Powerscreen® Chieftain 1700S

3 Deck Incline Screen

Specification - Rev 5. 01/01/2013

POWERSCREEN®
A TEREX BRAND

Powerscreen® Chieftain 1700S 3 Deck

Specification

		14ft Hopper (with grid) wheel	14ft Hopper (with grid) track
Total weight		27,500kgs (60,627lbs)*	29,800kg (65,698lbs)*
Transport	**Length**	16.81m (55’ 2”)	16.53m (54’ 3”)
	Width	3.00m (9’ 10”)	3.0m (9’ 10”)
	Height	3.88m (12’ 9”)	3.5m (11’ 6”)
Working	**Length**	17.22m (56’ 6”)	17.22m (56’ 6”)
	Width	17.32m (56’ 10”)	17.32m (56’10”)
	Height	6.19m (20’ 4”)	5.89m (19’ 4”)
Screenunit		4.8m x 1.5m (16’ x 5’)	4.8m x 1.5m (16’ x 5’)
Powerunit		Diesel / Hydraulic	Diesel / Hydraulic
Plant Colour		RAL 5021	RAL 5021

Features & Benefits

- High capacity up to 500 tph (depending on feed size, mesh size & material type)
- Maximum feed size 150mm
- Engine protection shutdown system
- Powerunit 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 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
- Low profile double deck vibrating grid option with radio remote control tipping grid rams, 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, Std= Standard, Hyd= Hydraulic, W/O= Without, C/W= Complete with EXT= Extended, DDVG= Double deck vibrating grid, Inc= Including, Aux= Auxiliary, Conv= Conveyor, *= depending on machine specification**

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Hopper & Grid

Target area: 4.85m (15’ 10”) long x 1.85m (6’) wide
Grid aperture: 102mm (4’’)

Hopper capacity: 7.5m^3 (9.8 cu. yd.)
Adjustable angle tipping grid with integral loading and wing plates
Feed in height: 3.65m (11’ 11”) (side)
Feed in height: 3.33m (10’ 11”) (rear)

Feed Conveyor

1050mm (42’’) wide feed conveyor with direct drive system & hydraulic variable speed control
4.09m (13’ 5”) drum centres
350mm (13.5”) drum diameter (drive)
320mm (12.5”) drum diameter (tail)

Main Conveyor

1050mm (42”) 3 ply plain belt
10.17m (33’ 4”) drum centres
286mm (11”) drum diameter (drive)
270mm (10”) drum diameter (tail)

Hydraulically adjustable conveyor, fully skirted & sealed
Variable speed control
Angle adjustment: 23º - 27º

Screenbox

4.8m x 1.53m (16’ x 5’) 3 deck incline screen
Highly aggressive screen drive
Grease filled 2 bearing screenbox

4.8m x 1.53m (16’ x 5’) top & middle deck
4.3m x 1.53m (14’ x 5’) bottom deck

4 of media sections (side tension) top/middle deck
2 of media sections (end tension) bottom deck

Hydraulic screen angle adjustment 20°- 30°
Hydraulic screen tensioning on bottom deck
Galvanised walkways on both sides of screen

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Finesize - Tail Conveyor

1200mm (48”) wide 3 ply plain belt
6.87m (22’ 6”) drum centres
286mm (11”) drum diameter (drive)
270mm (10”) drum diameter (tail)

4.23m (13’ 10’’) stockpile height (to drum centre) T
113m^3 (148 cu. yd.) stockpile volume

4.59m (15’ 1’’) stockpile height (to drum centre) W
144m^3 (188 cu. yd.) stockpile volume

Variable speed
Hydraulically folding
Chevron belt as option
Angle adjustment: 0º - 25º

Mid-finesize & Mid-oversize - Side Conveyors

650mm (26”) wide 3 ply chevron belt
9.67m (31’ 8”) drum centres
286mm (11”) drum diameter (drive)
270mm (10”) drum diameter (tail)

4.72m (15’ 6”) stockpile height (to drum centre) T
157m^3 (205 cu. yd.) stockpile volume

