

# POWERSCREEN® CHIEFTAIN 2100X

3 DECK INCLINE SCREEN



TECHNICAL SPECIFICATION - REV 18 01/05/2025





## CHIEFTAIN 2100X 3 DECK



# OVERVIEW

### SPECIFICATION

	<b>14ft Hopper (with grid) track</b>	
<b>Total weight</b>	37,400kg (82,453lbs)	
<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 (62' 11")
	<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 3 DECK



## HOPPER & GRID

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

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

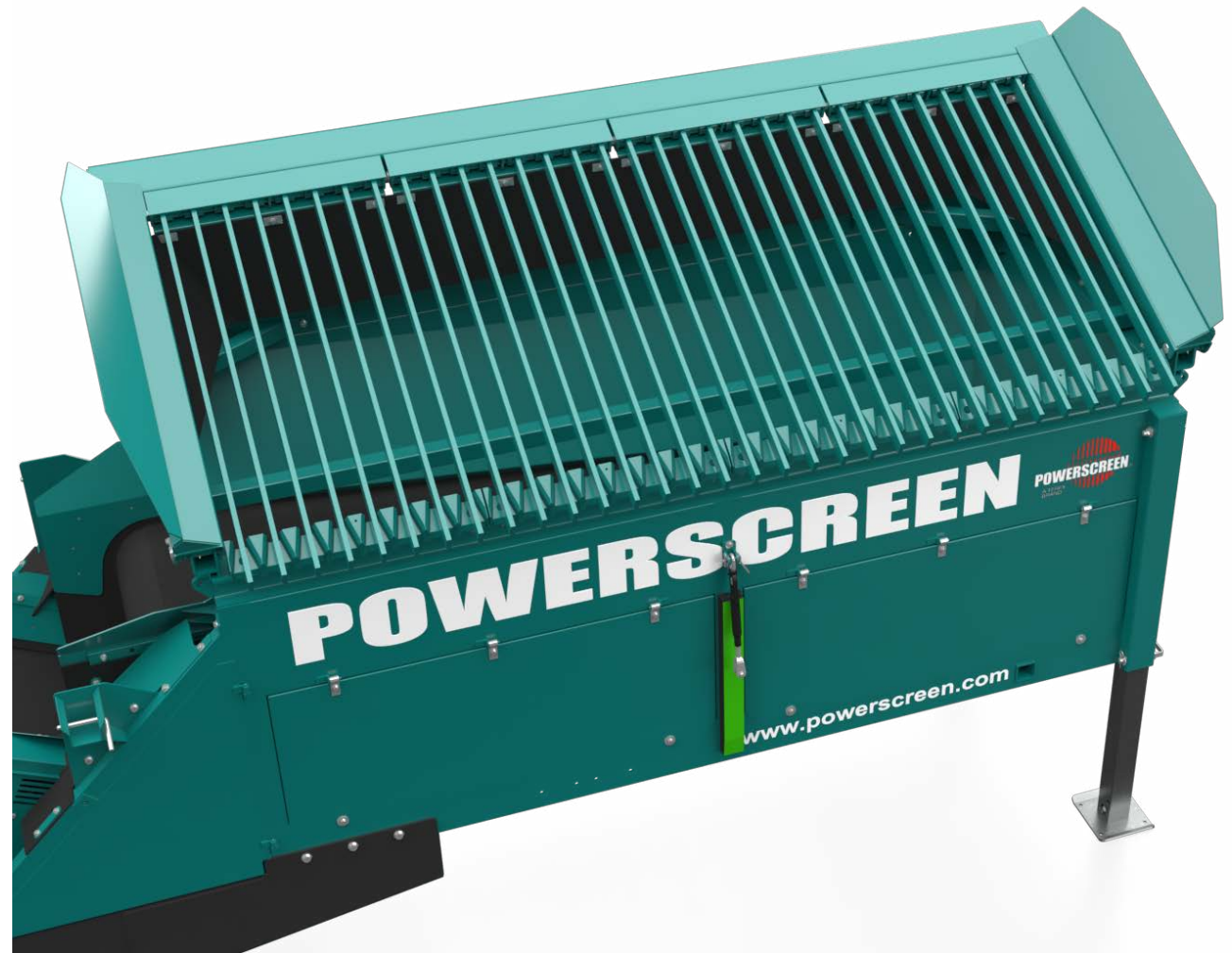
**Hopper capacity with tipping grid:** 6.9m<sup>3</sup> (9 cu. yd.)

