

POWERSCREEN® CHIEFTAIN 2100X

3 DECK INCLINE SCREEN



TECHNICAL SPECIFICATION - REV 18 01/05/2025





CHIEFTAIN 2100X 3 DECK



OVERVIEW

SPECIFICATION

	14ft Hopper (with grid) track
Total weight	37,400kg (82,453lbs)
Transport	Length 18.7m (61' 4") Width 3m (9' 10") Height 3.55m (11' 8")
Working	Length 19.17m (62' 11") Width 18.25m (59' 11")
(screenbox at 30°)	Height 6.72m (22' 1")
Screenbox	6.1m x 1.55m (20' 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 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 3 DECK



HOPPER & GRID

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

Grid aperture: 108mm (4.3")

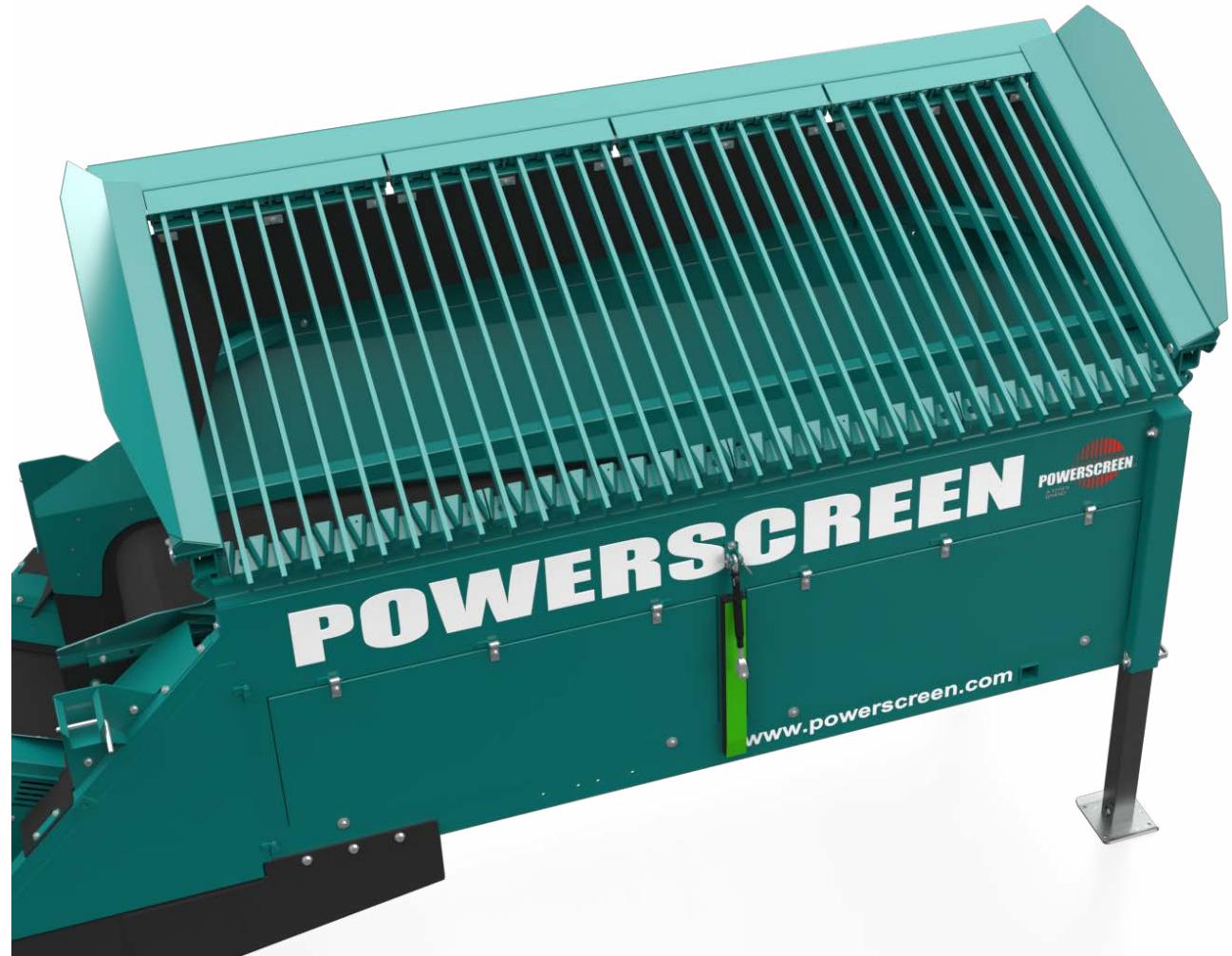
Hopper capacity with tipping grid: 6.9m³ (9 cu. yd.)

Hopper capacity without tipping grid: 6.2m³ (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 3 DECK



SCREENBOX

6.1m x 1.55m (20' x 5') 3 deck incline screen

Highly aggressive screen drive

Oil filled 2 bearing screenbox

6.1m x 1.55m (20' x 5') top & middle deck

5.55m x 1.52m (18' x 5') bottom deck

5 of media sections (side tension) top deck

5 of media sections (side tension) middle deck

3 of media sections (end tension) bottom deck

Hydraulic screen angle adjustment 20° - 30°

Hydraulic screen tensioning on bottom deck

Galvanised walkways on 3 sides of the screenbox

Speed: 1100rpm (standard)

Throw: 6.5 - 7mm (standard)