5.08m (16’ 8”) stockpile height (to drum centre) W
195m^3 (255 cu. yd.) stockpile volume

Variable speed control on each conveyor
Hydraulically folding
Fixed angle: 25º

Oversize - Auxiliary Conveyor (std)

650mm (26”) wide 3 ply chevron belt
7.25m (23’ 9”) drum centres (standard length)
286mm (11”) drum diameter (drive)
203mm (8”) drum diameter (tail)

3.93m (12’ 11”) stockpile height (to drum centre) T
90m^3 (118 cu. yd.) stockpile volume

4.3m (14’ 1”) stockpile height (to drum centre) W
119m^3 (156 cu. yd.) stockpile volume

Variable speed control
Hydraulic folding
Fixed angle: 25º

Oversize - Auxiliary Conveyor (ext)

650mm (26”) wide 3 ply chevron belt
10.26m (33’ 7”) drum centres (extended length)
286mm (11”) drum diameter (drive)
203mm (8”) drum diameter (tail)

5.22m (17’ 2”) stockpile height (to drum centre) T
212m^3 (277 cu. yd.) stockpile volume

5.08m (16’ 8”) stockpile height (to drum centre) W
195m^3 (255 cu. yd.) stockpile volume

Variable speed control
Fixed angle: 25º

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Powerunit & Hydraulics

Engine:

CAT C4.4 ATAAC (Tier 3 / Stage 3A) 4 cylinder diesel

Performance:

83 kW (111.3hp) @ 2200rpm

Tank Capacities:

Fuel:	336 L (88 US Gal)
Hydraulic Oil:	564 L (149 US Gal)

Pumps:

Flywheel pump:	Cast iron triple 46, 33, 33cc/rev
PTO pump A:	Cast iron tandem pump 23, 23cc/rev
PTO pump B:	Cast iron tandem pump 14cc/rev

Motors:

Belt feeder:	160cc/rev
Main conveyor:	Cast iron 630cc/rev
Tail conveyor:	Cast iron 500cc/rev
Side conveyors:	Cast iron 500cc/rev
Auxiliary conveyor:	Cast iron 400cc/rev
Screen motor:	Cast iron 101.8cc/rev

Optional Diesel engine:

Tier 4i / Stage 3B: CAT C4.4 82kW (110hp) @ 2200rpm
Tier 4i / Stage 3B: CAT C4.4 98kW (131hp) @ 2200rpm

Crawler Track Data

Track width:	400mm
Output torque:	24,769 Nm
Gradability degrees:	22.4º
Gearbox ratio:	1:127
Hydraulic motor:	63cc/rev
Approximate speed:	0.81kph (0.5mph)
Total flow per track:	72.6 Lpm

Powerscreen® Chieftain 1700S Options

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Double Deck Vibrating Grid

Target area: 3.8m (12’ 6”) long x 2.2m (7’ 3”) wide

Bottom deck screen size:
2 of 1.9m (6’ 3’’) x 1.5m (4’ 11’’)

Working angle: 10º - 20º (hydraulic adjustable)
Tip angle: 45º max
Motor: 59cc/rev
Circuit: Coupled to main conveyor circuit

Feed in height: 3.73m (12’ 2”) (side)
Feed in height: 3.93m (12’ 10”) (rear)

Transport height: 3.98m (13’) Track
Transport height: 3.98m (13’) Wheel

Total weight: 4,000kg (8,818lbs)

Dual Power

Dual Power System:
2 of electric motors; 37 kW (50hp) & 30 kW (40hp)
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

Other Options

Different coloured machine
Optional engine
Auto lubrication system
Quick release wedge tensioning for top & middle deck
Electric wheel version
Anti roll-back