**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 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

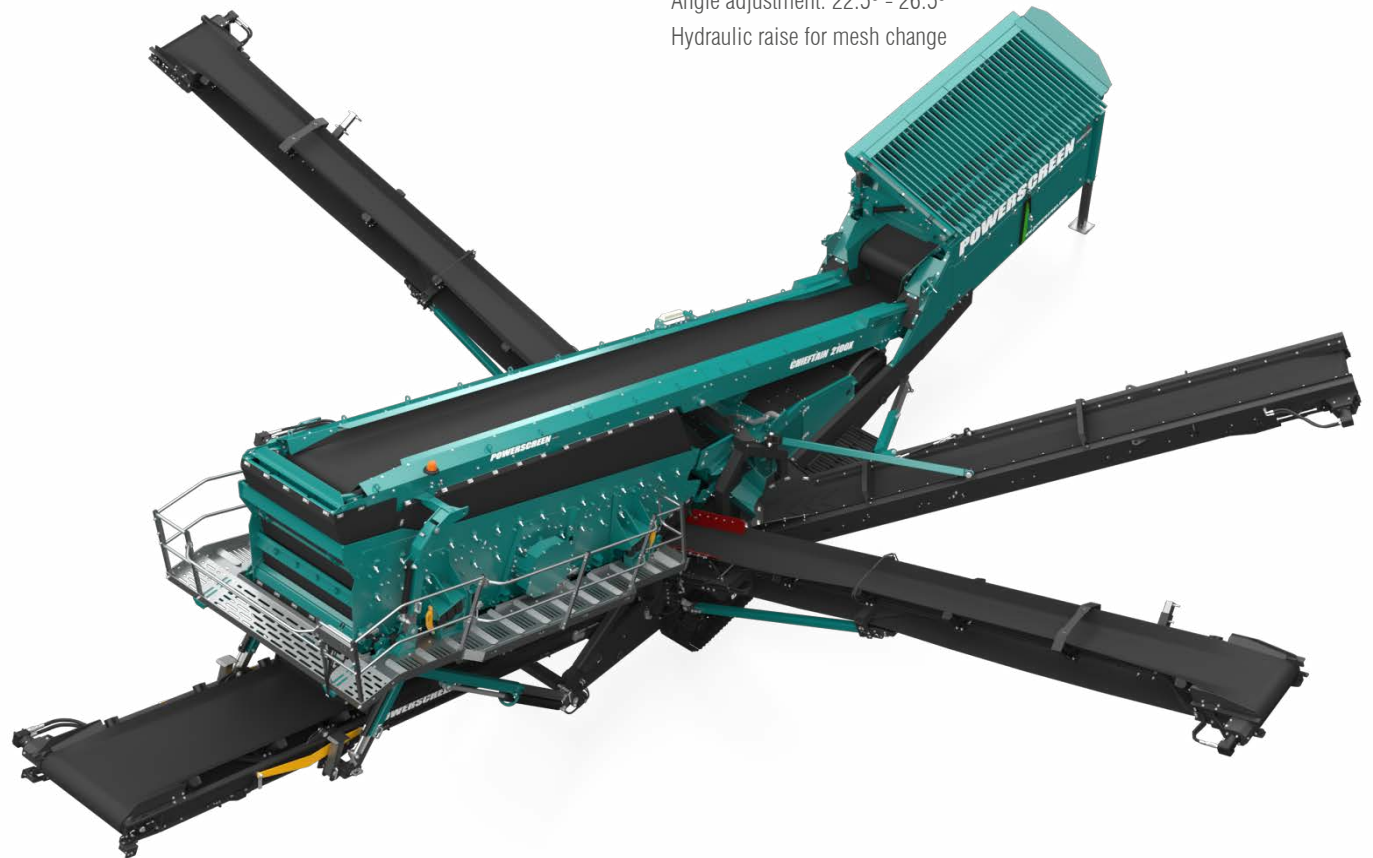
286mm (11.3") drum diameter (drive)

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

127.5m<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 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  
183m<sup>3</sup> (239 cu. yd.) stockpile volume  
