

POWERSCREEN® CHIEFTAIN 2200

2 DECK INCLINE DOUBLE SCREEN



TECHNICAL SPECIFICATION - REV 7 01/04/2024





CHIEFTAIN 2200 2 DECK



OVERVIEW

SPECIFICATION

	14ft Hopper (with grid) track
Total weight	36,000kg (79,366lbs)
Transport	Length 19.8m (64' 11") Width 3m (9' 10") Height 3.58m (11' 8")
Working	Length 20m (65' 7") Width 18.25m (59' 11")
(screenbox at 37°)	Height 7.58m (24' 10")
Screenbox	2 of 3.3m x 1.55m (11' x 5') Total of 6.6m x 1.55m (22' x 5')
Power Unit	Diesel / Hydraulic
Plant Colour	RAL 5021, RAL 7024 & RAL 9005

(Weights & dimensions are approximate base unit values)

FEATURES & BENEFITS

- High capacity up to 650 tph / 715 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 double screenboxes with adjustable stroke, angle & speed
- Fixed angle of 7° between screenboxes
- Ability to easily change between 2 and 4 bearings using patent pending drive system
- Hydraulic screen tensioning
- Screen mesh access system for quicker mesh changes
- Maximum mobility with heavy duty, low ground pressure tracks
- 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 2200 2 DECK



HOPPER & GRID

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

Grid aperture: 100mm (4")

Hopper capacity with tipping grid (rear): 6.9m³ (9 cu. yd.)

Hopper capacity without tipping grid (rear): 6.2m³ (8.1 cu. yd.)

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

Feed in height without grid: 2.62m (8' 7") (rear)

Adjustable angle tipping grid with integral loading & wing plates





CHIEFTAIN 2200 2 DECK



SCREENBOXES

2 of 3.3 m x 1.55m (11' x 5') 2 deck incline screens

Highly aggressive screen drive

Grease filled 4 bearing setup

6.7m x 1.55m (22' x 5') top deck total

6.1m x 1.55m (20' x 5') bottom deck total

3 of media sections (side tension) top deck per screenbox - 6 Total

2 of media sections (end tension) bottom deck per screenbox - 4 Total

Hydraulic screen angle adjustment : 25° - 37°

Galvanised walkways on 3 sides of the screenbox

Dispatches as standard 2 x 4 bearing

Speed: 1140rpm (standard)

Throw: 6mm (standard)





CHIEFTAIN 2200 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

13m (42' 8") drum centres

286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

Anti-rollback as standard

Hydraulically adjustable conveyor, fully skirted & sealed

Hydraulic raise for mesh change





CHIEFTAIN 2200 2 DECK



CONVEYORS

FINESIZE - TAIL CONVEYOR

1200mm (48") wide 3 ply plain belt

9.06m (29' 9") drum centres

286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

4.7m (15' 5") stockpile height

154m³ (202 cu. yd.) stockpile volume

Hydraulically folding

Chevron belt as option

Angle adjustment: 9° - 32°

Set-down for mesh change





CHIEFTAIN 2200 2 DECK



CONVEYORS

MID-FINESIZE & MID-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)

4.95m (16' 2") stockpile height

180m³ (236 cu. yd.) stockpile volume

Individual variable speed control

Hydraulically folding

Fixed angle: 24°





CHIEFTAIN 2200 2 DECK



POWER UNIT & HYDRAULICS

Engine Tier 3 Equivalent:

CAT C4.4

Performance:

83 kW (111.3hp) @ 2200rpm

Engine Tier 4F / Stage IV:

CAT C3.6

Performance:

82 kW (110hp) @ 2200rpm

Engine Stage V:

CAT C3.6

Performance:

82 kW (110hp) @ 2200rpm

Tank Capacities:

Fuel: 336L (88 US Gal)

Hydraulic oil: 450L (118 US Gal)

Pumps:

Flywheel pump: Cast iron quad 46/46/33/33cc/rev

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

Motors:

Belt feeder: 160cc/rev

Main conveyor: Cast iron 500cc/rev

Tail conveyor: Cast iron 630cc/rev

Side conveyors: Cast iron 400cc/rev

Screen: Cast iron 101cc/rev





CHIEFTAIN 2200 2 DECK



TRACKS

Track width:	500mm (1' 8")
Sprocket centres:	3838mm (12' 7")
Gradability degrees:	35.9°
Gearbox ratio:	1:166
Hydraulic motor:	85.9cc/rev
Approximate speed:	0.8kph (0.5mph)
Total flow per track:	107 Lpm

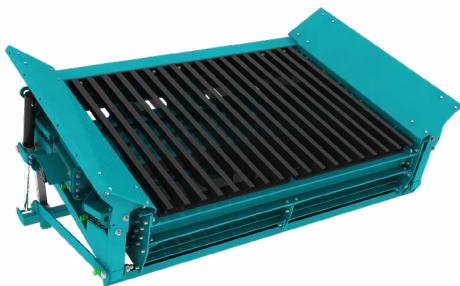
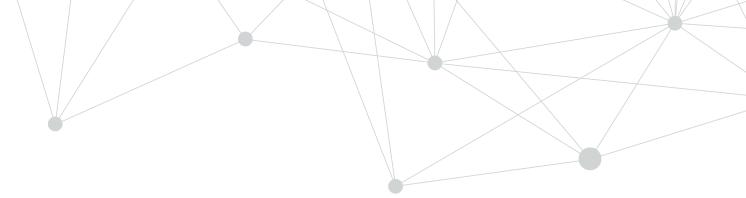




CHIEFTAIN 2200 2 DECK



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

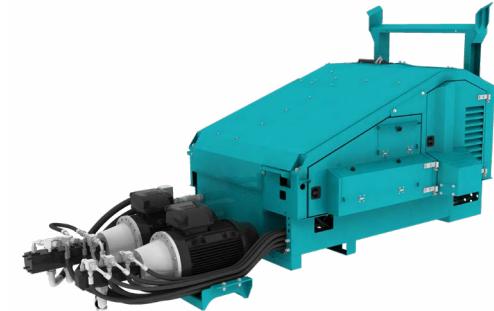
Motor: 56cc/rev

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: Electric motors IE2 as standard

IE3 motors for USA subject to availability



CHIEFTAIN 2200 2 DECK



OPTIONS

OTHER OPTIONS

- Custom colour machine
- Auto lubrication system
- Radio controlled tracking
- Low profile chevron on main conveyor belt
- Low profile chevron on tail conveyor belt
- Adjustable hopper door
- Fuel save option
- Quick release wedge tensioning for top deck
- Double deck vibrating grid
- Bottom deck self cleaning flexi mesh
- Vibrating grid discharge chute
- Crusher feed chute (when couple deck vibrating grid is selected)
- Hopper wear plates
- Grade 68 hydraulic oil
- Wear resistant lined spreader plate
- Reverse rotation of feed screenbox
- Hydraulic jacking legs - not available with Dual Power





CHIEFTAIN 2200 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



CHIEFTAIN 2200 2 DECK

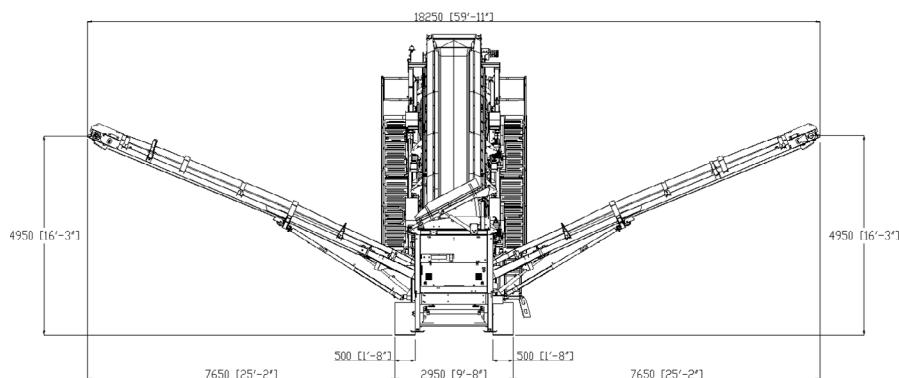
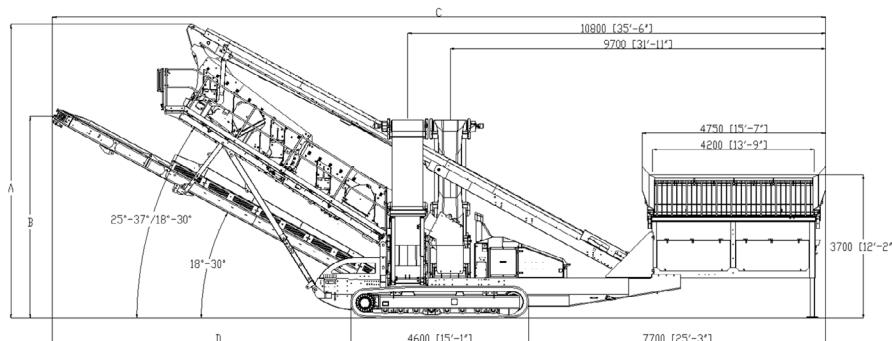


