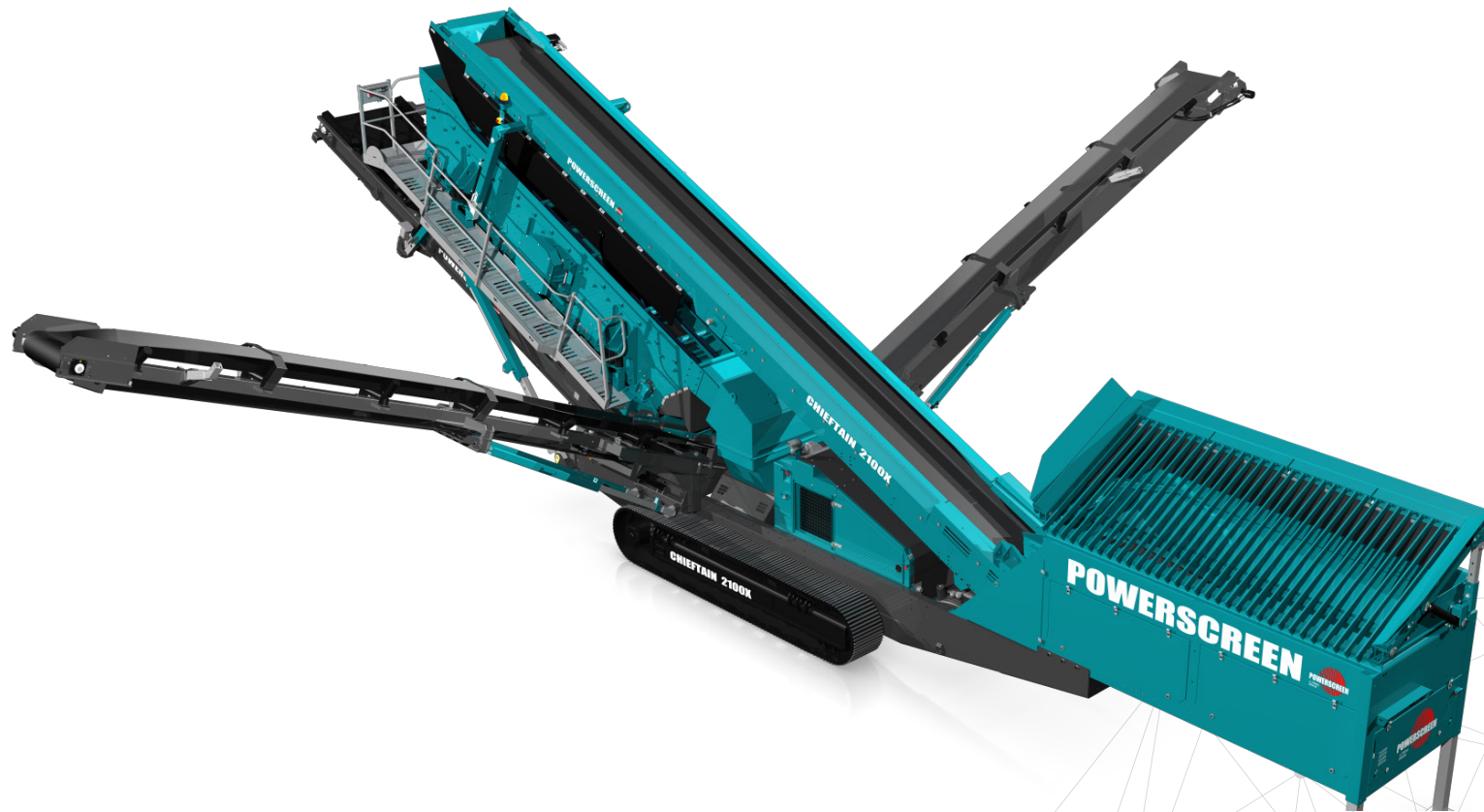


# POWERSCREEN® CHIEFTAIN 2100X

2 DECK INCLINE SCREEN



TECHNICAL SPECIFICATION - REV 14 01/02/2023





## CHIEFTAIN 2100X 2 DECK



# OVERVIEW

### SPECIFICATION

	<b>14ft Hopper (with grid)</b>
<b>Total weight</b>	34,700kg (76,500lbs)
<b>Transport</b>	<b>Length</b> 18.7m (61' 4")
	<b>Width</b> 3m (9' 10")
	<b>Height</b> 3.55m (11' 8")
<b>Working</b>	<b>Length</b> 19.17m (64' 8")
	<b>Width</b> 18.25m (59' 11")
	<b>Height</b> 6.72m (22' 1")
<b>(screenbox at 30°)</b>	
<b>Screenbox</b>	6.1m x 1.55m (20' x 5')
<b>Power Unit</b>	Diesel / Hydraulic
<b>Plant Colour</b>	RAL 5021, RAL 7024 & RAL 9005

(Weights & dimensions are approximate base unit values)

### FEATURES & BENEFITS

- High capacity up to 600 tph / 661 US tph (depending on media sizes & material type)
- Maximum feed size 150mm (6")
- Engine protection shutdown system
- Power unit featuring a transverse engine arrangement to aid access & serviceability
- Heavy duty single shaft incline screenbox with adjustable stroke, angle & speed
- Hydraulic screen tensioning
- Screen mesh access system for quicker mesh changes
- 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
- Low profile double deck vibrating grid option with radio remote control tipping grid, angle adjustable and fully riveted construction
- Hydraulically folding conveyors for transport
- Fines conveyor drop down facility to aid bottom deck mesh access
- 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 2100X 2 DECK