Individual variable speed control  
Hydraulically folding  
Fixed angle: 24°





## CHIEFTAIN 2100X 3 DECK



# CONVEYORS

### OVERSIZE - AUXILIARY CONVEYOR (STANDARD)

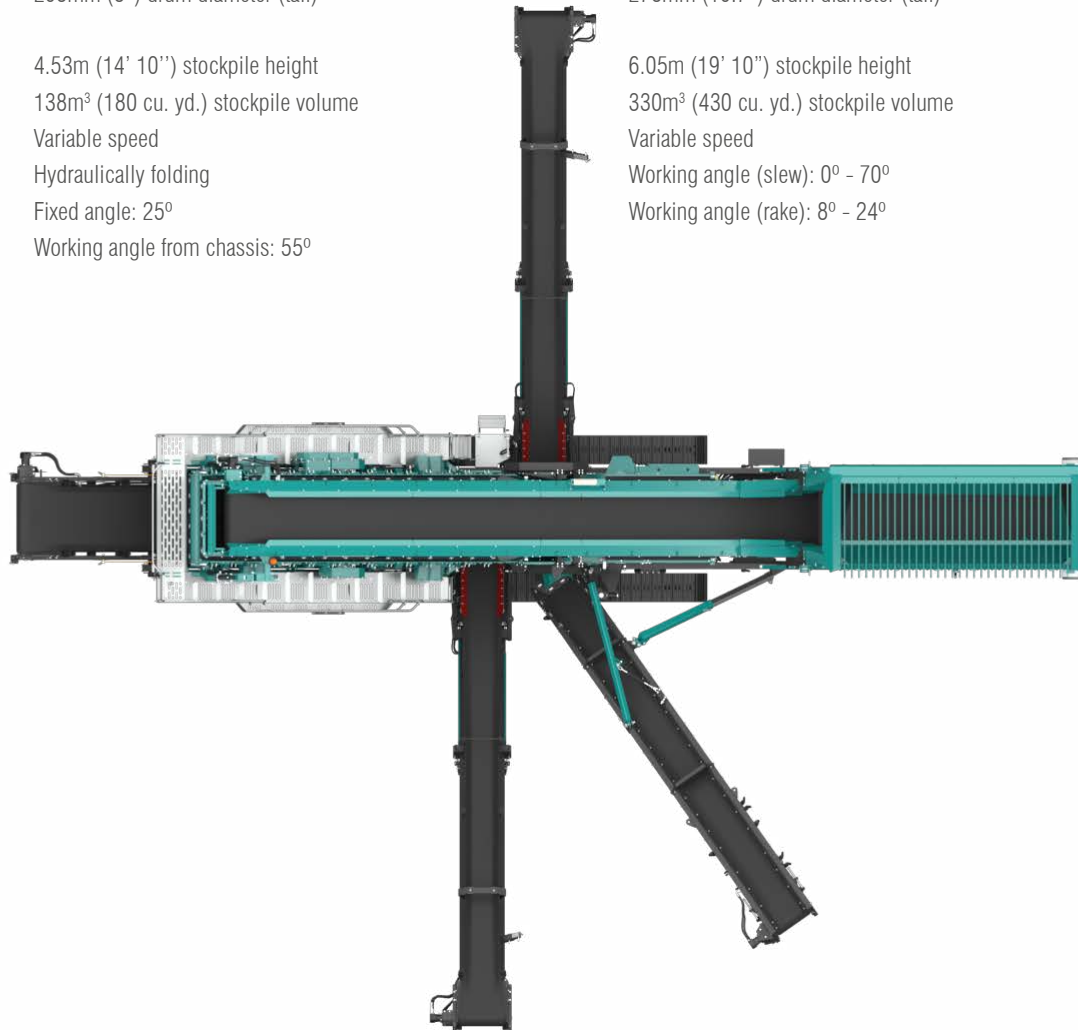
650mm (26") wide 3 ply chevron belt  
7.83m (25' 8") drum centres (standard length)  
286mm (11.3") drum diameter (drive)  
203mm (8") drum diameter (tail)