CHIEFTAIN 2100X 3 DECK



CONVEYORS

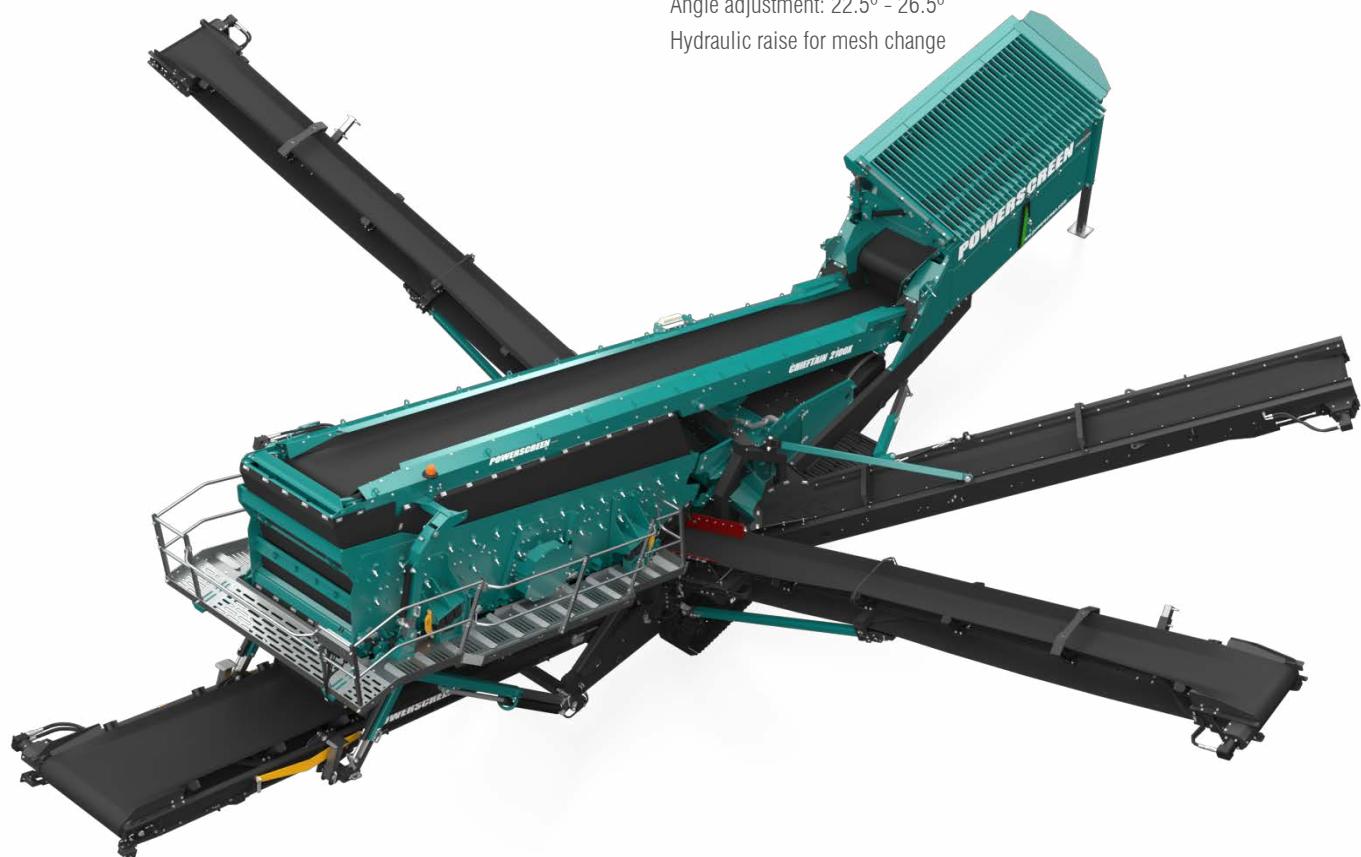
FEED CONVEYOR

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 3 DECK

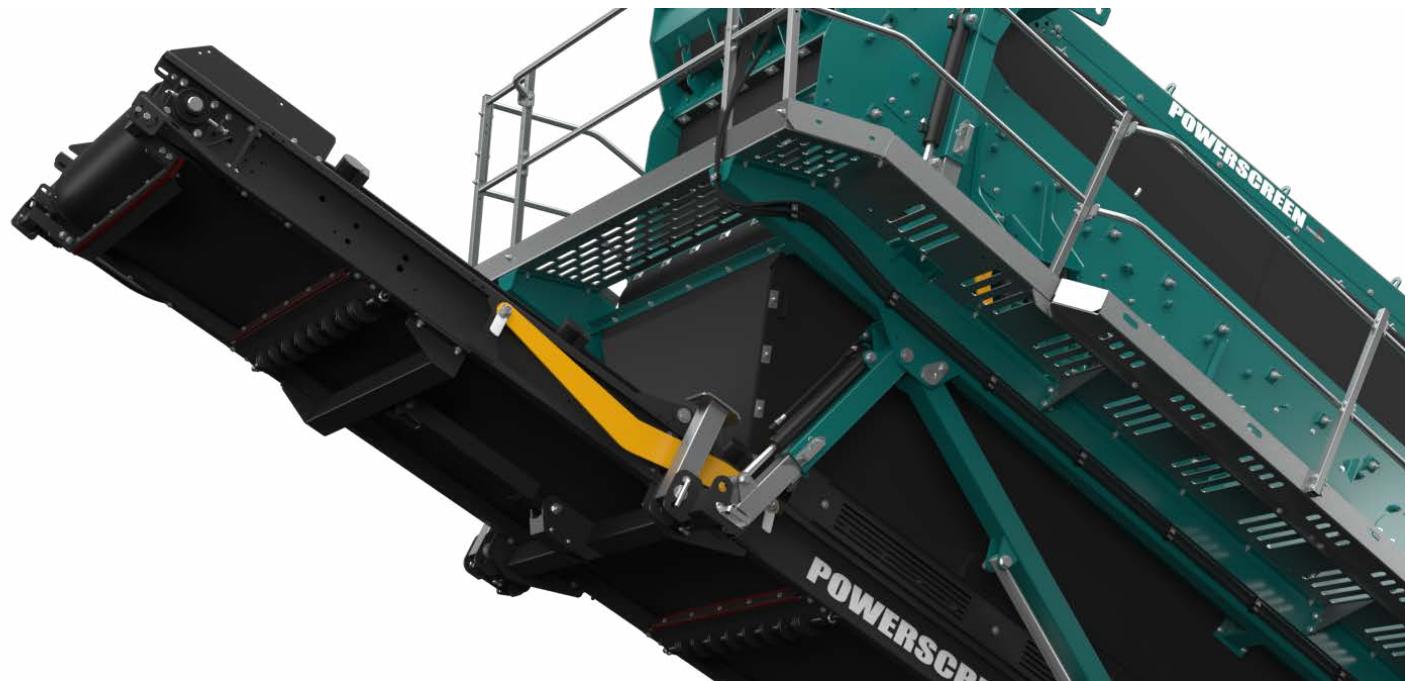


CONVEYORS

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
127.5m³ (167 cu. yd.) stockpile volume
Hydraulically folding
Chevron belt as option
Angle adjustment: 18° - 28°
Set-down for mesh change