DIMENSIONS

DIMENSION (MM)	FEED / DISCHARGE SCREEN WORKING ANGLES (DEGREES)					
	25 / 18 DEG	27.5 / 20.5 DEG	30 / 23 DEG	32.5 / 25.5 DEG	35 / 28 DEG	37 / 30 DEG
A	6450	6700	6940	7175	7405	7580
B	3515	3885	4245	4595	4935	5200
C	20720	20600	20460	20310	20140	20000
D	8430	8310	8170	8020	7850	7720

Figure 1: Chieftain 2200 2 Deck

Working Position



MORE DIMENSIONS OVERLEAF

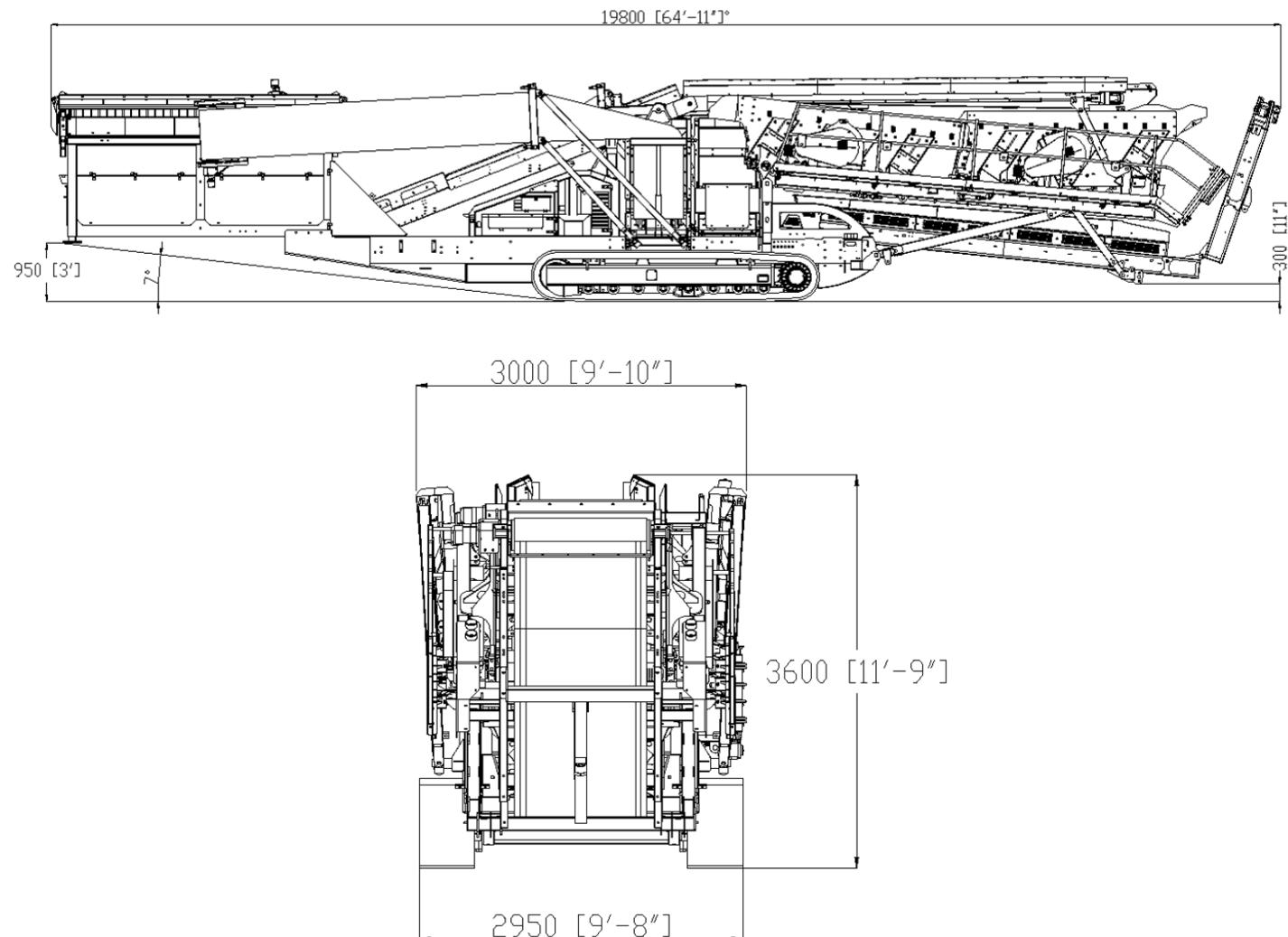


CHIEFTAIN 2200 2 DECK



DIMENSIONS

