

# POWERSCREEN® CHIEFTAIN 1500

3 DECK INCLINE SCREEN



TECHNICAL SPECIFICATION - REV 3 01/04/2024





## CHIEFTAIN 1500



# OVERVIEW

## SPECIFICATION

<b>Total weight:</b>	28,000kg (61,729lbs)
<b>Transport</b>	<b>Length</b> 16.76m (55')
	<b>Width</b> 3m (9' 10")
	<b>Height</b> 3.44m (11' 4")
<b>Working</b>	<b>Length</b> 17.13m (56' 2")
	<b>Width</b> 17.35m (56' 11")
	<b>Height</b> 5.75m (18' 11")
<b>Screenbox:</b>	3.66m x 1.52m (12' x 5')
<b>Power unit:</b>	Diesel / Hydraulic
<b>Plant Colour:</b>	RAL 5021, RAL 7024 & RAL 9005

(Weight & dimensions are approximate base unit values)

## FEATURES & BENEFITS

- High capacity up to 400 tph / 441 US tph (depending on media sizes & material type).
- Maximum feed size 150mm (6").
- Triple deck screen with galvanised fixed walkway to give access to 3 sides of the screen for ease of operation and maintenance.
- The oversize auxiliary conveyor provides variable tilt and slew capabilities to accurately discharge material for recirculation or for stockpiling.
- Maximum utilisation of the 3 decks provides ultra efficient screening capabilities even at small piece sizes.
- Ease of material flow from the hopper to the main conveyor.
- Adjustable screen angle.
- Engine protection shutdown system.
- Power unit featuring a transverse engine arrangement to aid access & serviceability.
- Hydraulic bottom deck screen tensioning.
- Maximum mobility with heavy duty, low ground pressure tracks.
- Removable heavy duty pendant remote control system.
- Quick set up time.
- High performance hydraulic system - cast iron pumps & motors complete with hydraulic cooler.
- Powerscreen Pulse telemetry as standard.

## APPLICATIONS



### Aggregate

Sand & gravel  
Blasted rock  
River rock



### Recycling

Top soil  
C&D waste  
Composted materials  
Wood by-products  
Overburden  
Foundry waste



### Mining

Processed ores  
Processed minerals



## CHIEFTAIN 1500



## HOPPER & GRID

**Target area:** 4.24m (13' 11") x 1.61m (5' 3")

**Grid aperture:** 110mm (4")

**Grid aperture options:** 73mm (3"), 126mm (5"), 151mm (6")

**Feed in height with tipping grid (rear):** 3.15m (10' 4")

**Feed in height without tipping grid (rear):** 2.36m (7' 8")

**Hopper capacity with tipping grid:** 6.64m<sup>3</sup> (8.68 cu. yd.)

**Hopper capacity without tipping grid:** 5.84m<sup>3</sup> (7.64 cu. yd.)

Adjustable angle tipping grid with integral loading and wing plates





## CHIEFTAIN 1500



# ↓ SCREENBOX

3.66m x 1.52m (12' x 5') 3 deck incline screen  
Highly aggressive screen drive

3.66m x 1.52m (12' x 5') top & middle deck  
3m x 1.52m (10' x 5') bottom deck

Hydraulic screen angle adjustment: 18° - 37°  
Hydraulic screen tensioning on bottom deck  
Galvanised walkways on 3 sides of screen  
Abrasion resistant impact plate