CHIEFTAIN 2100X 3 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)

4.97m (16' 4") stockpile height

183m³ (239 cu. yd.) stockpile volume

Individual variable speed control

Hydraulically folding

Fixed angle: 24°





CHIEFTAIN 2100X 3 DECK



CONVEYORS

OVERSIZE - AUXILIARY CONVEYOR (STANDARD)

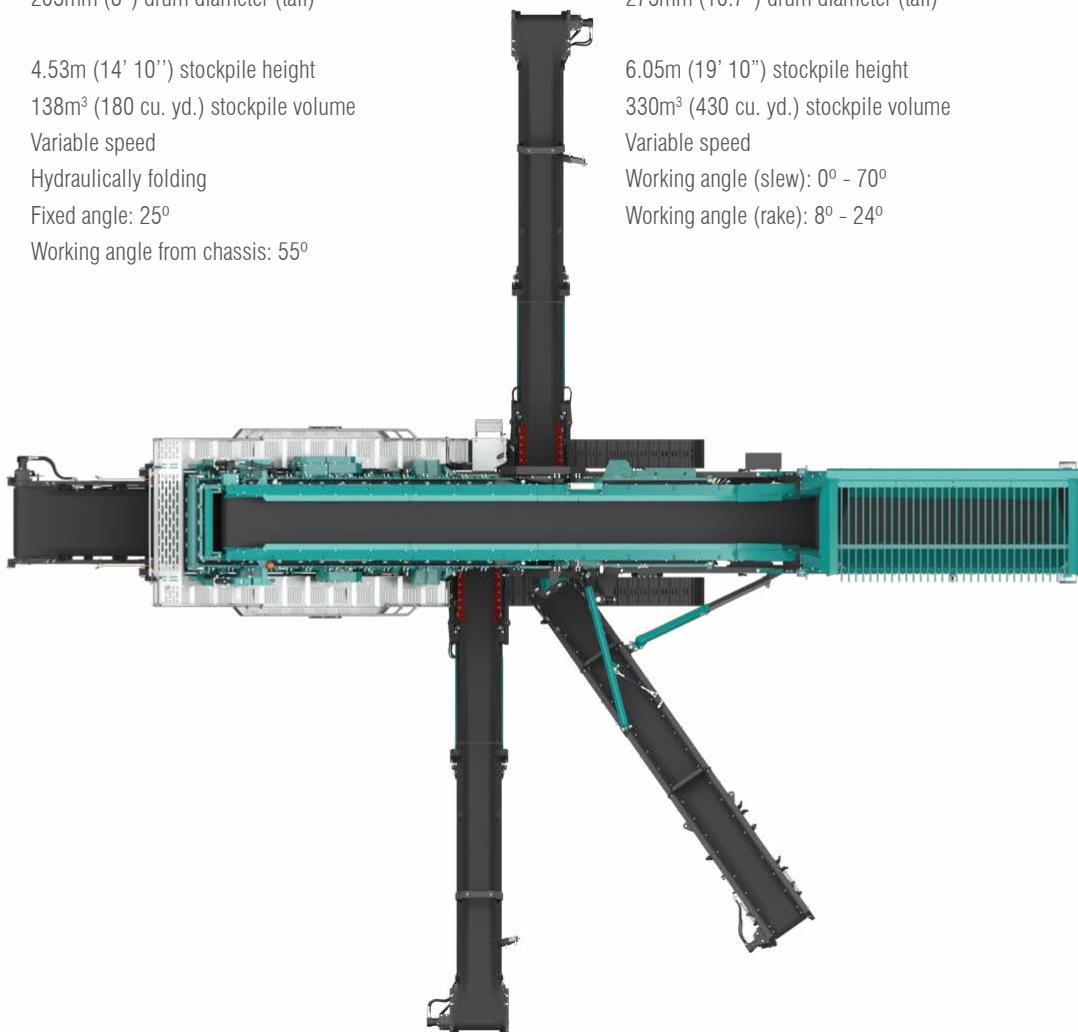
650mm (26") wide 3 ply chevron belt
7.83m (25' 8") drum centres (standard length)
286mm (11.3") drum diameter (drive)
203mm (8") drum diameter (tail)

4.53m (14' 10") stockpile height
138m³ (180 cu. yd.) stockpile volume
Variable speed
Hydraulically folding
Fixed angle: 25°
Working angle from chassis: 55°

OVERSIZE - AUXILIARY CONVEYOR (EXTENDED)

500mm (20") wide 3 ply chevron belt
11.09m (36' 4") drum centres (extended length)
289mm (11.4") drum diameter (drive)
273mm (10.7") drum diameter (tail)

6.05m (19' 10") stockpile height
330m³ (430 cu. yd.) stockpile volume
Variable speed
Working angle (slew): 0° - 70°
Working angle (rake): 8° - 24°





CHIEFTAIN 2100X 3 DECK



POWER UNIT & HYDRAULICS

Engine Tier 3 Equivalent:

CAT C4.4

Performance:

97 kW (130hp) @ 2200rpm

Engine Tier 4F / Stage IV:

CAT C4.4

Performance:

102 kW (137hp) @ 2200rpm

Engine Stage V:

Cat C4.4

Performance:

102kW (110hp) @ 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

Constant Speed Pumps:

Flywheel pump: Cast iron quad 73/41/41/33cc/rev

PTO pump: Cast iron tandem 29/29cc/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

Auxiliary conveyors: Cast iron 400cc/rev (500cc for extended)

