

POWERSCREEN® CHIEFTAIN 1400

2 DECK INCLINE SCREEN



TECHNICAL SPECIFICATION - REV 11. 01/01/2019





CHIEFTAIN 1400



OVERVIEW

SPECIFICATION

		14ft Hopper (with grid) wheel	14ft Hopper (with grid) track
Total weight:		22,000kg (48,502lbs)	24,900kg (54,895lbs)
Transport	Length	17.05m (55' 11")	15.55m (51')
	Width	2.8m (9' 2")	2.8m (9' 2")
	Height	3.65m (12')	3.4m (11' 2")
Working	Length	16.64m (54' 7")	16.64m (54' 7")
	Width	16.2m (53' 2")	16.2m (53' 2")
	Height	5.12m (16' 10")	5.12m (16' 10")
Screenbox:		3.3m x 1.5m (11' x 5')	3.3m x 1.5m (11' x 5')
Power unit:		Diesel / Hydraulic	Diesel / Hydraulic
Plant Colour:		RAL 5021, RAL 7024 & RAL 9005	RAL 5021, RAL 7024 & RAL 9005

(Weights & 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")
- Engine protection shutdown system
- Power unit featuring a transverse engine arrangement to aid access & serviceability
- Heavy duty single shaft incline screenbox with adjustable angle
- Hydraulic screen tensioning
- Maximum mobility with heavy duty, low ground pressure crawler tracks
- Removable heavy duty pendant remote control system
- Quick set up time
- High performance hydraulic system - cast iron pumps & motors complete with hydraulic cooler
- Angle adjustable tipping grid with radio control double acting tipping grid rams
- Low profile double deck vibrating grid option with radio remote control tipping grid, angle adjustable & fully riveted construction
- Hydraulically folding conveyors for transport
- Fines conveyor drop down facility to aid bottom deck mesh access

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

Abbreviations:

T Track **W** Wheel



CHIEFTAIN 1400



HOPPER & GRID

Target area:	4.75m (15' 7") long x 2m (6' 7") wide
Grid aperture:	108mm (4.3")
Hopper capacity with grid:	5.35m ³ (7 cu. yd.) T
Hopper capacity with grid:	6.8m ³ (9 cu. yd.) W
Adjustable angle tipping grid with integral loading and wing plates	
Feed in height with grid:	3.7m (12' 2") (rear) T
Feed in height with grid:	3.89m (12' 9") (rear) W



Abbreviations:

T Track W Wheel



CHIEFTAIN 1400



SCREENBOX

3.3m x 1.5m (11' x 5') 2 deck incline screen
 Highly aggressive screen drive
 Grease filled 4 bearing screenbox

3.3m x 1.5m (11' x 5') top deck
 3m x 1.5m (10' x 5') bottom deck

Hydraulic screen angle adjustment: 27° - 37°
 Combination side & end tensioned top deck
 End tensioned bottom deck
 Galvanised maintenance platforms on 3 sides of the screenbox
 Hydraulic screen tensioning on end tensioned sections
Speed: 1140rpm **Throw:** 6mm



Abbreviations:

 Track  Wheel



CHIEFTAIN 1400



CONVEYORS

FEED CONVEYOR

1050mm (3' 5") 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 (3' 5") 3 ply plain belt