4.53m (14' 10") stockpile height  
138m<sup>3</sup> (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  
330m<sup>3</sup> (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



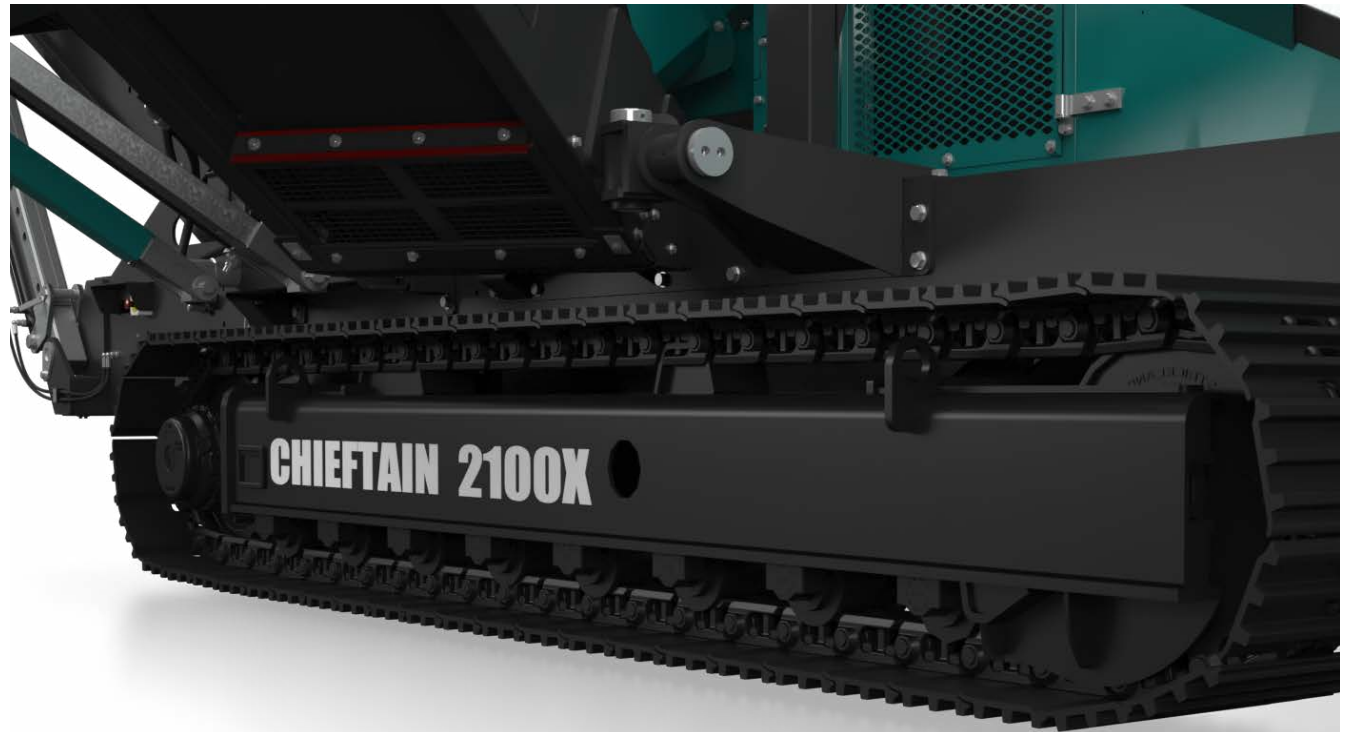


## CHIEFTAIN 2100X 3 DECK



## 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.



  
**AVAILABLE  
ANYWHERE  
AND AT ANY TIME**

  
**DASHBOARD  
DISPLAY**

  
**FLEET  
OVERVIEW**

  
**WEEKLY REPORT  
DIRECT TO YOUR  
INBOX**

  
**GPS: MACHINE  
TRACKING**

  
**REPORTING  
UTILISATION, PERFORMANCE  
& PART SPECIFIC**



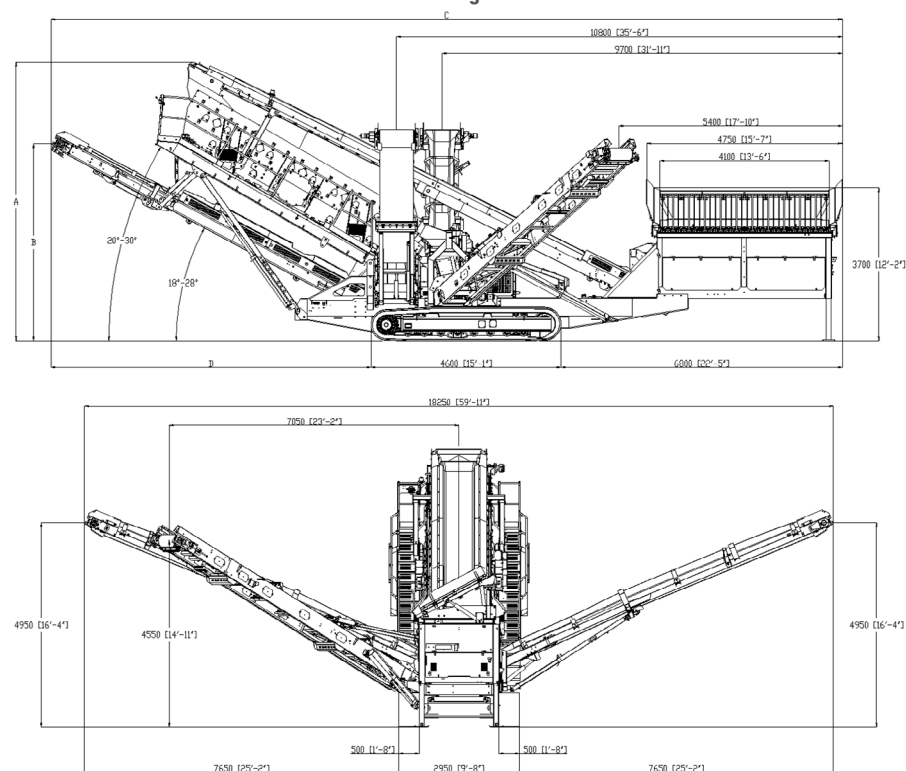


## DIMENSIONS

### CHIEFTAIN 2100X 3 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 3 Deck  
Standard Length Auxiliary Conveyor  
Working Position