## HOPPER & GRID

**Target area:** 4.75m (15' 7") long x 2.15m (7' 1") wide

**Grid aperture:** 108mm (4.3")

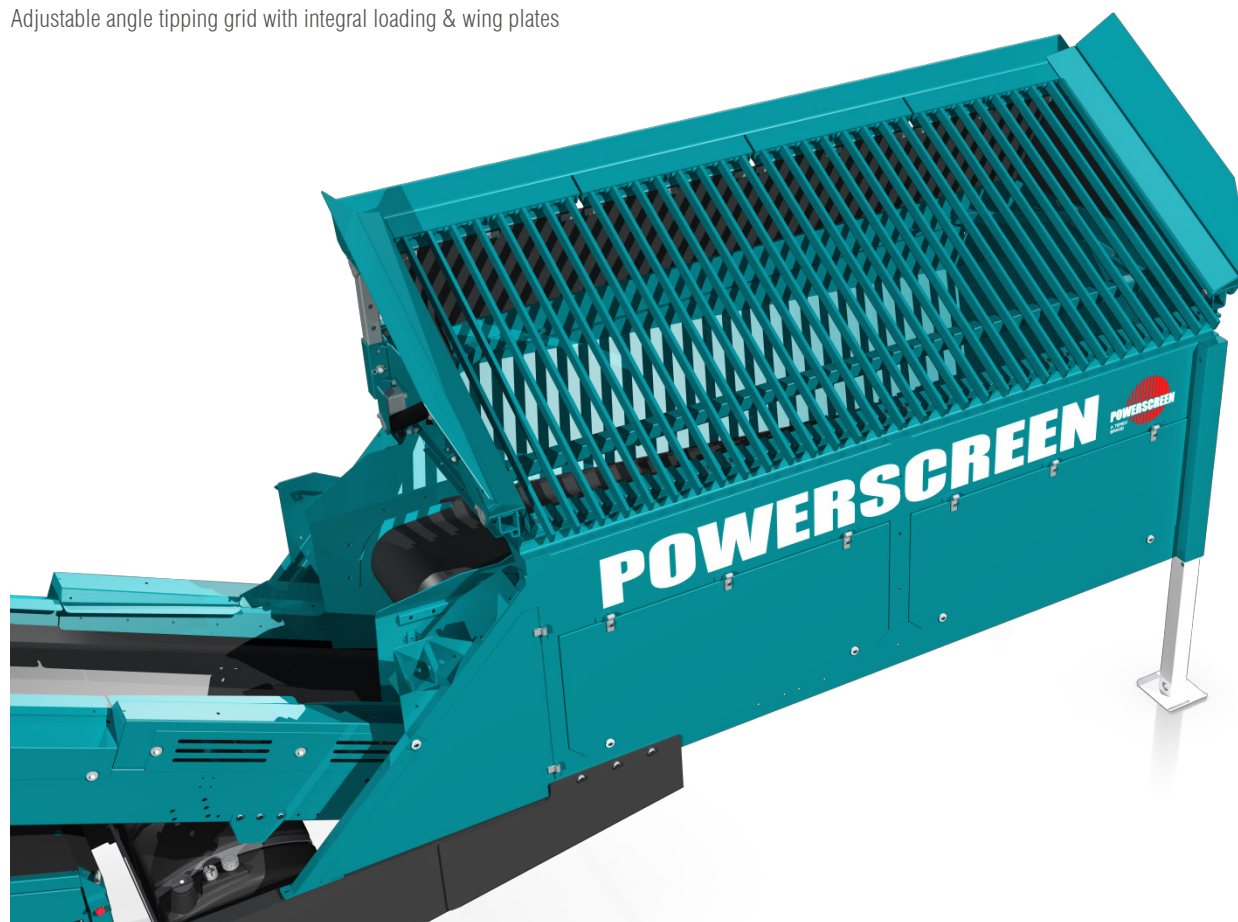
**Hopper capacity with tipping grid:** 6.9m<sup>3</sup> (9 cu. yd.)

**Hopper capacity without tipping grid:** 6.2m<sup>3</sup> (8.1 cu. yd.)

**Feed in height with grid (rear):** 3.7m (12' 2") (rear)

**Feed in height without grid (rear):** 2.65m (8' 8") (rear)

Adjustable angle tipping grid with integral loading & wing plates





## CHIEFTAIN 2100X 2 DECK



### ↓ SCREENBOX

6.1m x 1.55m (20' x 5') 2 deck incline screen  
Highly aggressive screen drive  
Oil filled 2 bearing screenbox

6.1m x 1.55m (20' x 5') top deck  
5.55m x 1.52m (18' 2" x 5') bottom deck

5 of media sections (side tension) top deck  
3 of media sections (end tension) bottom deck