Screen: Cast iron 80cc/rev



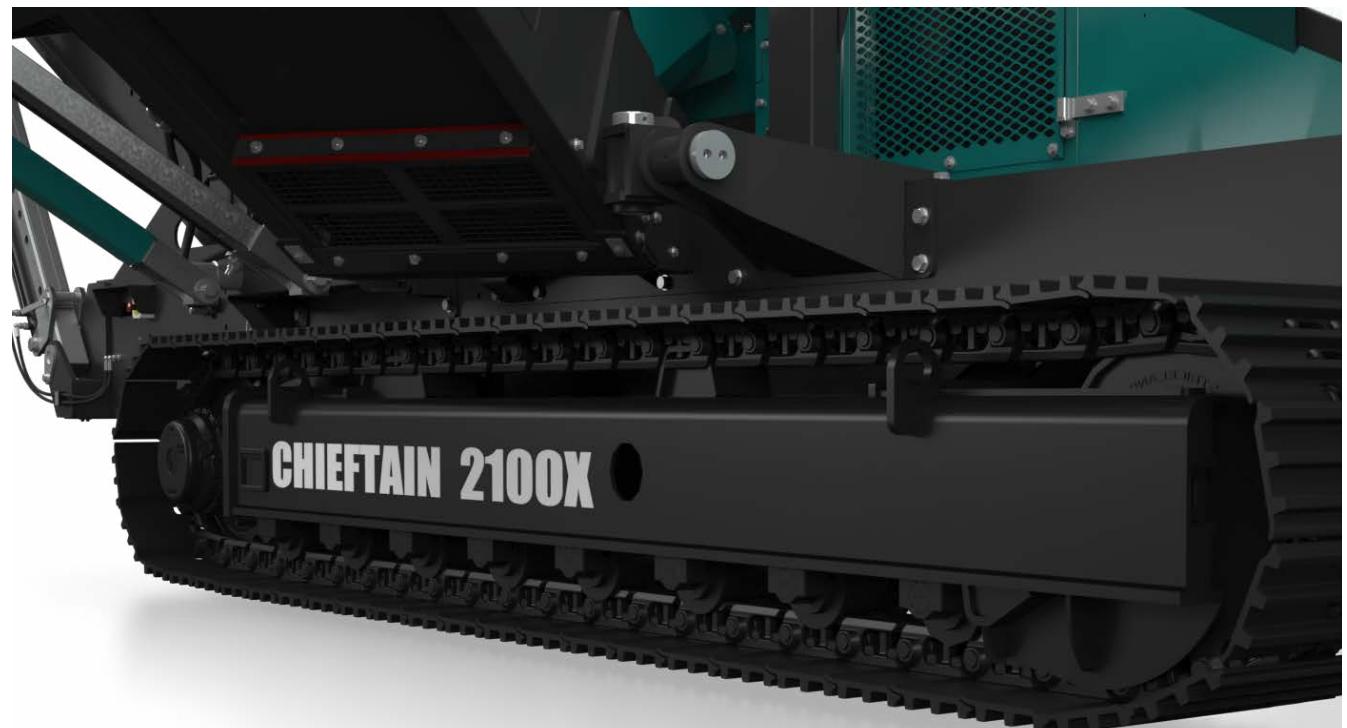


CHIEFTAIN 2100X 3 DECK



TRACKS

Track width:	500mm (1' 8")
Sprocket centres:	3838mm (12' 7")
Gradability degrees:	23.9°
Gearbox ratio:	1:166
Hydraulic motor:	85.9cc/rev
Approximate speed:	0.5kph (0.35mph)
Total flow per track:	69Lpm (approx.)





CHIEFTAIN 2100X 3 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: 59cc/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 IE3 as standard

Note: This option may alter transport dimensions and feed access.

For further details please contact engineering for detailed drawings and dimensions.





CHIEFTAIN 2100X 3 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 and/or middle 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
- Hydraulically adjustable extendable recirculating conveyor





CHIEFTAIN 2100X 3 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.

The image illustrates the Powerscreen Pulse software interface, showing fleet status, asset details, and a map of tracked locations. Below the interface, five key features are highlighted:

- AVAILABLE ANYWHERE AND AT ANY TIME** (Icon: Earth with a lock)
- DASHBOARD DISPLAY** (Icon: Bar chart)
- FLEET OVERVIEW** (Icon: Network of nodes)
- WEEKLY REPORT DIRECT TO YOUR INBOX** (Icon: Envelope with an arrow)
- GPS: MACHINE TRACKING** (Icon: Map with a location pin)
- REPORTING UTILISATION, PERFORMANCE & PART SPECIFIC** (Icon: Line graph)



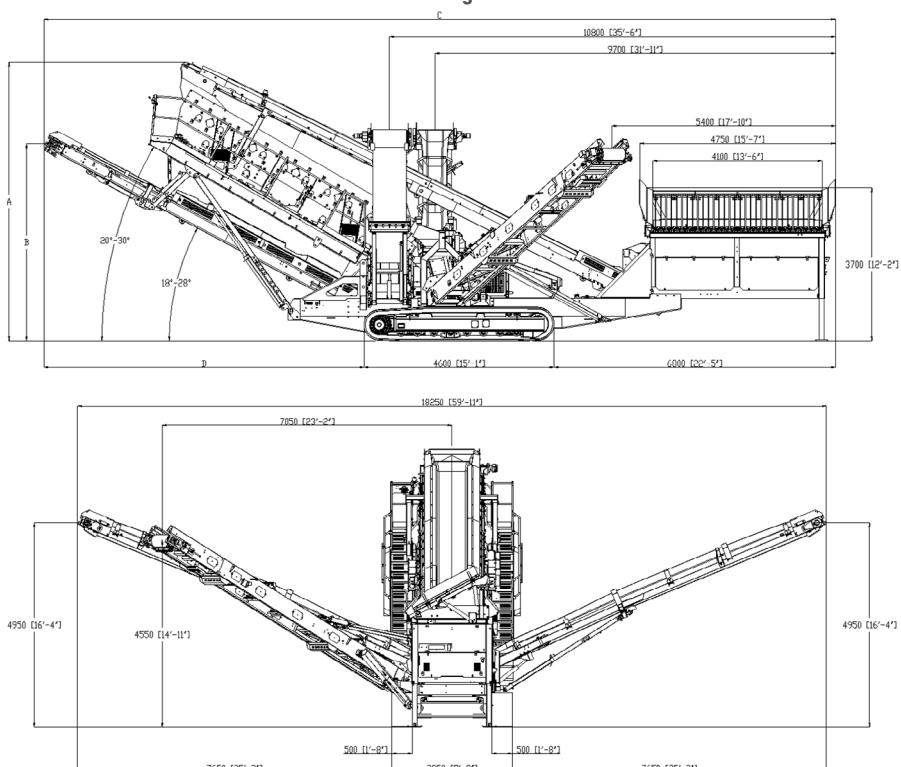
CHIEFTAIN 2100X 3 DECK



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	19700	19550	19370	19170
D	8300	8150	7970	7770