Figure 2: Chieftain 2200 2 Deck
Transport Position



MORE DIMENSIONS OVERLEAF



CHIEFTAIN 2200 2 DECK



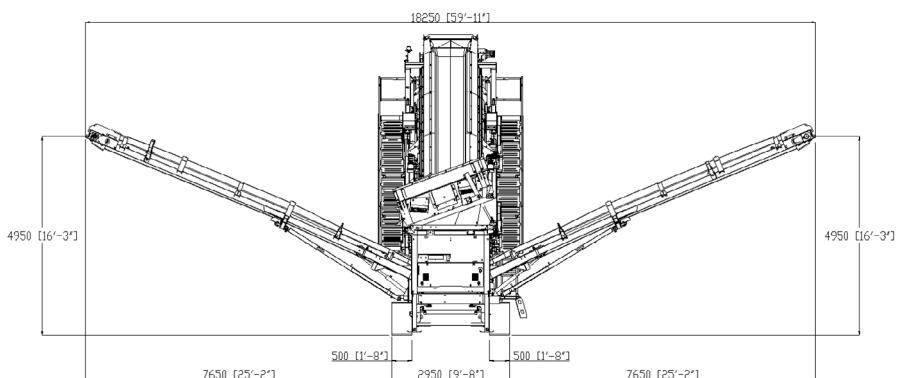
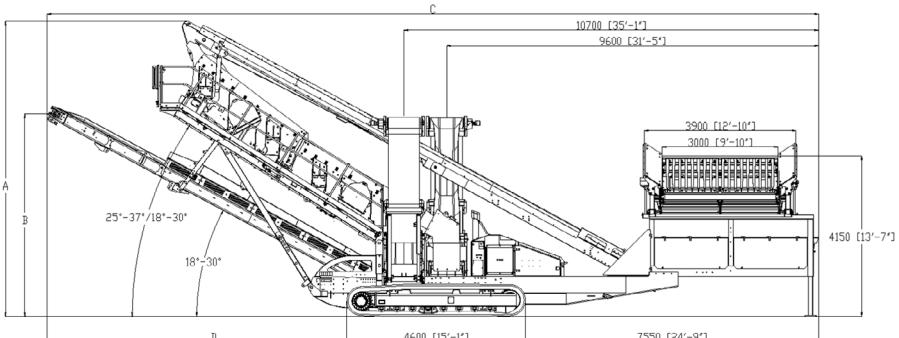
DIMENSIONS

DIMENSION (MM)	FEED / DISCHARGE SCREEN WORKING ANGLES (DEGREES)					
	25 / 18 DEG	27.5 / 20.5 DEG	30 / 23 DEG	32.5 / 25.5 DEG	35 / 28 DEG	37 / 30 DEG
A	6450	6700	6940	7175	7405	7580
B	3515	3885	4245	4595	4935	5200
C	20580	20460	20320	20170	20000	19860
D	8430	8310	8170	8020	7850	7720