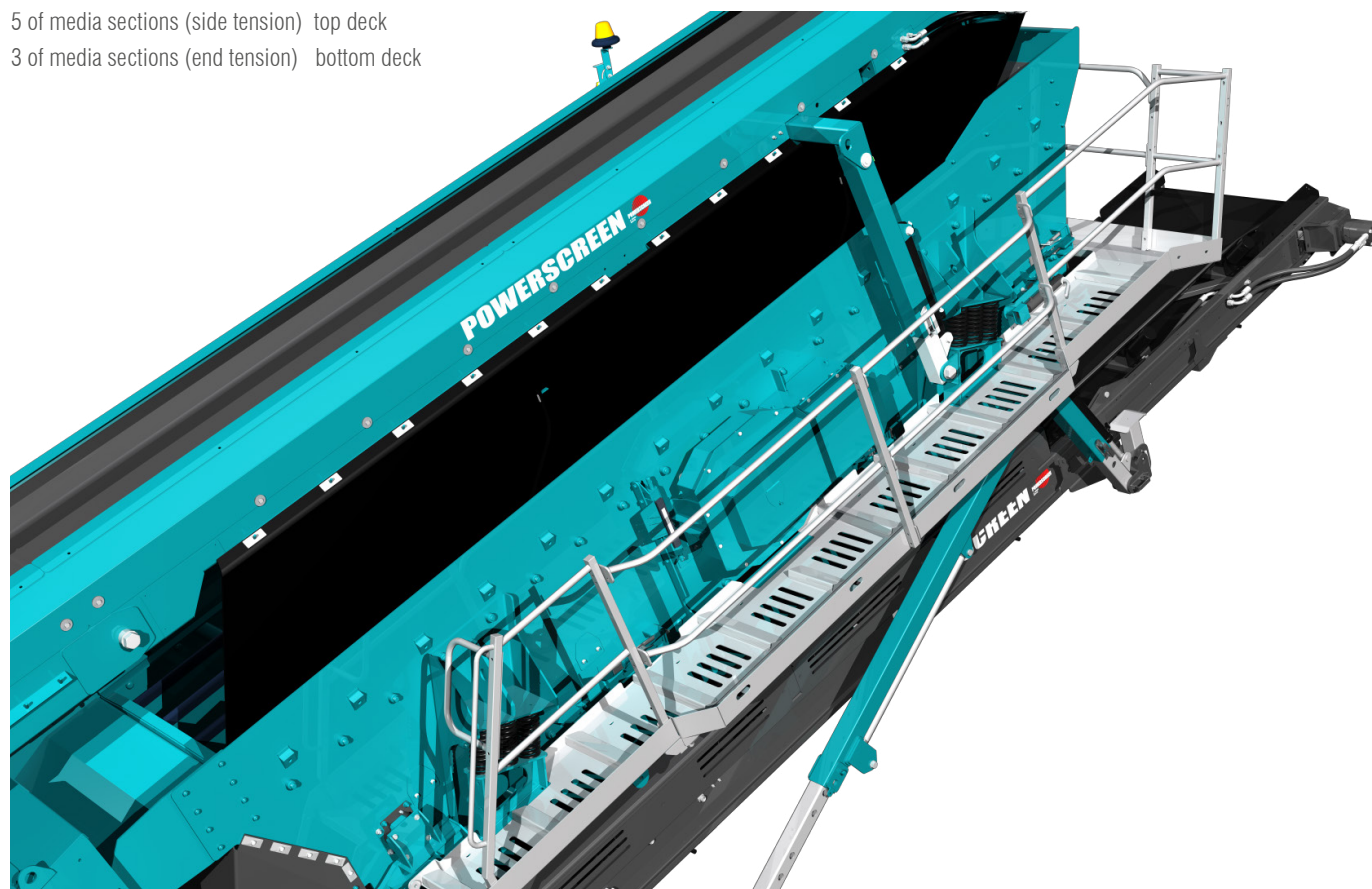
Hydraulic screen angle adjustment 20° - 30°

Hydraulic screen tensioning on bottom deck

Galvanised walkways on three sides of screenbox

**Speed:** 1100rpm (standard)

**Throw:** 6.5 - 7mm (standard)







## CHIEFTAIN 2100X 2 DECK



# CONVEYORS

### FEED CONVEYOR

1200mm (48") wide feed conveyor with direct drive system & hydraulic variable speed control

4.11m (13' 6") drum centres

350mm (13.7") drum diameter (drive)

320mm (12.6") drum diameter (tail)

### MAIN CONVEYOR

1050mm (42") 3 ply plain belt

12.09m (39' 8") drum centres

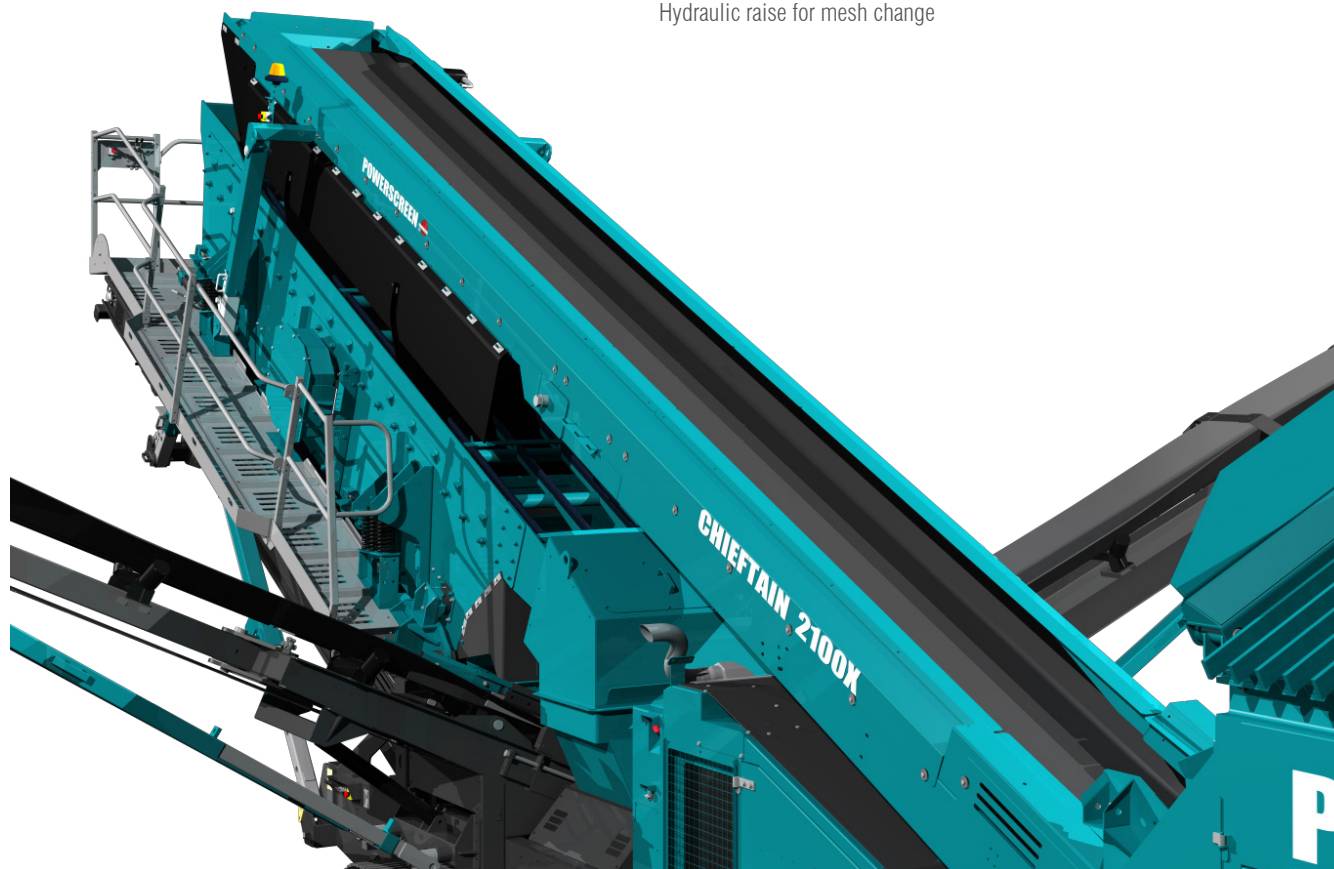
286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