Speed: 1140rpm  
Throw: 6mm





## CHIEFTAIN 1500



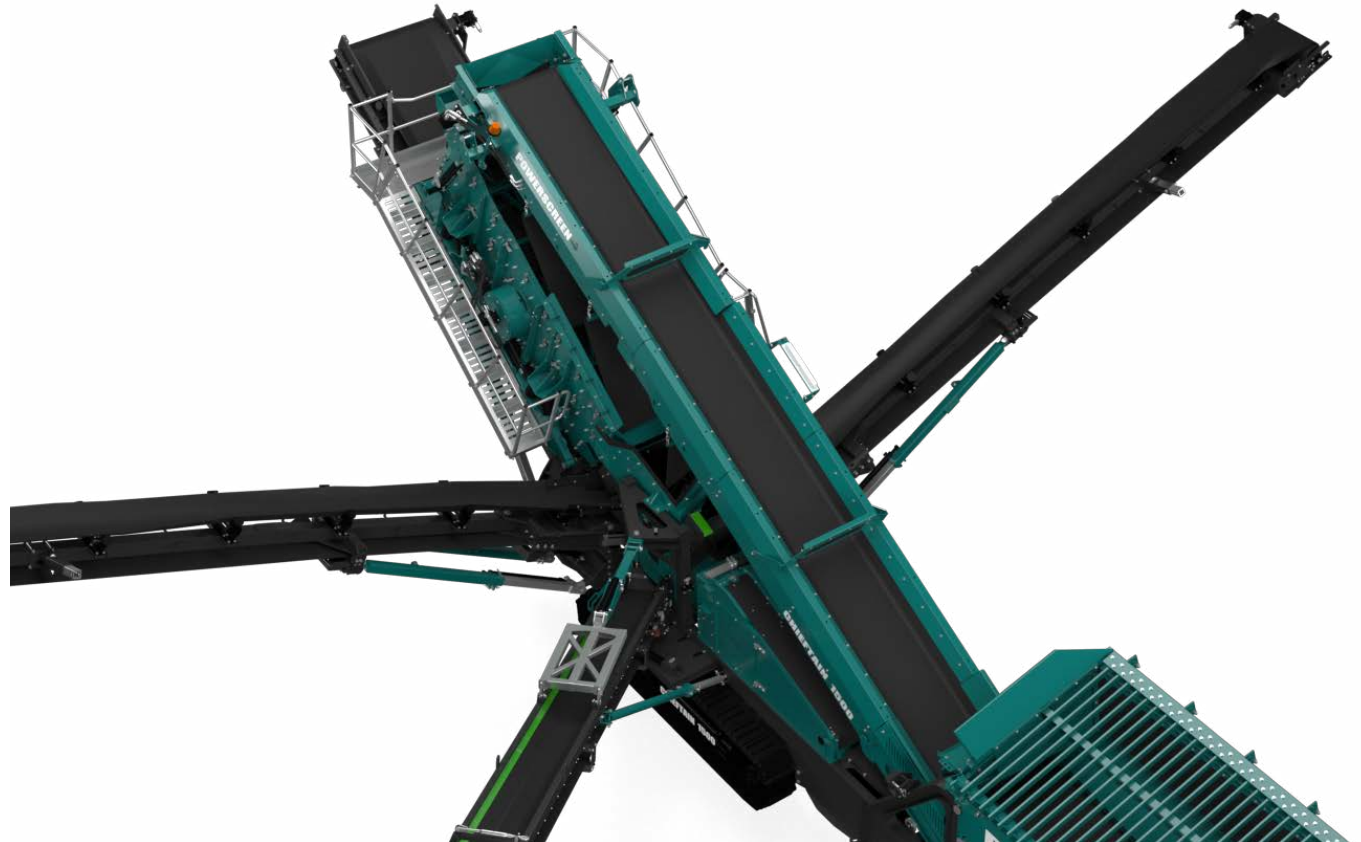
# CONVEYORS

### FEED CONVEYOR

1050mm (42") wide, 3 Ply plain belt  
Drum centres: 4.26m (13' 11")  
Drive drum diameter: 344mm (13.5")  
Tail drum diameter: 273mm (10.75")  
Variable speed control: 0 - 16 m/m (0 - 53 ft/m)  
Wide mouth opening

### MAIN CONVEYOR

1000mm (40") 3 ply plain belt  
Drum centres: 9.79m (32' 1")  
Drive drum diameter: 293mm (11.5")  
Tail drum diameter: 260mm (10")  
Angle adjustment: 21° - 28°  
Max belt speed: 99 m/m (324 ft/m)  
Steel skirted full length of conveyor