Figure 1: Chieftain 2100X 3 Deck
Standard Length Auxiliary Conveyor
Working Position



MORE DIMENSIONS OVERLEAF

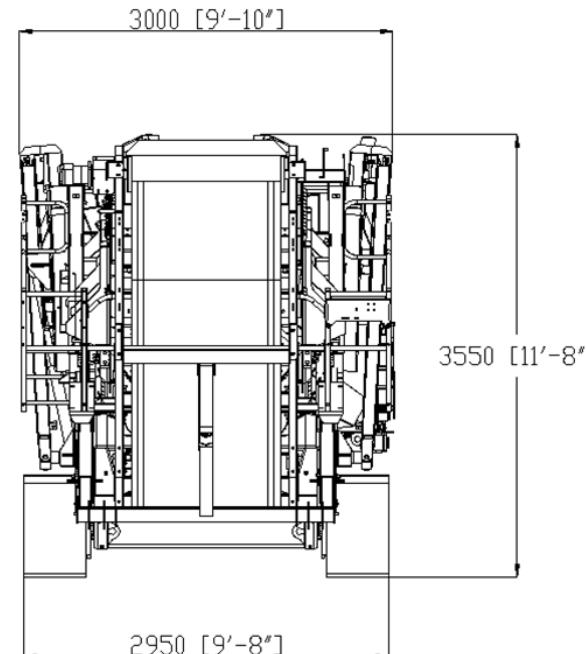
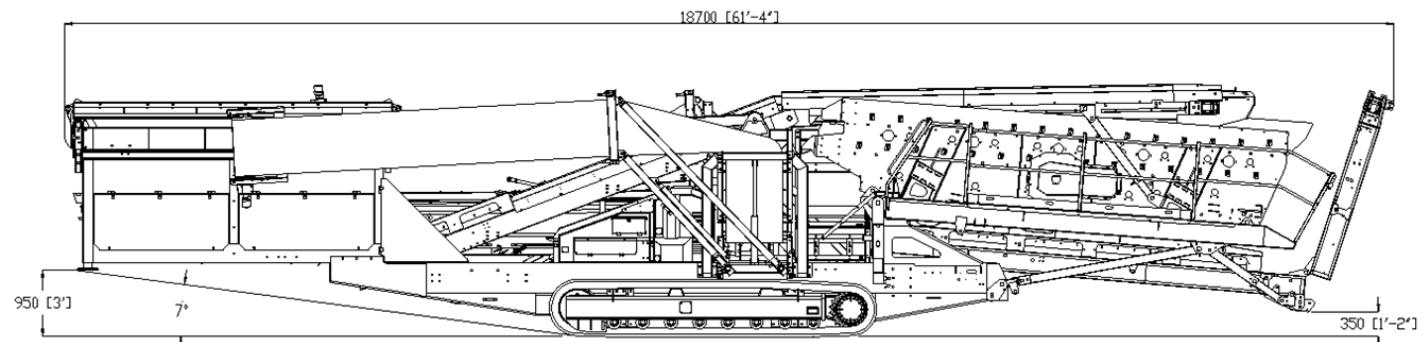


CHIEFTAIN 2100X 3 DECK



DIMENSIONS

Figure 2: Chieftain 2100X 3 Deck
Standard Length Auxiliary Conveyor
Transport Position



MORE DIMENSIONS OVERLEAF



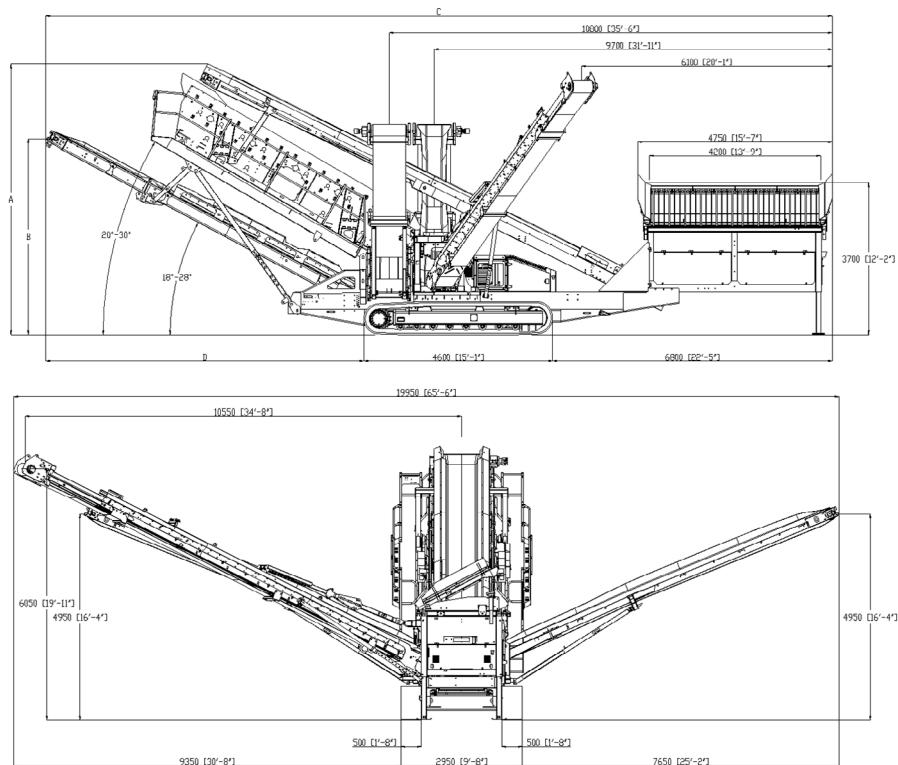
CHIEFTAIN 2100X 3 DECK



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	19700	19550	19370	19170
D	8300	8150	7970	7770

