flow rate of 69 litres (15.2 gals) per minute.

Hydraulic Motors:

Screen Motor	David Brown MCC 2208	(58cc per rev)
Conveyor Motor	Danfoss OMV800	(800cc per rev)

Control Valves:

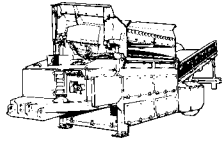
Screen Circuit	Kontak K18 Set at 190 Bar (2700 psi)
Conveyor Circuit	Kontak K18 Set at 190 Bar (2700 psi)
Auxiliary Circuits	Nimco CV402

Recommended Hydraulic Oil:

0c to 30c Ambient temp	Shell Tellus 46 (or equivalent)
+30c Ambient temp	Shell Tellus 100 (or equivalent)

Hydraulic System Capacity:

230 litres (50 gals)



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Typical Operating Pressures:

(i) Screen			
Empty or full:-	42 Bar	(600 psi)	
(ii) Conveyor			
Empty:-	56 Bar	(800 psi)	
600 Tonne per hour:-	150 Bar	(2150 psi)	

Screen Shaft Speed:

Empty:-	1150 rpm
Full:-	1100 rpm

Main Conveyor:

Conveyor belt:-	3 ply x 1500mm (60") wide
Drums outside diameter:-	273mm (10.75")
Drum centres:-	7.68m (25' - 2")
Drum speed empty:-	90 rpm
Conveyor belt speed empty:-	120 m/min (394 ft/min)
Conveyor belt speed full:-	80 m/min (270 ft/min)

Wheels:

Size:-	425 / 65 / R22.5
Pressure:-	9.8 Bar (140 psi)
Wheel stud torque:-	745 Nm (550 lbs ft)
Total machine weight	from 14,600kg (32,100lbs)

ELECTRIC / HYDRAULIC DRIVE

Motor:

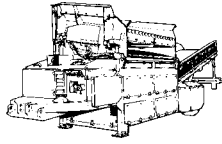
Electric motor running at 1450 rpm developing 37 KW (50 Hp)

HYDRAULICS

Hydraulic Pump:

Ultra 3PL180/3PL150 clockwise tandem pump, driving two deck screen on one circuit and main conveyor on the other circuit. The screen circuit having a flow rate of 69 litres (15.1 gals) per minute and the conveyor circuit having a flow rate of 78 litres (17.2 gals) per minute.

The remaining hydraulic motors stay the same as for Diesel Hydraulic machine.

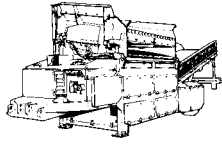


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