Figure 3: Chieftain 2200 2 Deck

Double Deck Vibrating Grid

Working Position



MORE DIMENSIONS OVERLEAF

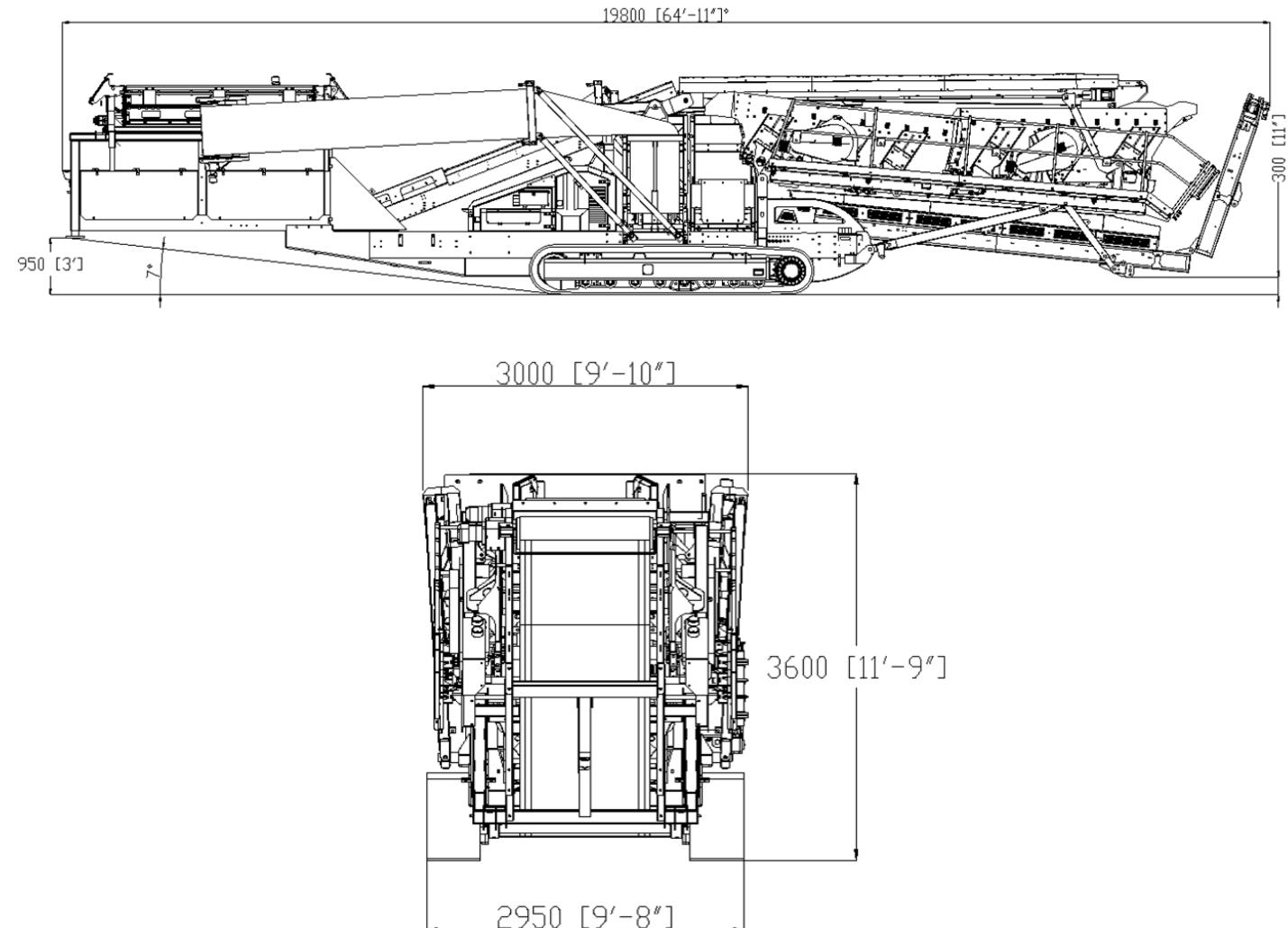


CHIEFTAIN 2200 2 DECK



DIMENSIONS

Figure 4: Chieftain 2200 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