Figure 3: Chieftain 2100X 3 Deck
Hydraulic Extended Length Auxiliary Conveyor
Working Position



MORE DIMENSIONS OVERLEAF

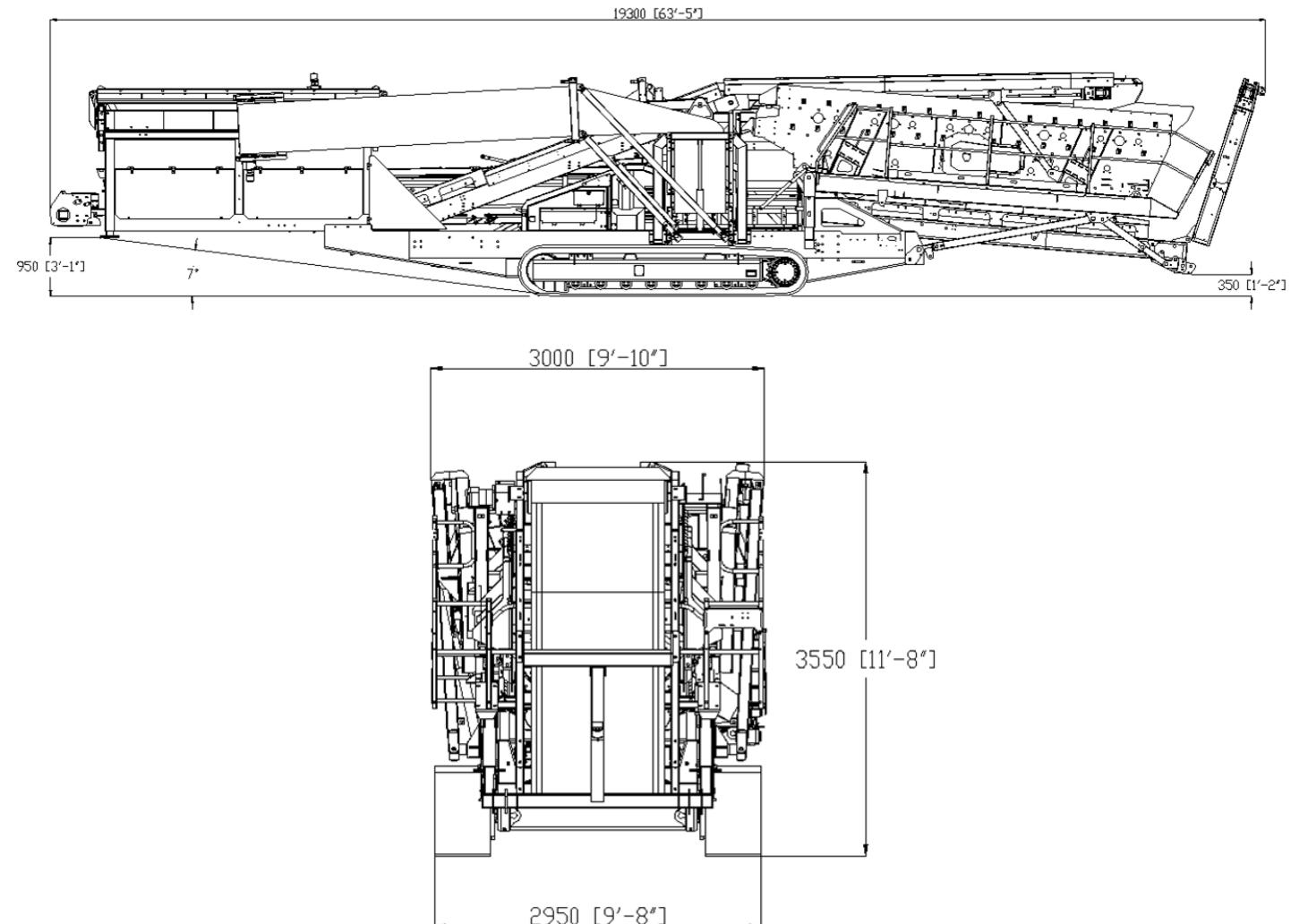


CHIEFTAIN 2100X 3 DECK



DIMENSIONS

Figure 4: Chieftain 2100X 3 Deck
Hydraulic Extended Length Auxiliary Conveyor
Transport Position