Radio controlled tracking
Roll-in bogie
Hydraulic jacking legs
Washing version

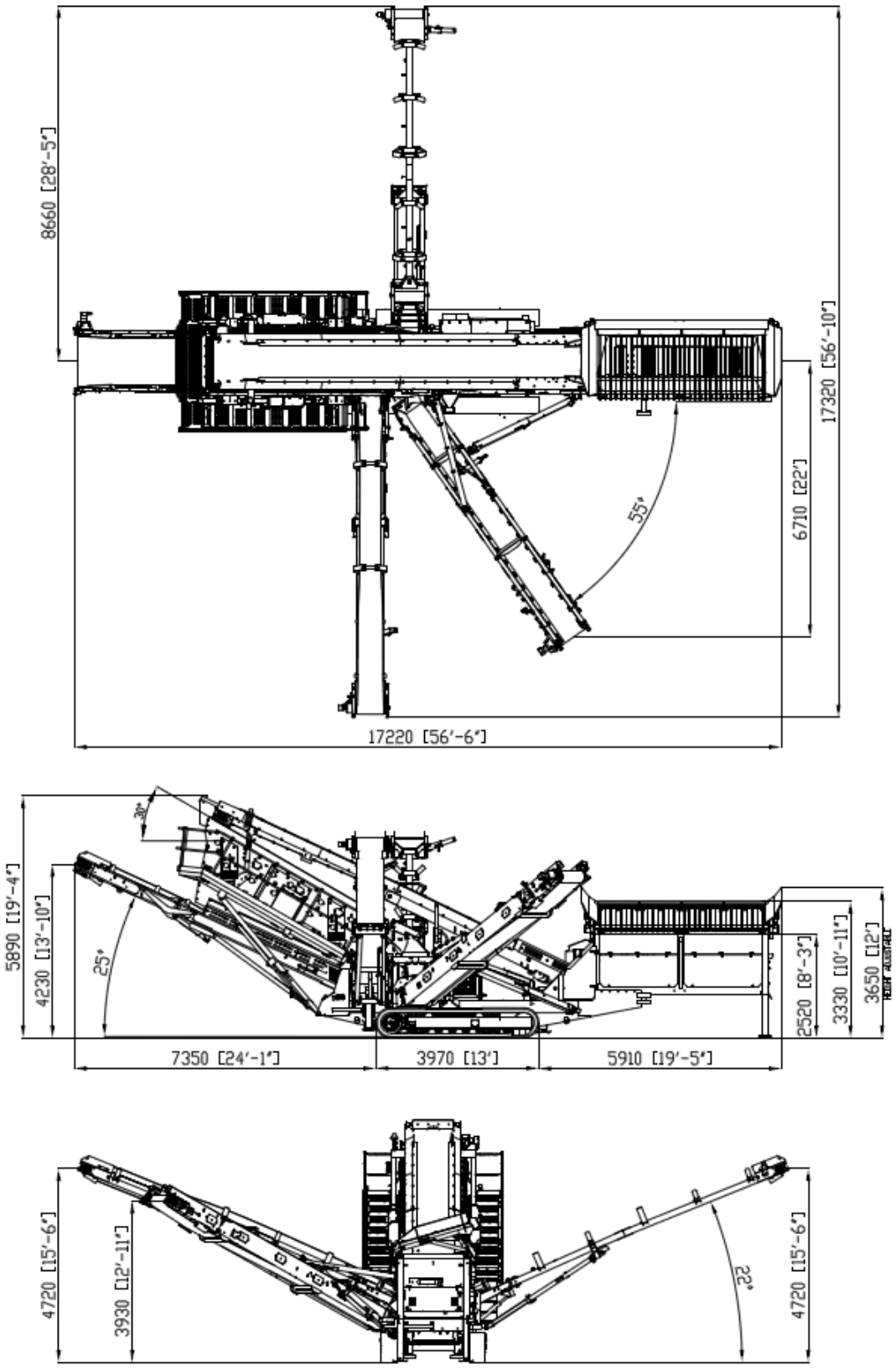

Figure 1: Chieftain 1700S 3 Deck Track Standard Length Auxiliary Conveyor Working Position