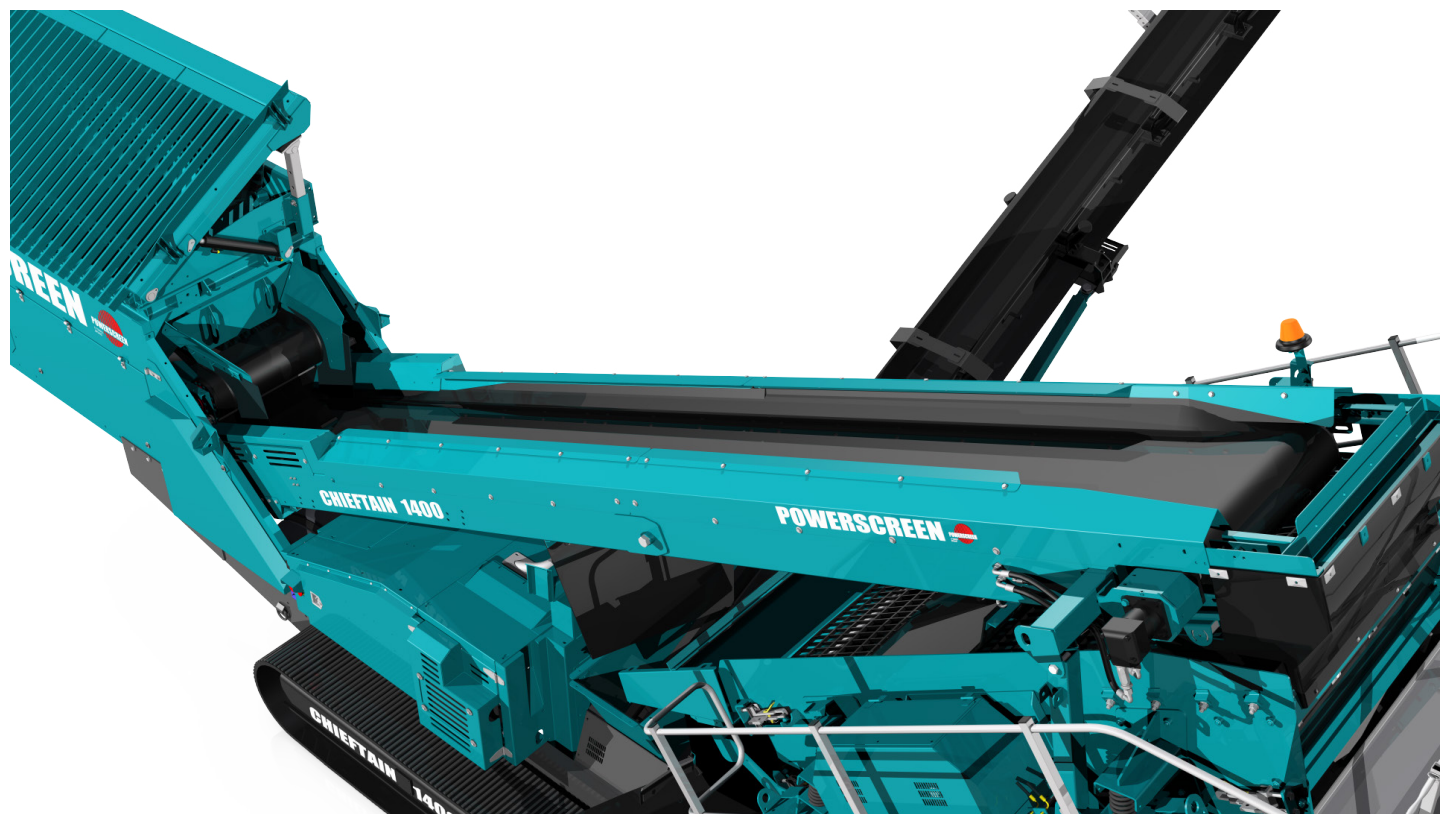
8.6m (28' 3") drum centres ^T

286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

Hydraulically adjustable conveyor, fully skirted & sealed

Fixed speed



Abbreviations:

^T Track ^W Wheel



CHIEFTAIN 1400



CONVEYORS

FINESIZE - TAIL CONVEYOR

1200mm (3' 11") wide 3 ply plain belt

5.91m (19' 5") drum centres

286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

3.93m (12' 11") stockpile height

90m³ (118 cu. yd.) stockpile volume

T

4.12m (13' 6") stockpile height

104m³ (136 cu. yd.) stockpile volume

W

Fixed speed

Hydraulically folding

Chevron belt as option

Variable to 24°



Abbreviations:

T Track W Wheel



CHIEFTAIN 1400



CONVEYORS

MIDSIZE & OVERSIZE SIDE CONVEYORS

650mm (2' 2") wide 3 ply chevron belt

9.07m (29' 9") drum centres

286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

4.5m (14' 9") stockpile height **T**

136m³ (178 cu. yd.) stockpile volume

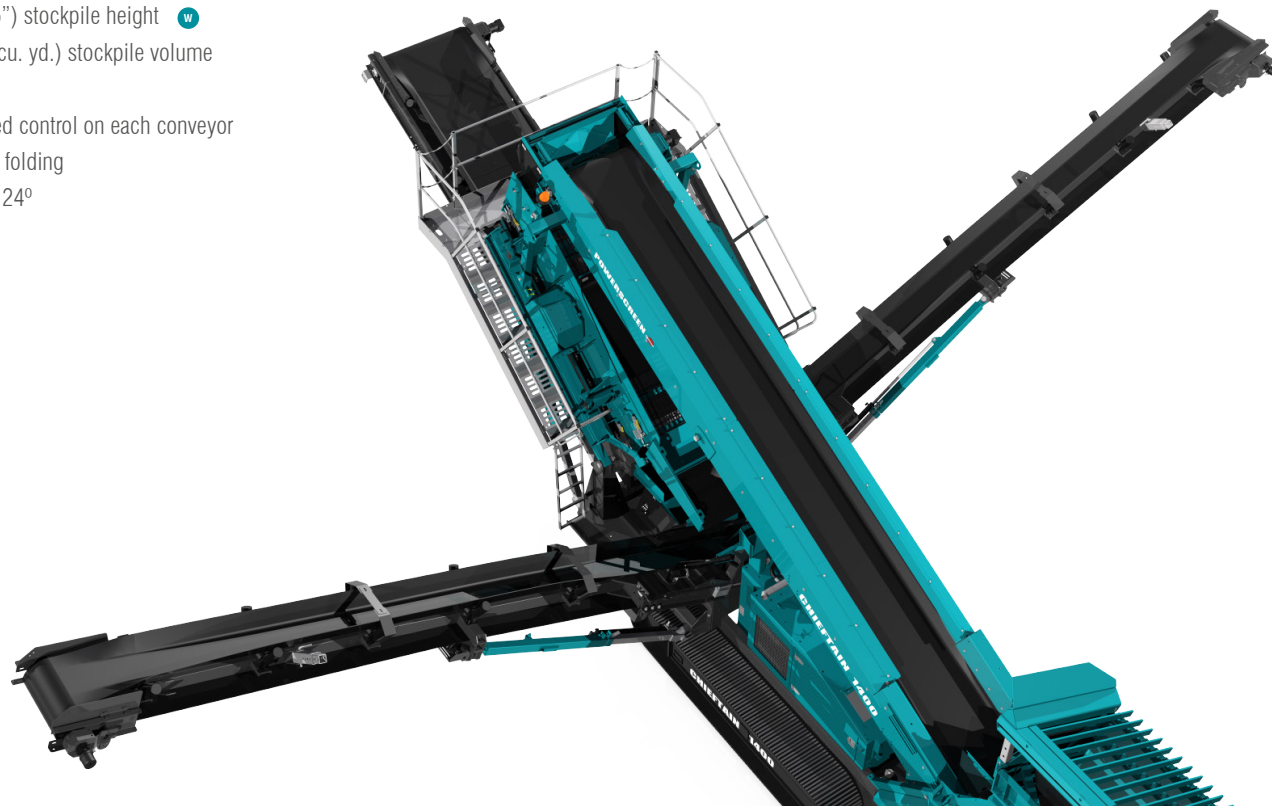
4.69m (15' 5") stockpile height **W**

153m³ (200 cu. yd.) stockpile volume

Variable speed control on each conveyor

Hydraulically folding

Fixed angle: 24°



Abbreviations:

T Track **W** Wheel



CHIEFTAIN 1400



POWER UNIT & HYDRAULICS

Engine Tier 3 Equivalent:

CAT C4.4

Performance:

83 kW (111.3hp) @ 2200rpm

Engine Stage IIIA Constant Speed:

CAT C4.4 CS

Performance:

98 kW (131hp) @ 1800rpm

Engine Tier 4 / Stage IV:

CAT C4.4

Performance:

82 kW (110hp) @ 2200rpm

Tank Capacities:

Fuel: 336 L (88 US Gal)

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

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

Pumps:

Flywheel pump: Cast iron tandem 33cc/rev

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

Constant Speed Pumps:

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

PTO pump: Cast iron tandem 29/29cc/rev

Motors:

Belt feeder: Cast iron 160cc/rev

Main conveyor: Cast iron 630cc/rev

Tail conveyor: Cast iron 500cc/rev

Side conveyors: Cast iron 400cc/rev

Screen motor: Cast iron 56cc/rev



Abbreviations:

T Track **W** Wheel



CHIEFTAIN 1400



TRACKS

Track width: 500mm (1' 8")

Sprocket centres: 2956mm (9'8")

Gradability degrees: 30.34°

Gearbox ratio: 1:154

Hydraulic motor: 50.9cc/rev

Approximate speed: 0.9kph (0.56mph)

Total flow per track: 69 Lpm (approx.)



Abbreviations:

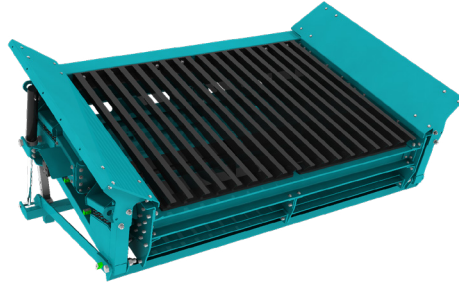
 Track  Wheel



CHIEFTAIN 1400



↓ 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

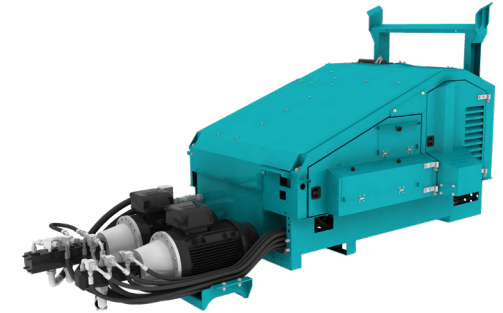
Circuit: Run in series after to main conveyor circuit

Minimum feed in height with grid (rear): 3.8m (12' 6") with grid T

Minimum feed in height with grid (rear): 3.99m (13' 1") with grid W

Increase in transport height Track & Wheel: +250mm (9.8")

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



DUAL POWER

Dual Power System:

2 of electric motors: 30 kW (40hp) & 30 kW (40hp) 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.

Abbreviations:

T Track W Wheel



CHIEFTAIN 1400



↓ OPTIONS

OTHER OPTIONS

- Custom colour machine
- Auto lubrication system
- Radio controlled tracking
- Quick release wedge screen tensioning (side tension only)
- Extra coupling facility
- Full dust suppression
- Roll-in bogie
- Shredder
- Wheeled chassis machine
- Powerscreen Pulse
- Vibrating grid discharge chute
- Adjustable hopper door
- Anti-rollback on main conveyor
- Fuel save option
- Full side tensioned top deck
- Bottom deck self cleaning flexi mesh
- Crusher feed chute (when double deck vibrating grid is selected)



Abbreviations:

T Track W Wheel



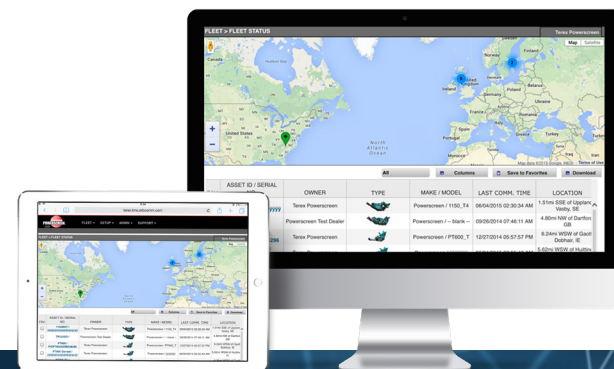
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POWERSCREEN PULSE

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**



Abbreviations:

 Track  Wheel



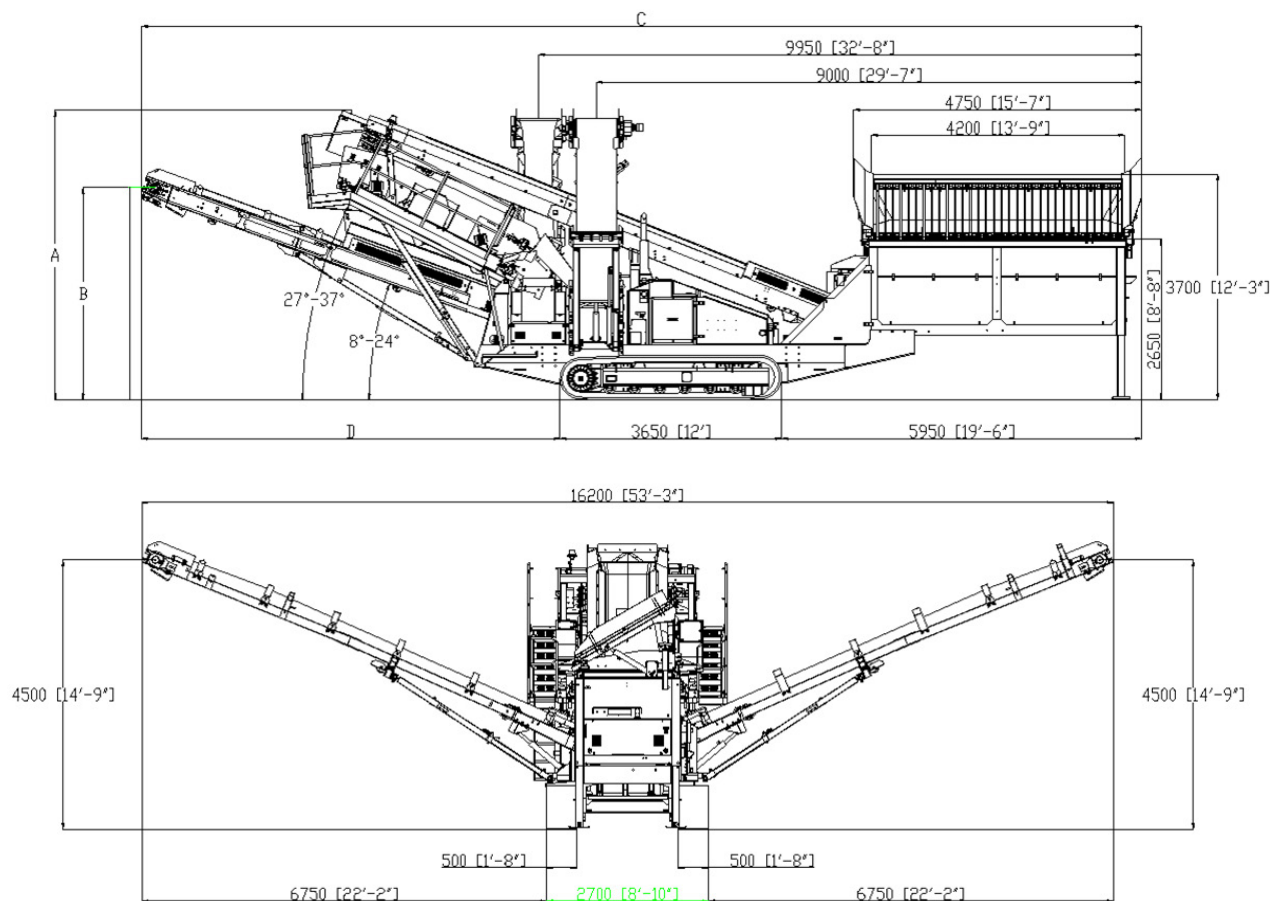
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DIMENSIONS

DIMENSION (MM)	27 DEG	30 DEG	33 DEG	37 DEG
A	4759	4871	4974	5112
B	3144	3144	3926	3926
C	16637	16637	16333	16333
D	7037	7037	6733	6733

Figure 1: Chieftain 1400 2 Deck Track - Working Position



Abbreviations:

T Track W Wheel

MORE DIMENSIONS OVERLEAF

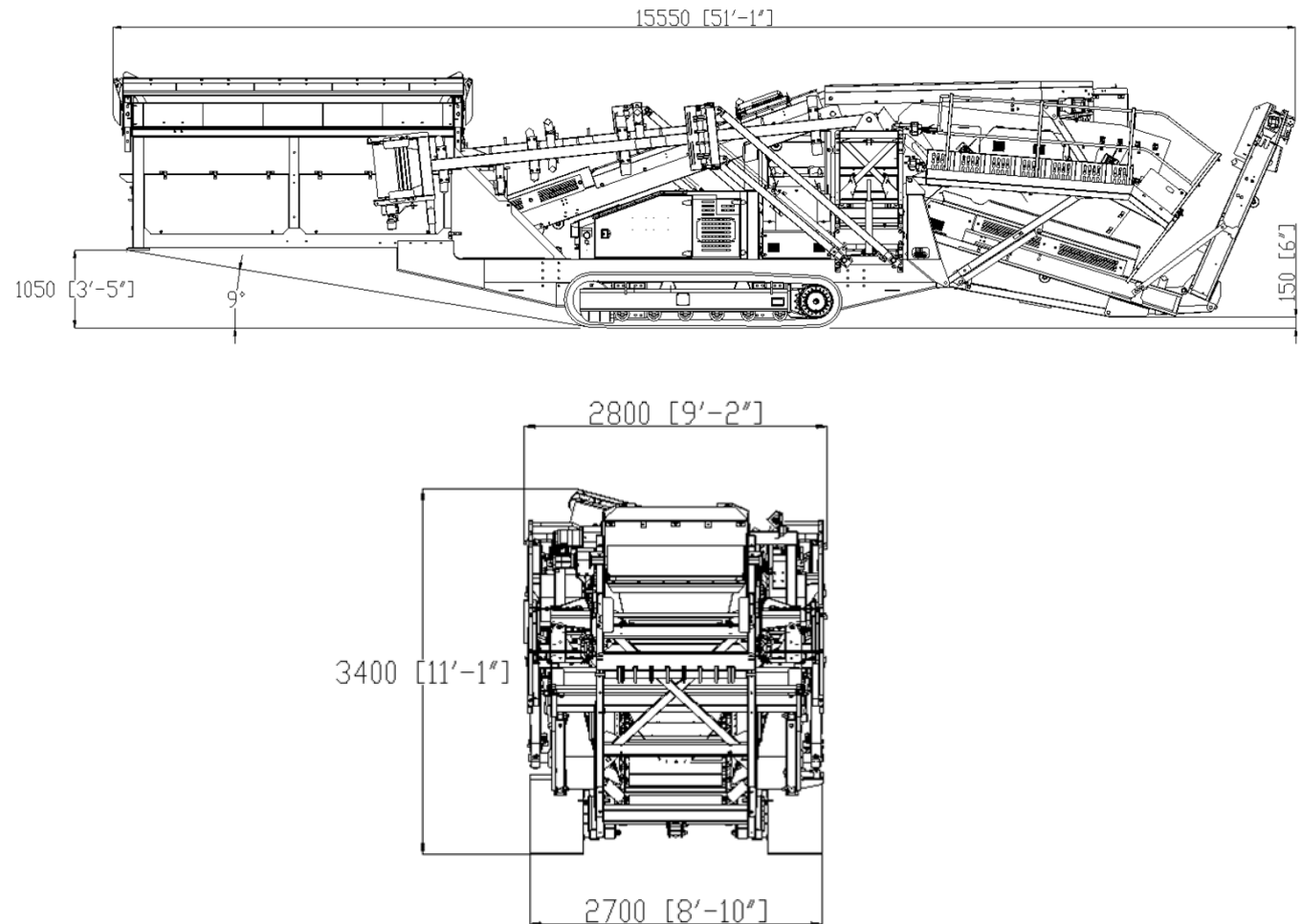


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DIMENSIONS

Figure 2: Chieftain 1400 2 Deck Track - Transport Position



Abbreviations:

 Track  Wheel

MORE DIMENSIONS OVERLEAF



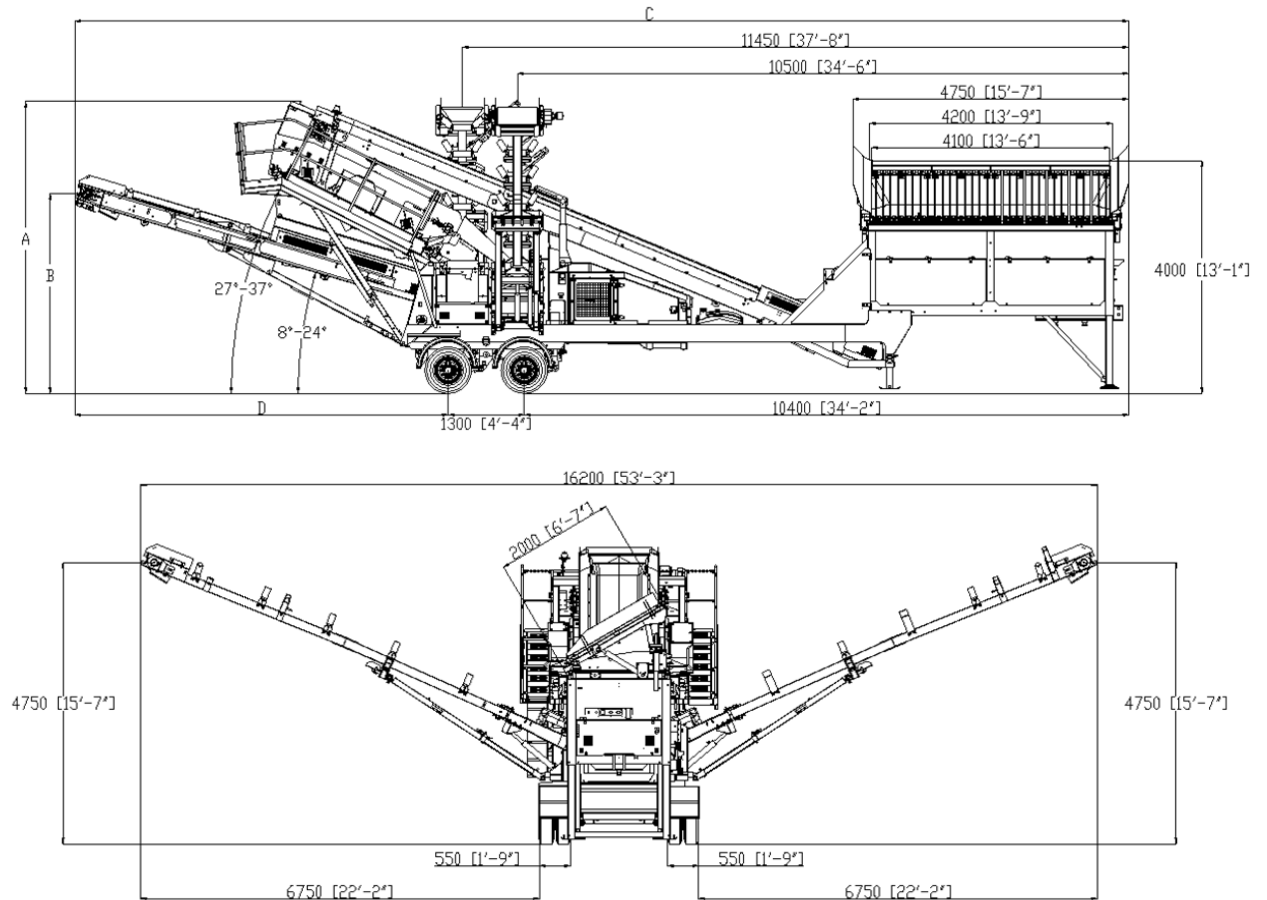
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DIMENSIONS

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Figure 3: Chieftain 1400 2 Deck Wheel - Working Position



Abbreviations:

T Track **W** Wheel

MORE DIMENSIONS OVERLEAF

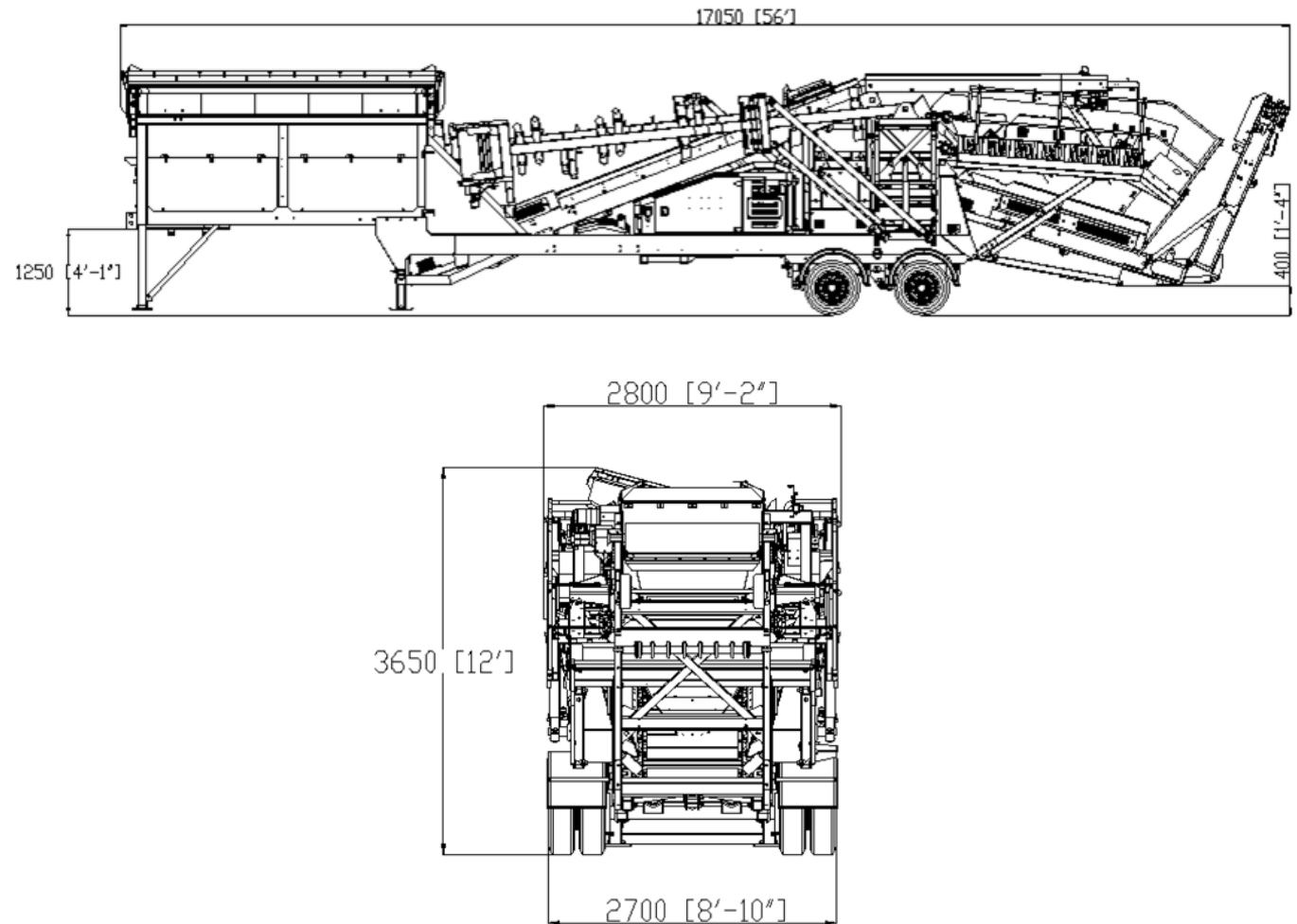


CHIEFTAIN 1400



DIMENSIONS

Figure 4: Chieftain 1400 2 Deck Wheel - Transport Position



Abbreviations:

 Track  Wheel



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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