MORE DIMENSIONS OVERLEAF



CHIEFTAIN 2100X 3 DECK



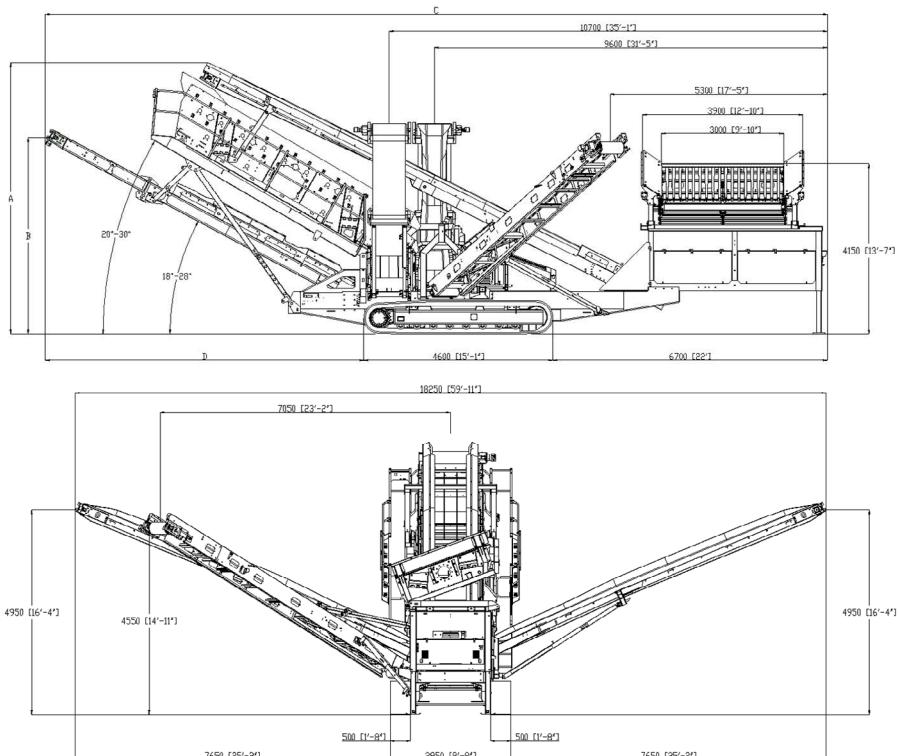
DIMENSIONS

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 5: Chieftain 2100X 3 Deck

Double Deck Vibrating Grid

Standard Length Auxiliary Conveyor - Working Position



MORE DIMENSIONS OVERLEAF



CHIEFTAIN 2100X 3 DECK

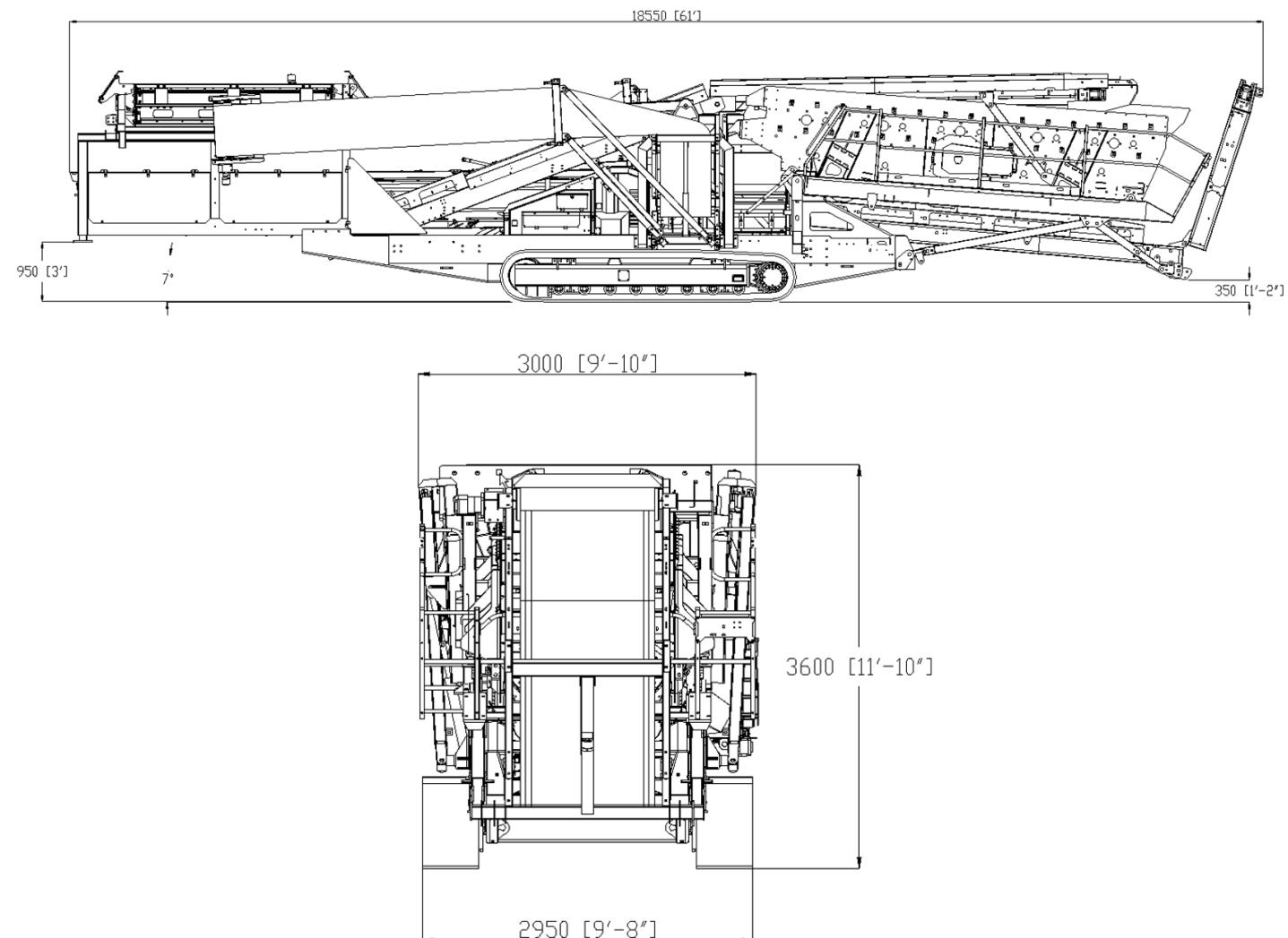


DIMENSIONS

Figure 6: Chieftain 2100X 3 Deck

Double Deck Vibrating Grid

Standard Length Auxiliary Conveyor - Transport Position



MORE DIMENSIONS OVERLEAF