MORE DIMENSIONS OVERLEAF

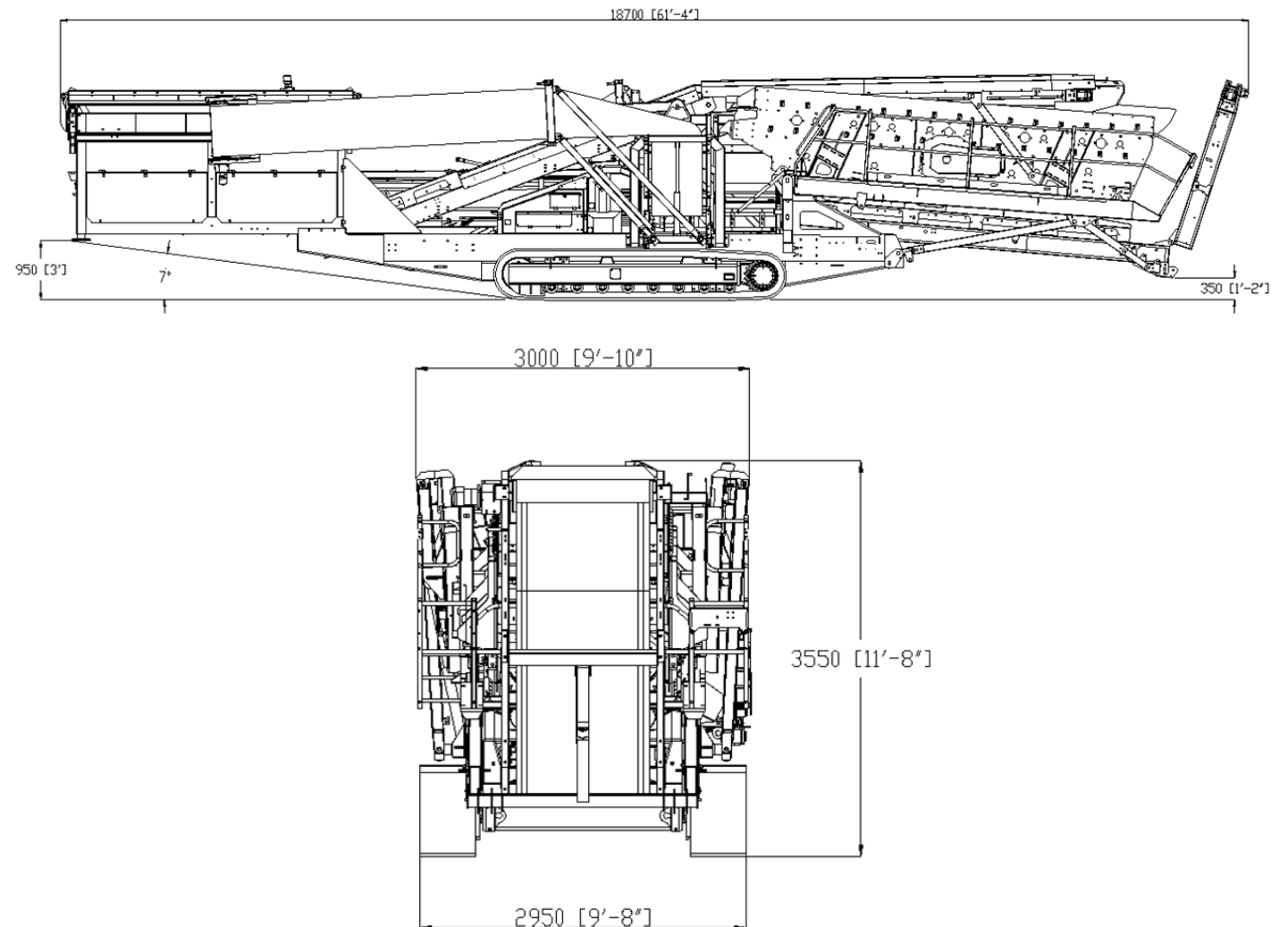


## CHIEFTAIN 2100X 3 DECK



## DIMENSIONS

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



**MORE DIMENSIONS OVERLEAF**

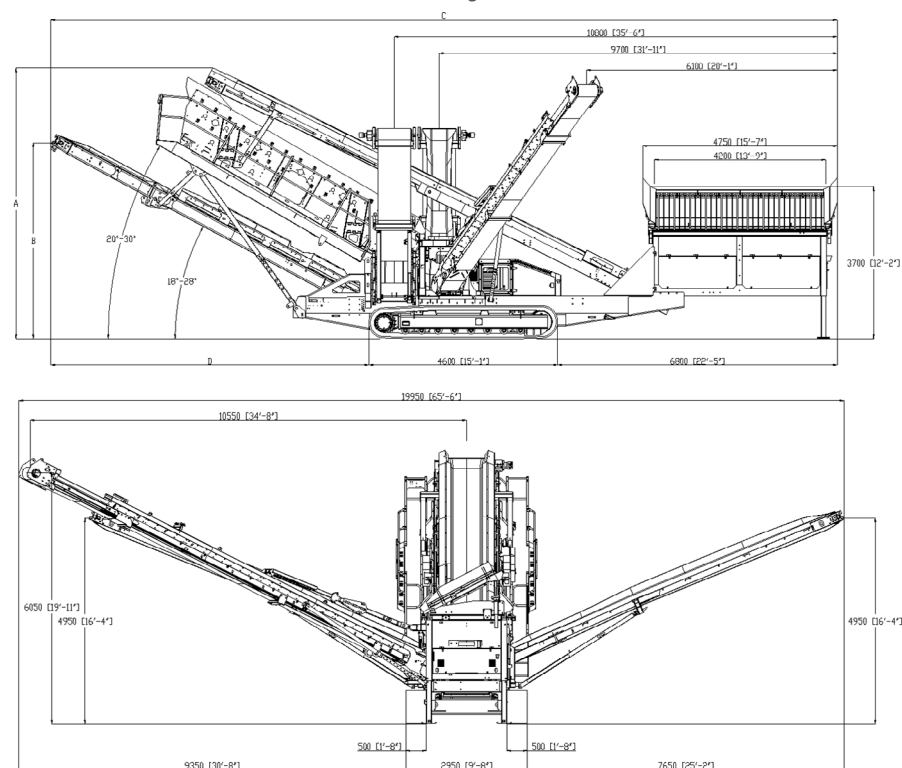


## DIMENSIONS

### CHIEFTAIN 2100X 3 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 3: Chieftain 2100X 3 Deck  
Hydraulic Extended Length Auxiliary Conveyor  
Working Position**