Hydraulically adjustable conveyor, fully skirted & sealed

Angle adjustment: 22.5° - 26.5°

Hydraulic raise for mesh change





## CHIEFTAIN 2100X 2 DECK



## CONVEYORS

### FINESIZE - TAIL CONVEYOR

1200mm (48") wide 3 ply plain belt

8.16m (26' 9") drum centres

286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

4.41m (14' 6") stockpile height

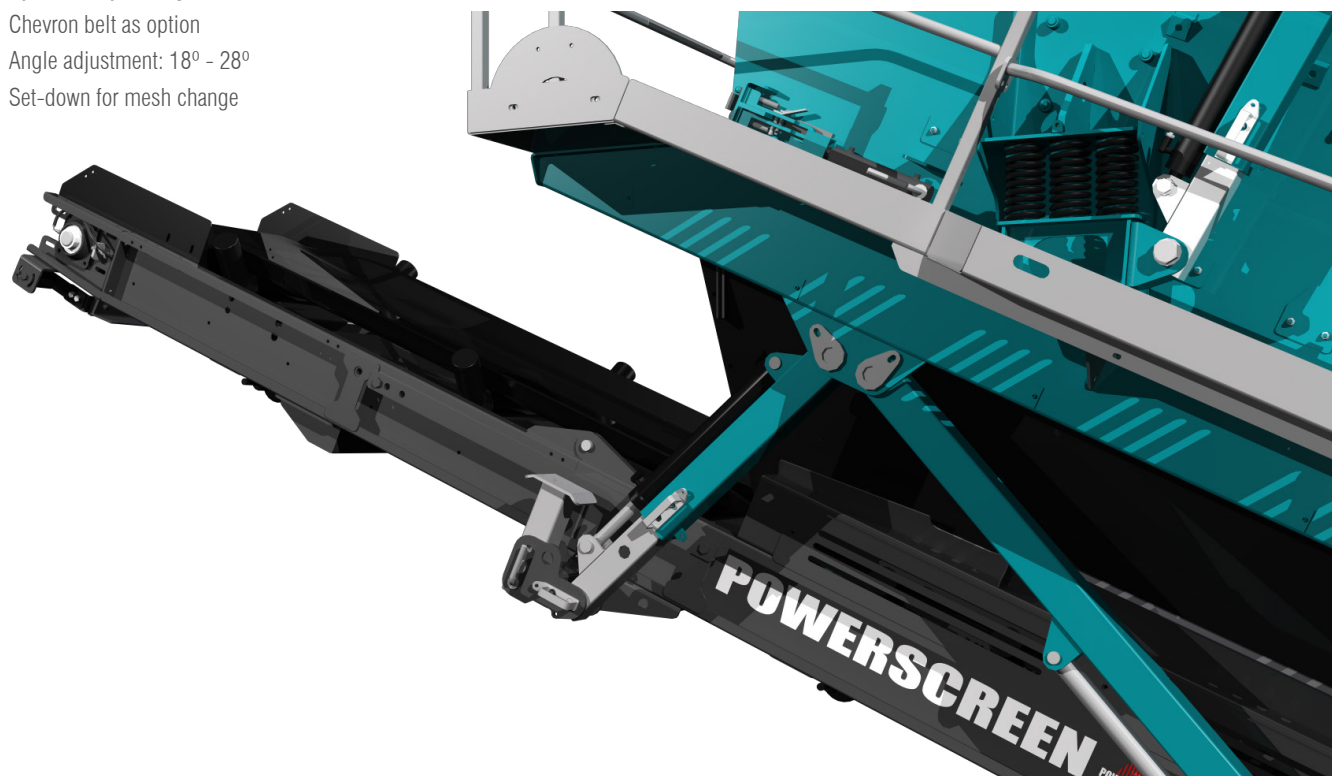
127.5m<sup>3</sup> (167 cu. yd.) stockpile volume