## CHIEFTAIN 1500



# CONVEYORS

### FINESIZE - TAIL CONVEYOR

1200mm (48") wide 3 ply plain belt

5.58m (18' 4") belt centres

4.25m (13' 11") stockpile height

114m<sup>3</sup> (149 cu. yd.) stockpile volume

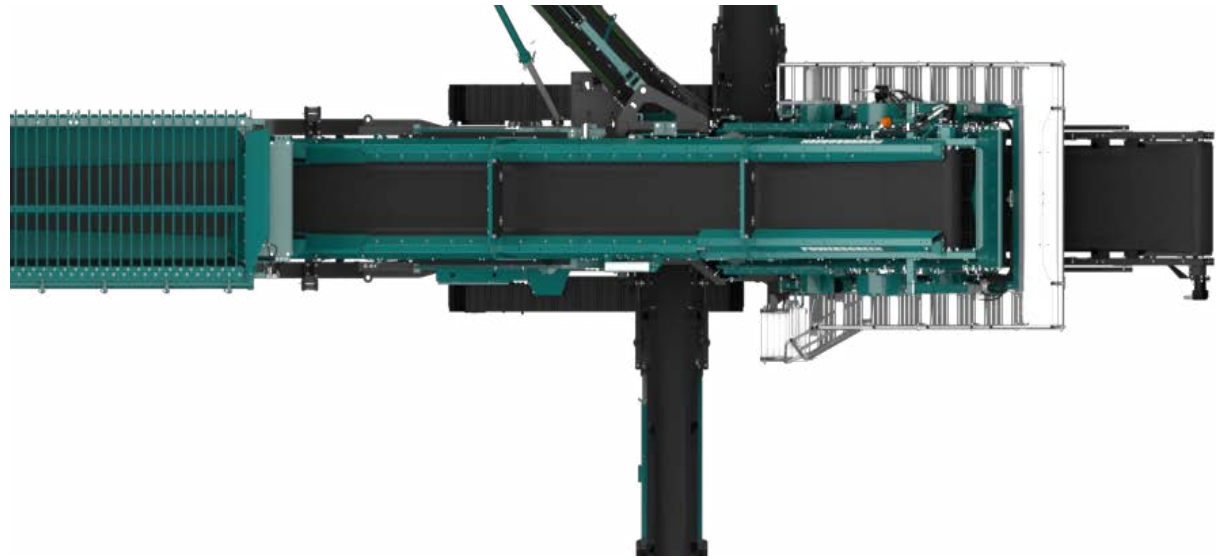
Fixed speed - 147 m/m (482 ft/m)

Hydraulically folding

Chevron belt as option

Angle adjustment: 14° - 33°

Rosta scraper on head drum





## CHIEFTAIN 1500



# CONVEYORS

### MID-FINESIZE & MID-OVERSIZE - SIDE CONVEYORS

650mm (26") wide 3 ply chevron belt

9.67m (31' 8") belt centres

4.76m (15' 7") stockpile height

160m<sup>3</sup> (209 cu. yd.) stockpile volume

Variable speed control on each conveyor

Max belt speed: 73m/m (239 ft/m)

Hydraulically folding

Fixed angle: 24°





## CHIEFTAIN 1500



# CONVEYORS

### OVERSIZE AUXILIARY CONVEYOR

500mm (20") wide 3 ply chevron belt  
8.47m (27' 10") belt centres  
4.47m (14' 8") stockpile height  
133m<sup>3</sup> (173 cu. yd.) stockpile volume

Variable speed control  
Angle (rake): 20°  
Variable angle (slew): 30° - 60°  
Oversize feed chute from top deck







## CHIEFTAIN 1500



# POWER UNIT & HYDRAULICS

### Engine Tier 3:

CAT C4.4

### Performance:

77 kW (103hp) @ 1800rpm

### Engine Tier 4F / Stage IV:

CAT C3.6

### Performance:

82 kW (110hp) @ 1800rpm

### Engine Stage V:

CAT C3.6

### Performance:

98 kW (131hp) @ 1800rpm

### Tank Capacities:

Fuel: 336 L (88 US Gal)

Hydraulic Tier 3: 564L (149 US Gal)

Hydraulic Tier 4/Stage V: 450L (118 US Gal)

### Pumps:

Flywheel pump: Cast iron triple 61/41/41cc/rev

PTO pump: Cast iron tandem 33/33cc/rev

### Motors:

Belt feeder: Cast iron 160cc/rev

Main conveyor: Cast iron 500cc/rev

Tail conveyor: Cast iron 630cc/rev

Side conveyors: Cast iron 400cc/rev

Auxiliary conveyor: Cast iron 500cc/rev

Screen motor: Cast iron 80cc/rev





## CHIEFTAIN 1500



## TRACKS

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

**Sprocket centres:** 2.92 (9' 7")

**Gradability degrees:** 25.5°

**Approximate speed:** 0.8kph (0.5mph)

**Gearbox ratio:** 1:154

**Hydraulic motor:** 50.9cc/rev

**Total flow per track:** 71 Lpm (approx.)





## CHIEFTAIN 1500



## OPTIONS

### OPTIONS

- No grid but hopper dead plate fitted
- 10mm bolt in hopper wear resistant wear plates
- Screenbox reversal control
- Wear resistant main conveyor spreader plate
- Hydraulic raise of main conveyor head section
- Radio remote control of tracks
- Working lights on main conveyor and power unit
- 68 grade hydraulic oil
- Standard stockpiler drive – only when no tipping grid fitted
- Quad pump stockpiler drive