**MORE DIMENSIONS OVERLEAF**

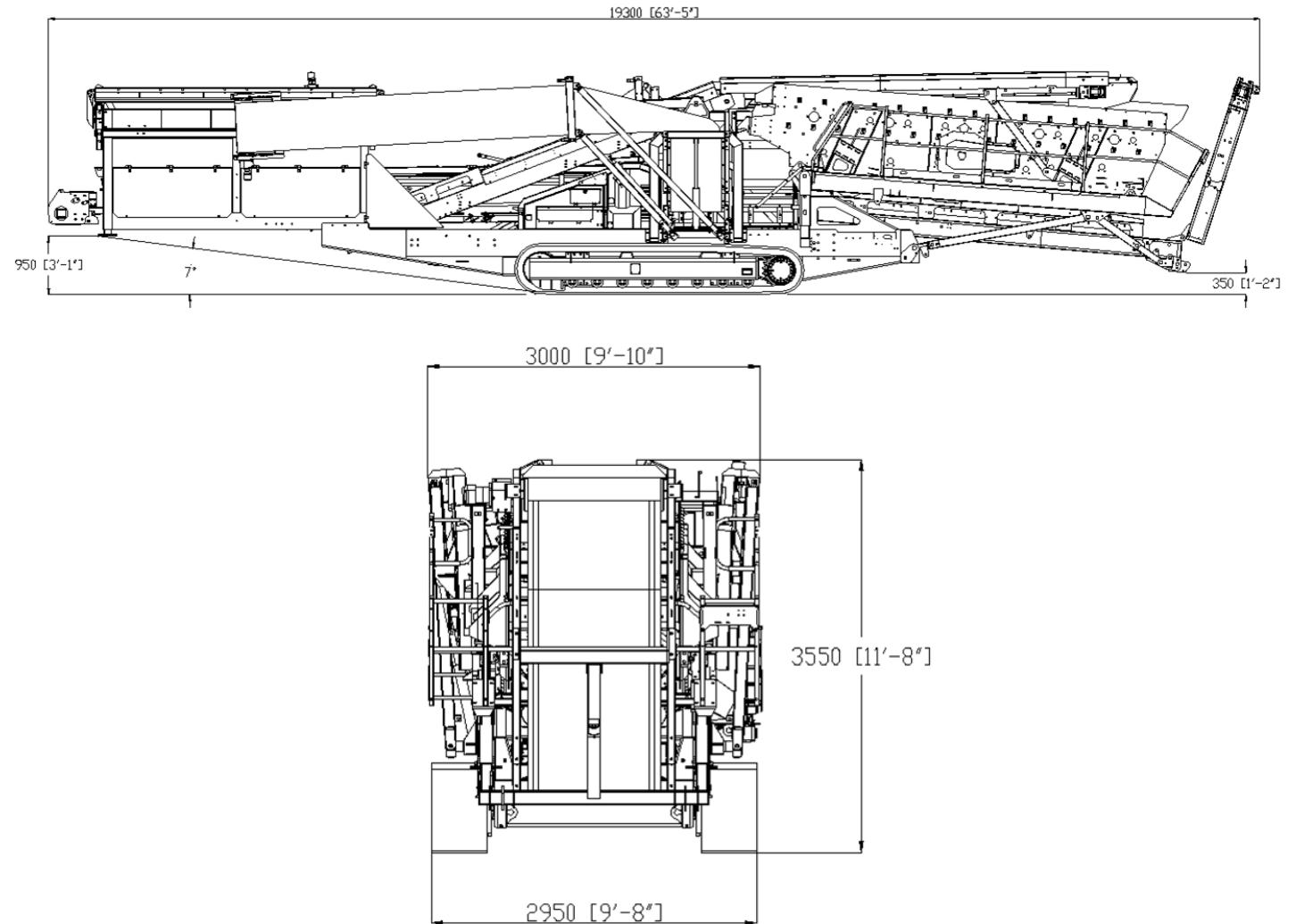


## CHIEFTAIN 2100X 3 DECK



# **DIMENSIONS**

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



**MORE DIMENSIONS OVERLEAF**

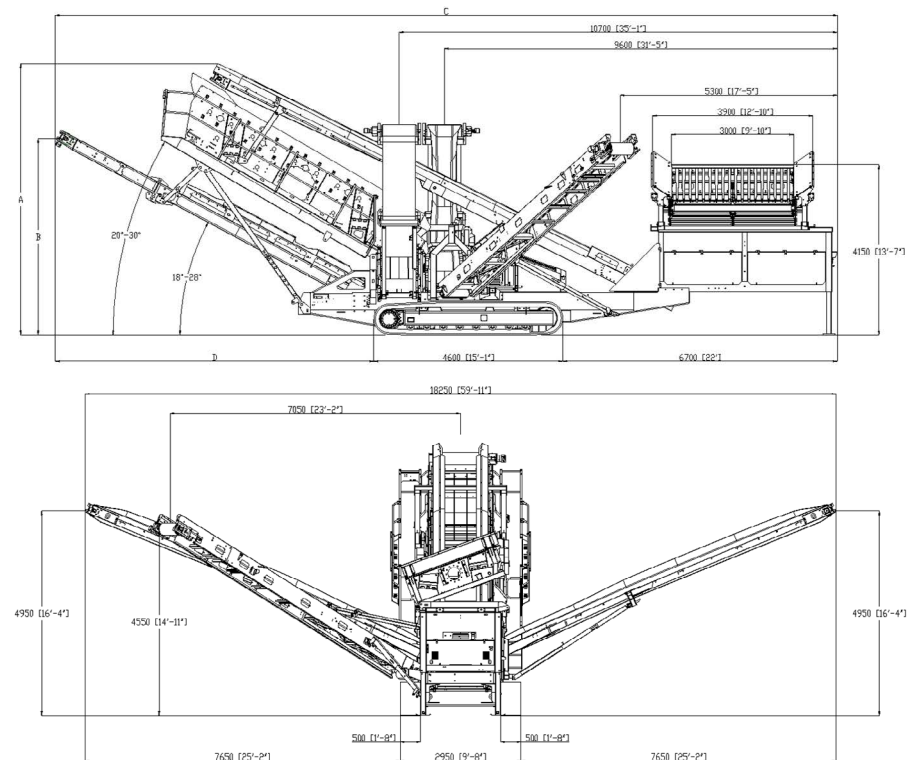


## DIMENSIONS

### CHIEFTAIN 2100X 3 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	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