Hydraulically folding

Chevron belt as option

Angle adjustment: 18° - 28°

Set-down for mesh change





## CHIEFTAIN 2100X 2 DECK



# CONVEYORS

### MIDSIZE & OVERSIZE - SIDE CONVEYORS

800mm (32") wide 3 ply chevron belt

10.18m (33' 5") drum centres

286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

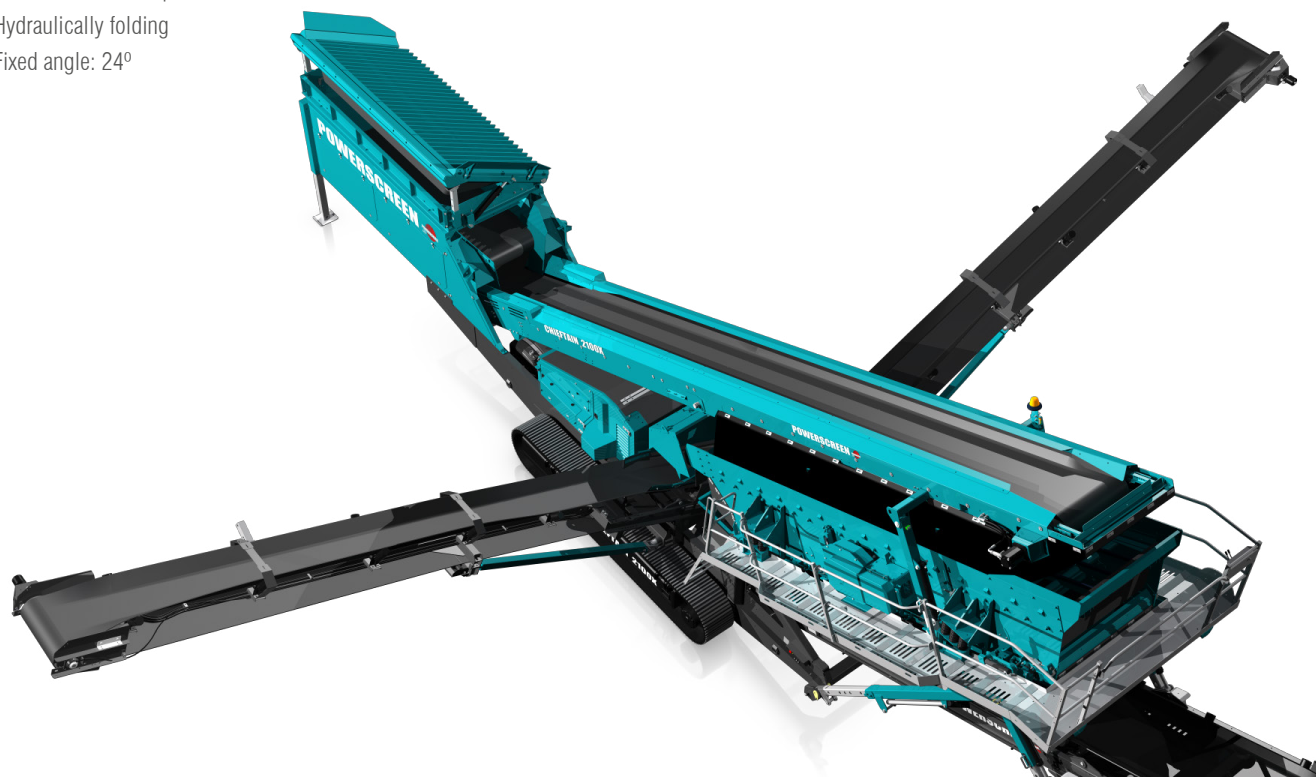
4.97m (16' 4") stockpile height

183m<sup>3</sup> (239 cu. yd.) stockpile volume

Individual variable speed control

Hydraulically folding

Fixed angle: 24°





## CHIEFTAIN 2100X 2 DECK



# POWER UNIT & HYDRAULICS

### Engine Tier 3 Equivalent:

CAT C4.4

### Performance:

83 kW (111.3hp) @ 2200rpm

### Engine Tier 4F / Stage IV:

CAT C4.4

### Performance:

82 kW (110hp) @ 2200rpm

### Engine Stage V:

CAT C4.4

### Performance:

102 kW (137hp) @ 2200rpm

### Tank Capacities:

Fuel: 336L (88 US Gal)

Hydraulic oil Tier 3: 564L (149 US Gal)

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

### Pumps:

Flywheel pump: Cast iron triple 63/33/33cc/rev

PTO pump A: Cast iron triple 23/23/14cc/rev

### Motors:

Belt feeder: Cast iron 160cc/rev

Main conveyor: Cast iron 500cc/rev

Tail conveyor: Cast iron 800cc/rev

Side conveyors: Cast iron 400cc/rev

Screen: Cast iron 80cc/rev







## CHIEFTAIN 2100X 2 DECK



## TRACKS

Track width:	500mm (1' 8")
Sprocket centres:	3838mm (12' 7")
Gradability degrees:	41°
Gearbox ratio:	1:147
Hydraulic motor:	85.9cc/rev
Approximate speed:	0.56kph (0.35mph)
Total flow per track:	69Lpm (approx.)

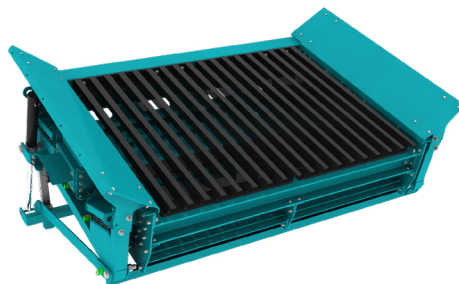




## CHIEFTAIN 2100X 2 DECK



## ↓ OPTIONS



### DOUBLE DECK VIBRATING GRID

**Target area:**

3.91m (12' 10") long x 2.42m (7' 11") wide

**Bottom deck screen size:**

2 of 1.9m (6' 3") x 1.5m (4' 11")

**Working angle:** 10° - 20° (hydraulically adjustable)

**Tip angle:** 45° max

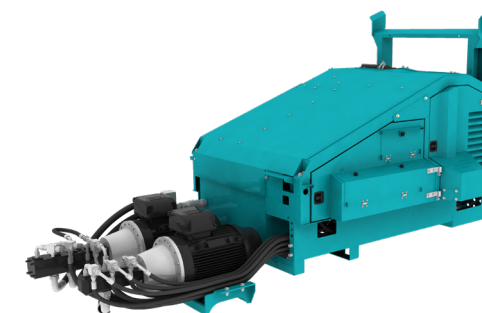
**Motor:** 56cc/rev

**Circuit:** Coupled to main conveyor circuit.

Minimum feed in height with grid (rear): 3.8m (12' 6")

Increase in transport height: +135mm (5.3")

Increase in machine weight: +3,750kg (8,267lbs)



### DUAL POWER

**Dual Power System:**

2 of electric motors: 37 kW (50hp) & 37 kW (50hp) Diesel engine

Integrated control system

This controls either diesel-hydraulic or electric-hydraulic functions

Note: This option may alter transport dimensions and feed access. For further details please contact engineering for detailed drawings and dimensions.