## CHIEFTAIN 1500



# 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**

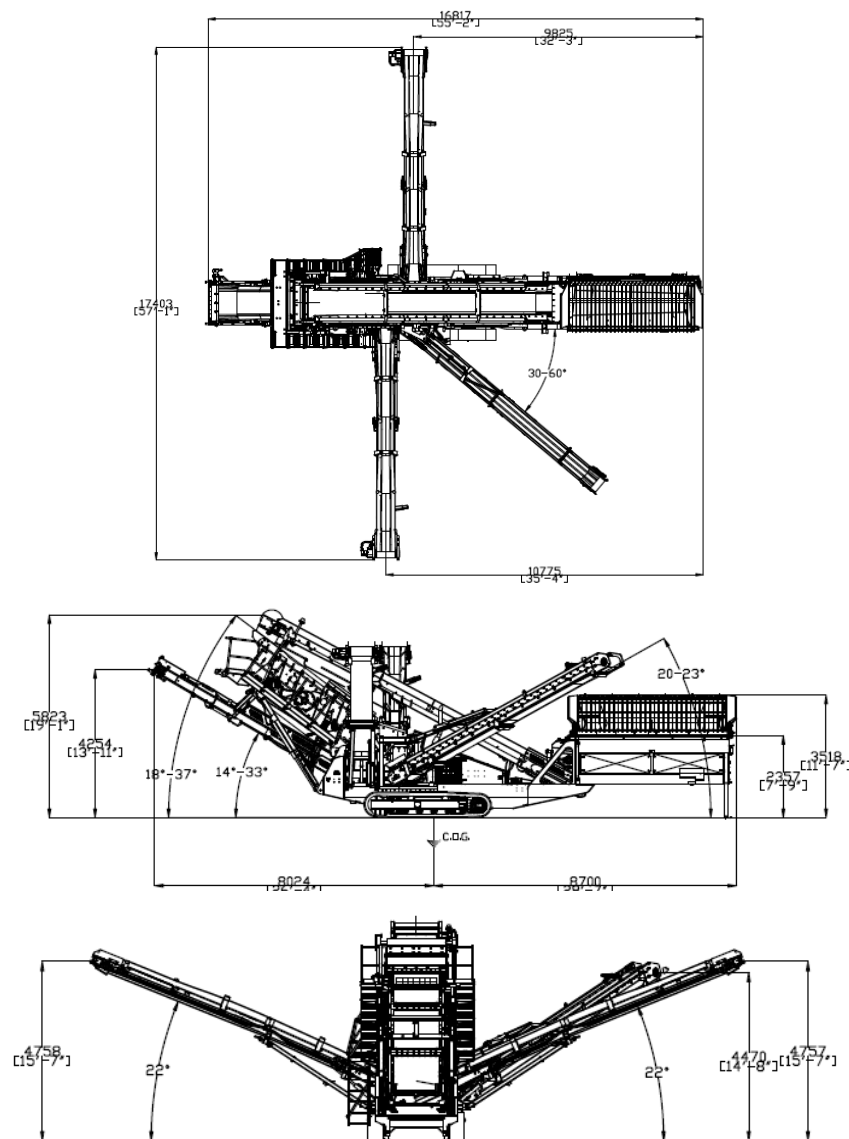


## CHIEFTAIN 1500



## DIMENSIONS

Figure 1: Chieftain 1500  
Working Position



MENSIONS OVERLEAF



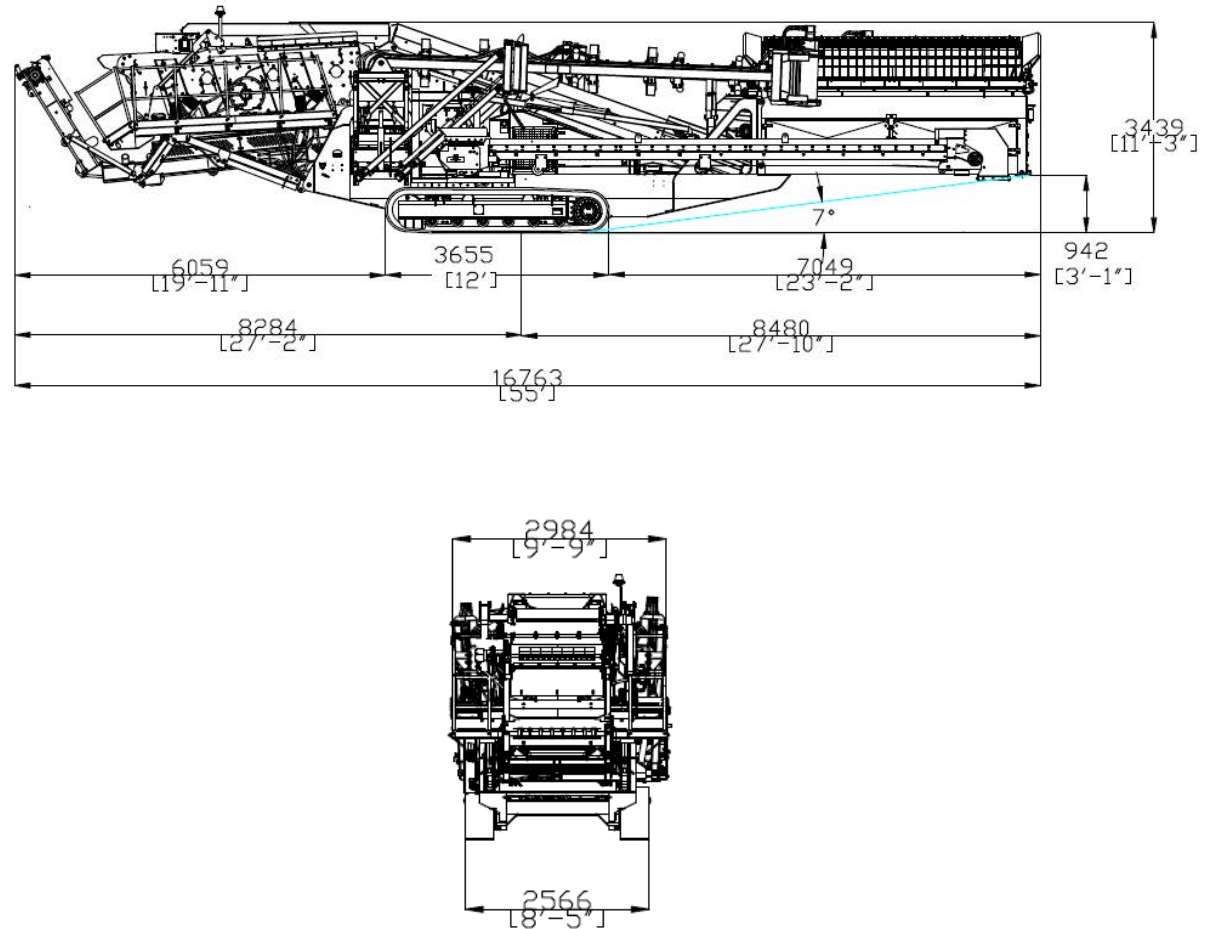


## CHIEFTAIN 1500



## DIMENSIONS

Figure 2: Chieftain 1500  
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**

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# APPENDIX 1 - ENGINE OPTIONS – Powerunit options that may be fitted in place of technical specification offering subject to availability

## Screens – Tier 4 Final

**CAT C4.4 82kW (110hp) @ 2200rpm as per Chieftain 1400, Chieftain 1500, Chieftain 2100X 2 deck, Chieftain 2200 2 deck and Warrior 1800**

Option 1.) CAT C3.6 82kW (110hp) @ 2200rpm

Option 2.) CAT C4.4 102kW (137hp) @ 2200rpm