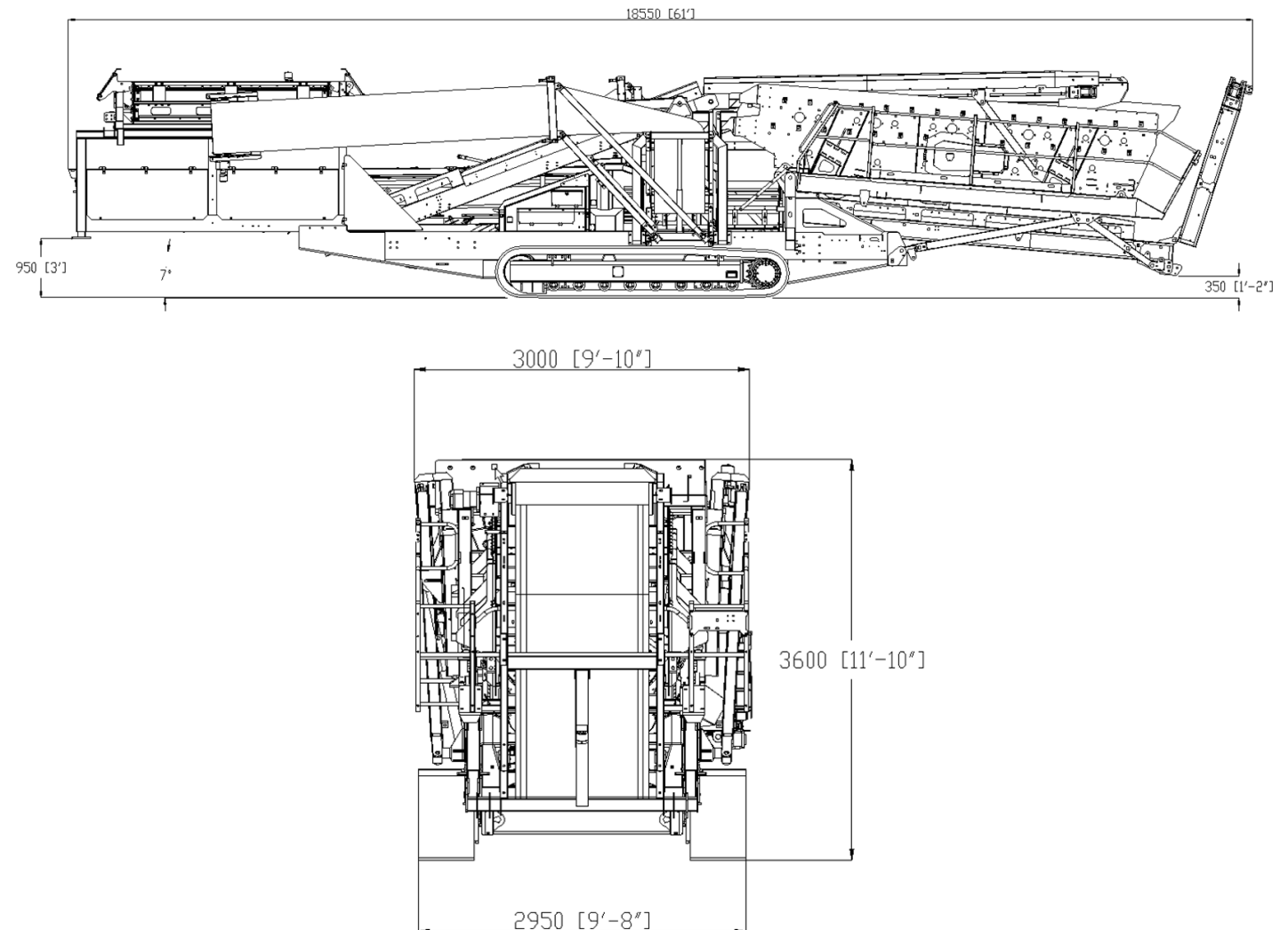


## CHIEFTAIN 2100X 3 DECK



## DIMENSIONS

Figure 6: Chieftain 2100X 3 Deck  
Double Deck Vibrating Grid  
Standard Length Auxiliary Conveyor - Transport Position