CHIEFTAIN 2100X 3 DECK



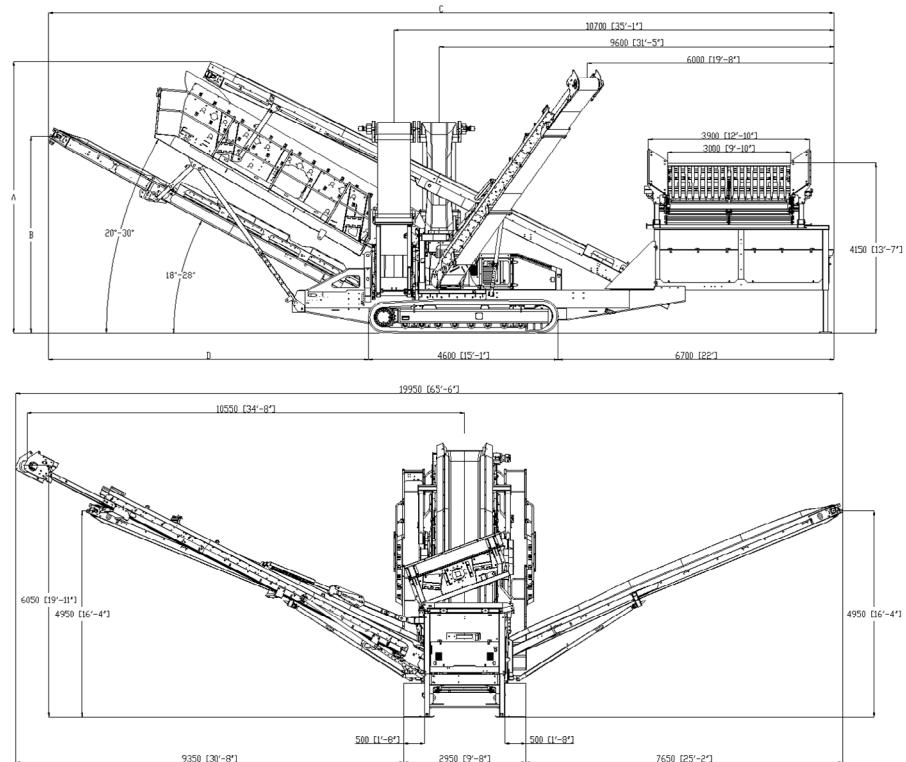
DIMENSIONS

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 7: Chieftain 2100X 3 Deck

Double Deck Vibrating Grid

Hydraulic Extended Length Auxiliary Conveyor - Working Position



MORE DIMENSIONS OVERLEAF



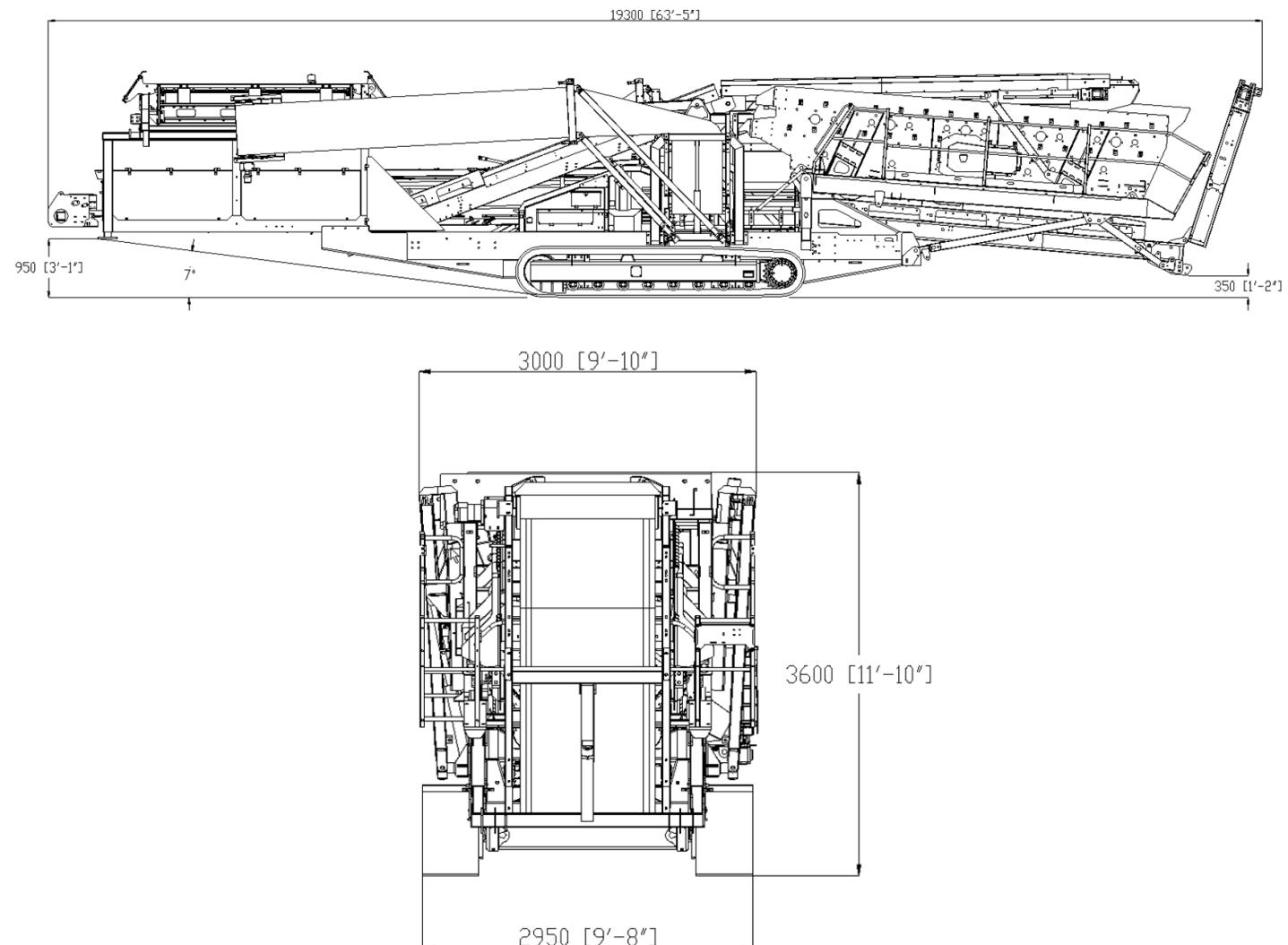
CHIEFTAIN 2100X 3 DECK

DIMENSIONS

Figure 8: Chieftain 2100X 3 Deck

Double Deck Vibrating Grid

Hydraulic Extended Length Auxiliary Conveyor - 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