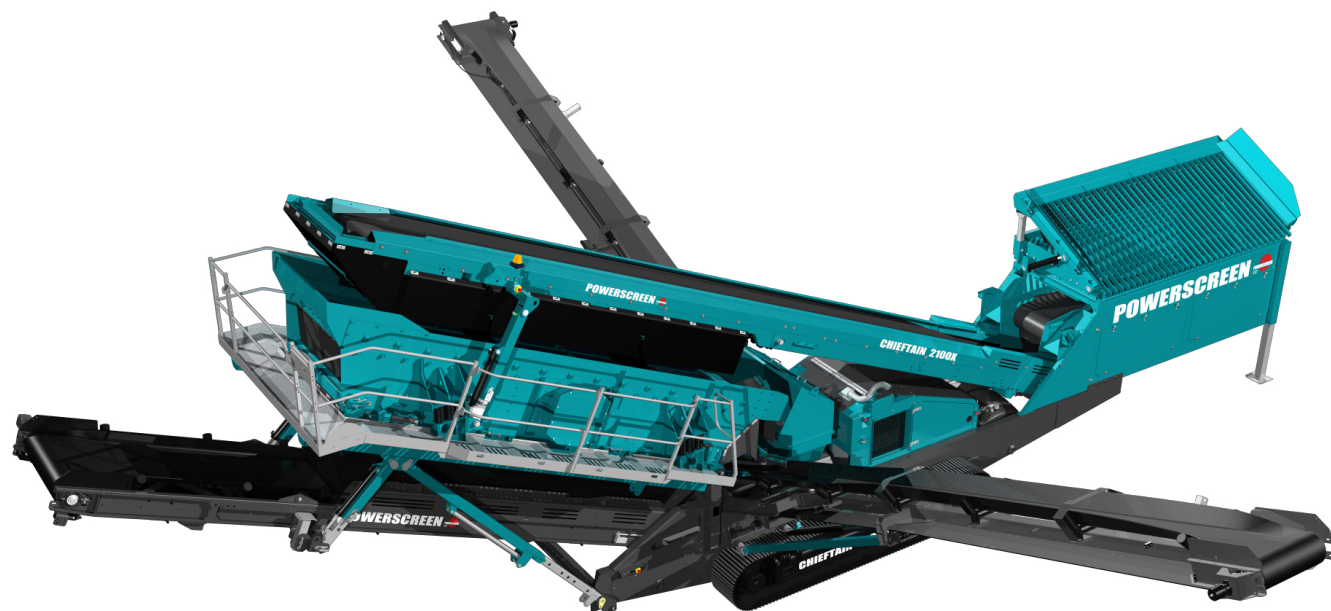
## CHIEFTAIN 2100X 2 DECK



## ↓ OPTIONS

### OTHER OPTIONS

- Custom colour machine
- Auto lubrication system
- Radio controlled tracking
- Anti-roll back on main conveyor
- Quick release wedge tensioning for top deck
- Double deck vibrating grid
- Hydraulic jacking legs
- Grid aperture (6")
- Vibrating grid discharge chute
- Crusher feed chute (when double deck vibrating grid is selected)
- Adjustable hopper door
- Bottom deck self cleaning flexi mesh
- Extra coupling facility
- Fuel save option
- Hopper wear plates
- Wear resistant lined spreader plate
- Hydraulic oil grade 68





## CHIEFTAIN 2100X 2 DECK



# 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**



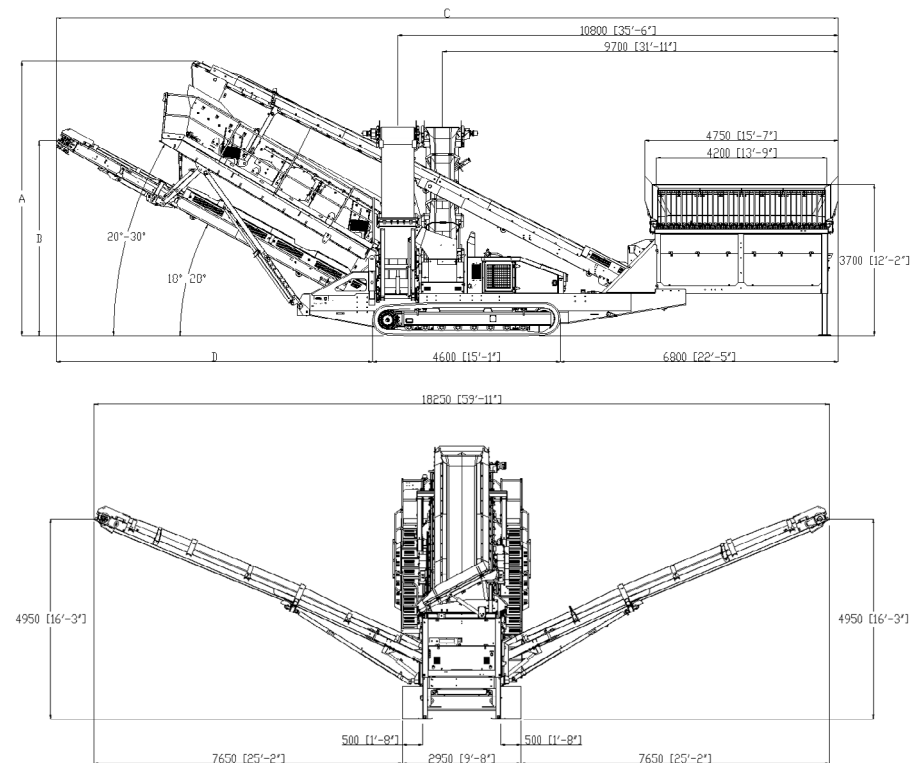


## DIMENSIONS

### CHIEFTAIN 2100X 2 DECK

DIMENSION (MM)	SCREEN WORKING ANGLES (DEGREES)			
	20 DEG	23 DEG	27 DEG	30 DEG
A	6060	6290	6520	6720
B	3610	4020	4410	4800
C	19700	19550	19370	19170
D	8300	8150	7970	7770