**MORE DIMENSIONS OVERLEAF**

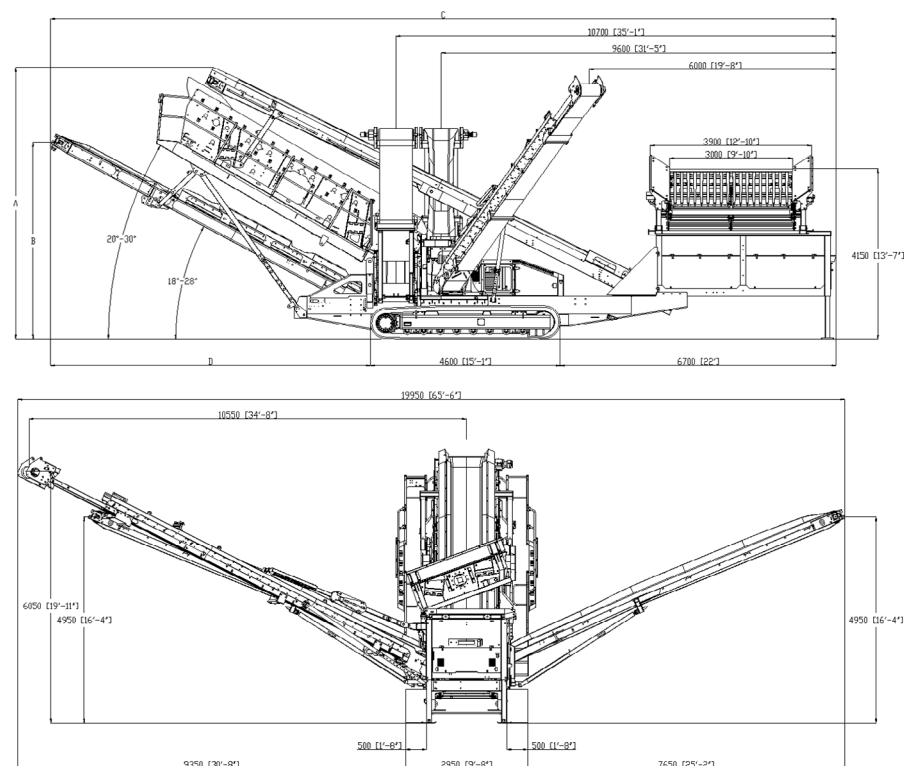


# DIMENSIONS

## CHIEFTAIN 2100X 3 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	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

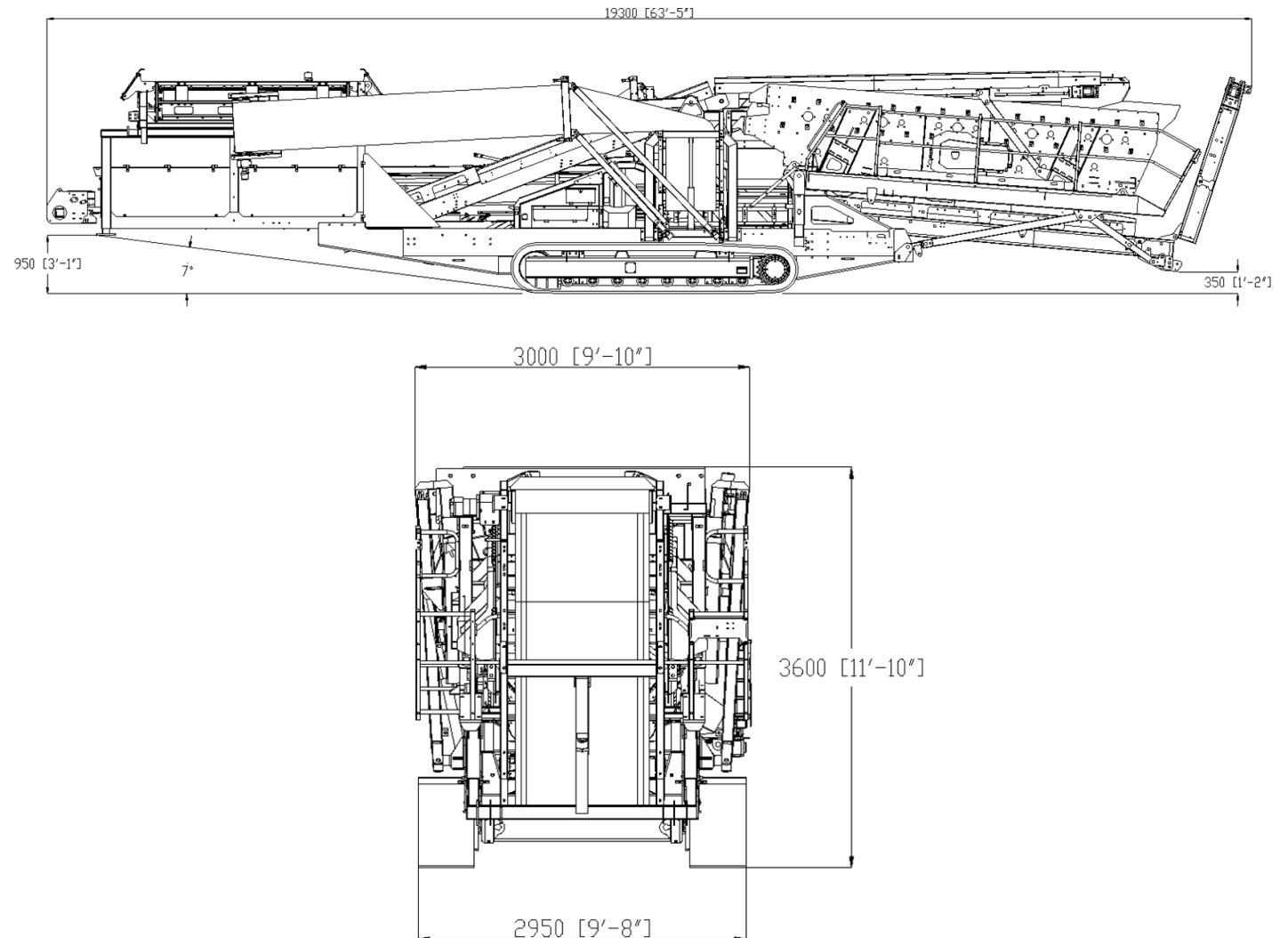


## CHIEFTAIN 2100X 3 DECK



## 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.

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