**CAT C4.4 98kW (131hp) @ 2200rpm as per Chieftain 2100X 3 deck and Chieftain 2200 3 deck**

Option 1.) CAT C4.4 102kW (137hp) @ 2200rpm

**CAT C4.4 82kW (110hp) @ 1800rpm as per Chieftain 1700X and Warrior 1400X**

Option 1.) CAT C3.6 82kW (110hp) @ 1800rpm

Option 2.) CAT C4.4 98kW (131hp) @ 1800rpm

## Screens – Stage V

**CAT C4.4 102kW (137hp) @ 2200rpm as per Chieftain 1400, Chieftain 1500, Chieftain 2100X, Chieftain 2200 and Warrior 1800**

Option 1.) CAT C3.6 82kW (110hp) @ 2200rpm

Option 2.) JCB 4.8 81kW (109hp) @ 2200rpm

Option 3.) JCB 4.8 97kW (130hp) @ 2200rpm

Option 4.) Deutz TD3.6 100kW (134hp) @ 2200rpm

**CAT C4.4 98kW (131hp) @ 1800rpm as per Chieftain 1700X, Warrior 1400X and Warrior 2100**

Option 1.) CAT C3.6 82kW (110hp) @ 1800rpm

Option 2.) CAT C4.4 98kW (131hp) @ 1800rpm

Option 3.) JCB 4.8 80kW (108hp) @ 1800rpm

Option 4.) Deutz TD3.6 92kW (123hp) @ 1800rpm