Figure 1: Chieftain 2100X 2 Deck  
Working Position



MORE DIMENSIONS OVERLEAF

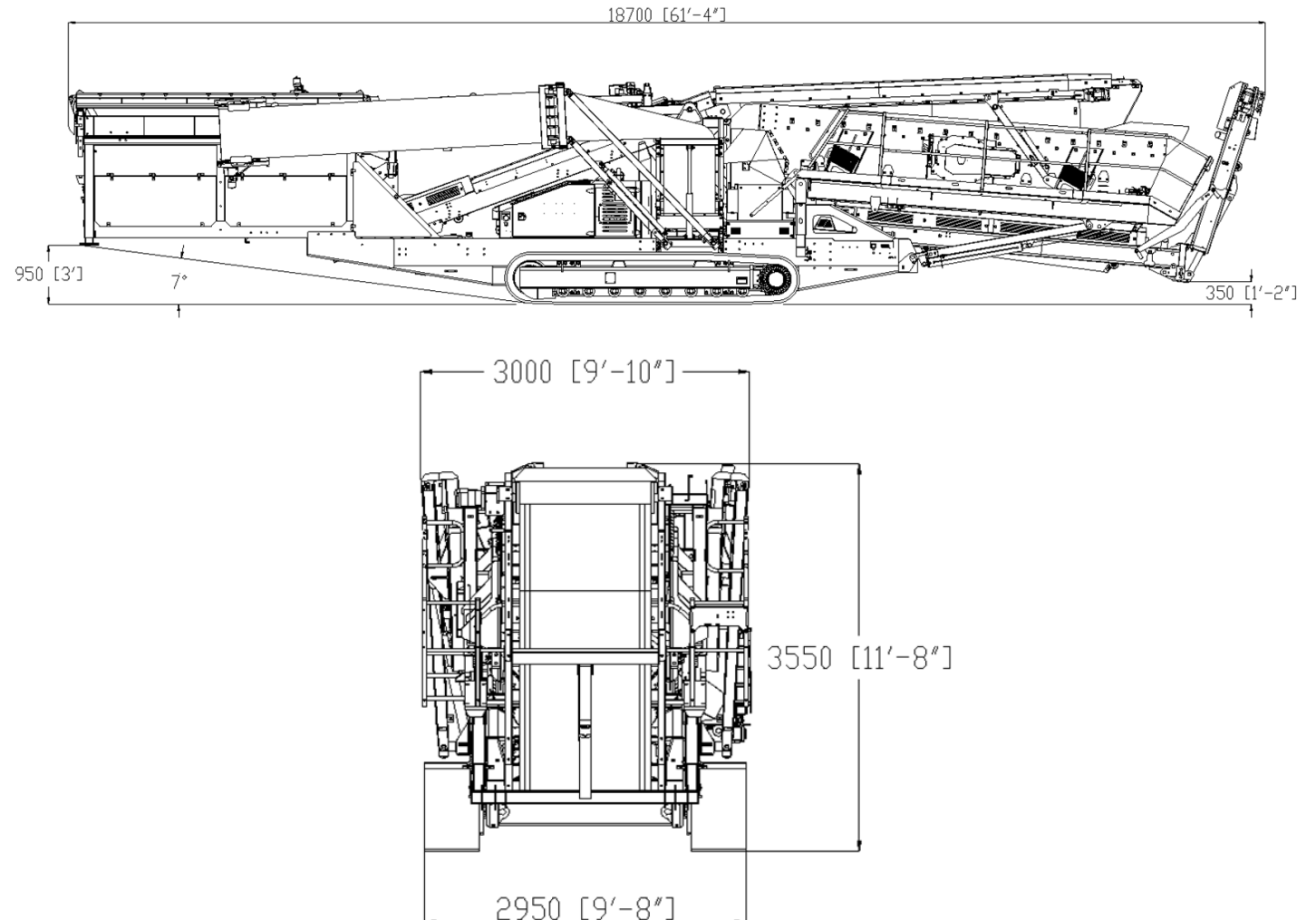


## CHIEFTAIN 2100X 2 DECK



## DIMENSIONS

Figure 2: Chieftain 2100X 2 Deck  
Transport Position



**MORE DIMENSIONS OVERLEAF**



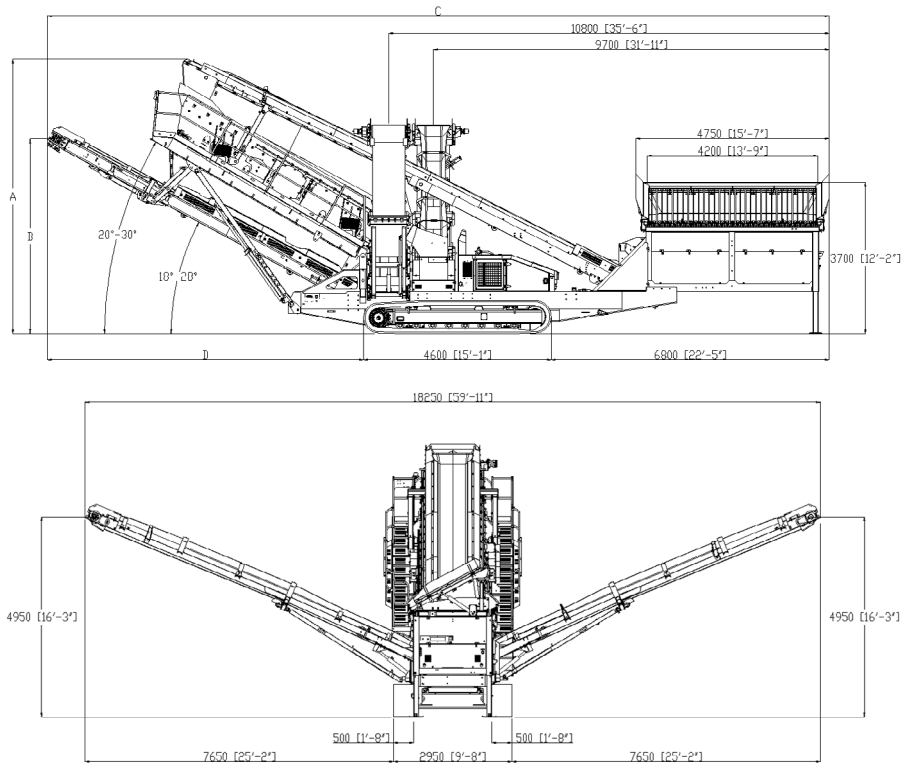
# CHIEFTAIN 2100X 2 DECK



## DIMENSIONS

DIMENSION (MM)	SCREEN WORKING ANGLES (DEGREES)			
	20 DEG	23 DEG	27 DEG	30 DEG
A	6060	6290	6520	6720
B	3610	4020	4410	4800
C	19560	19410	19230	19030
D	8300	8150	7970	7770

Figure 3: Chieftain 2100X 2 Deck  
Double Deck Vibrating Grid  
Working Position



MORE DIMENSIONS OVERLEAF

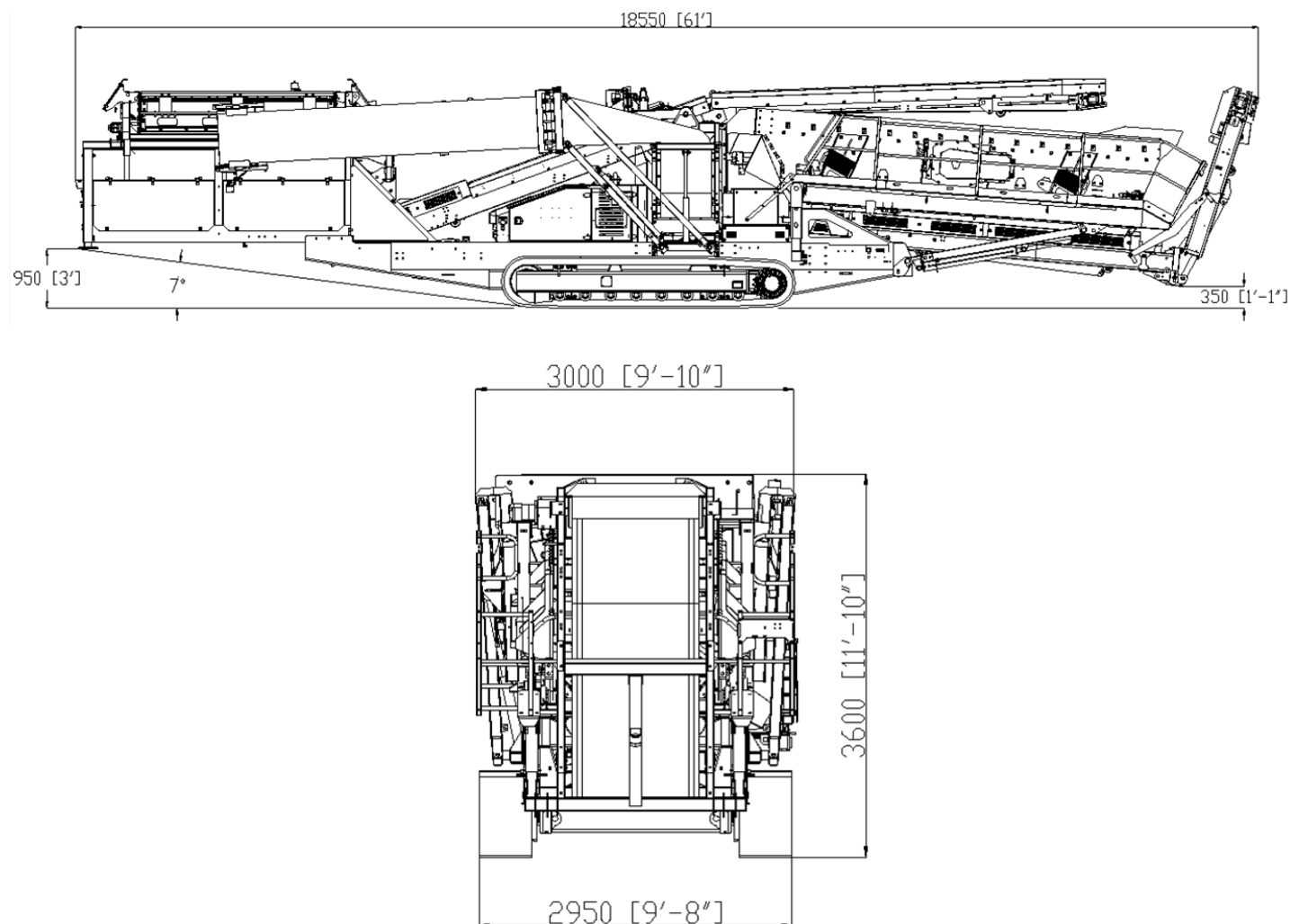


## CHIEFTAIN 2100X 2 DECK



## DIMENSIONS

Figure 4: Chieftain 2100X 2 Deck  
Double Deck Vibrating Grid  
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



# 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