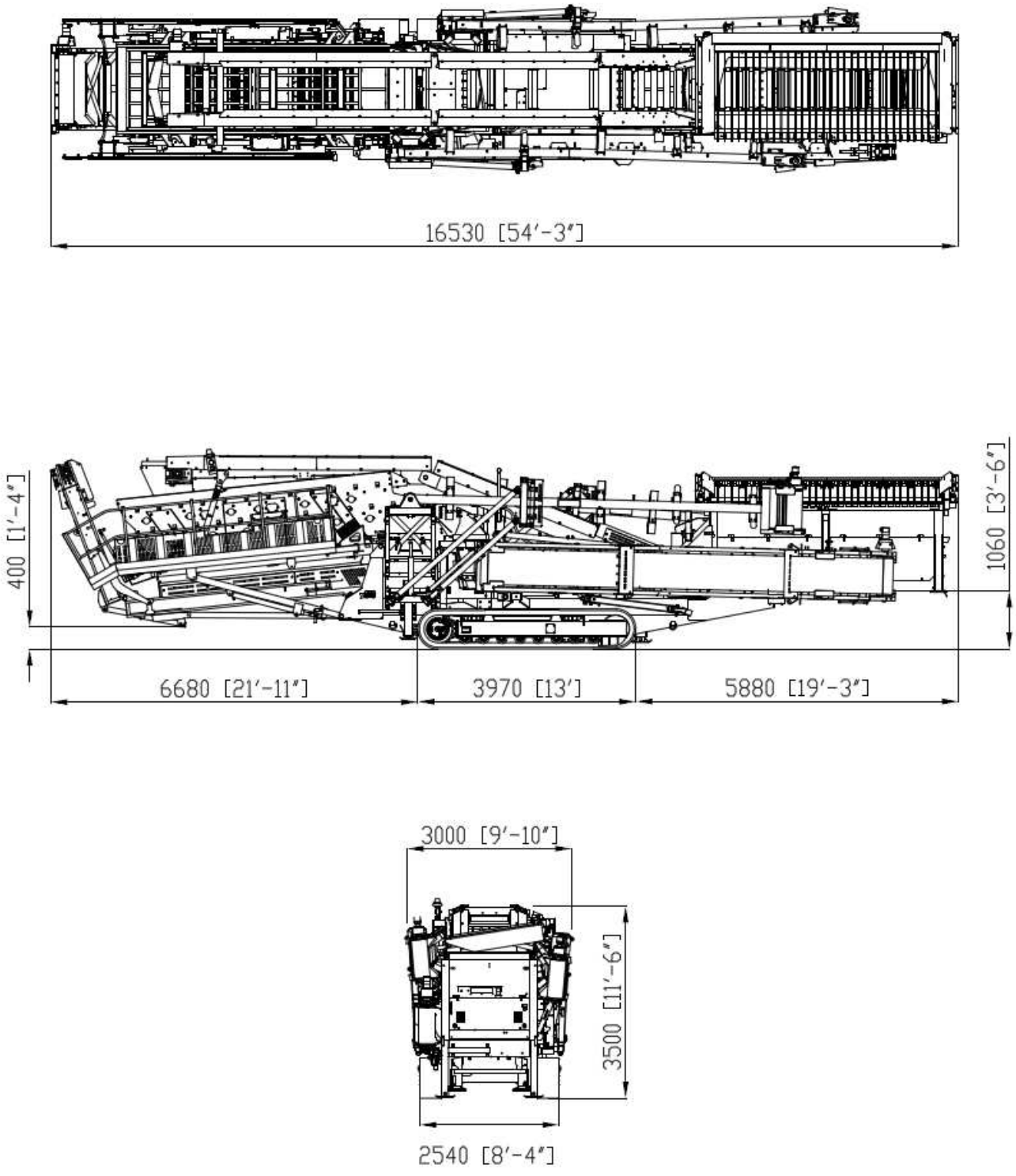

Figure 2: Chieftain 1700S 3 Deck Track Standard Length Auxiliary Conveyor Transport Position

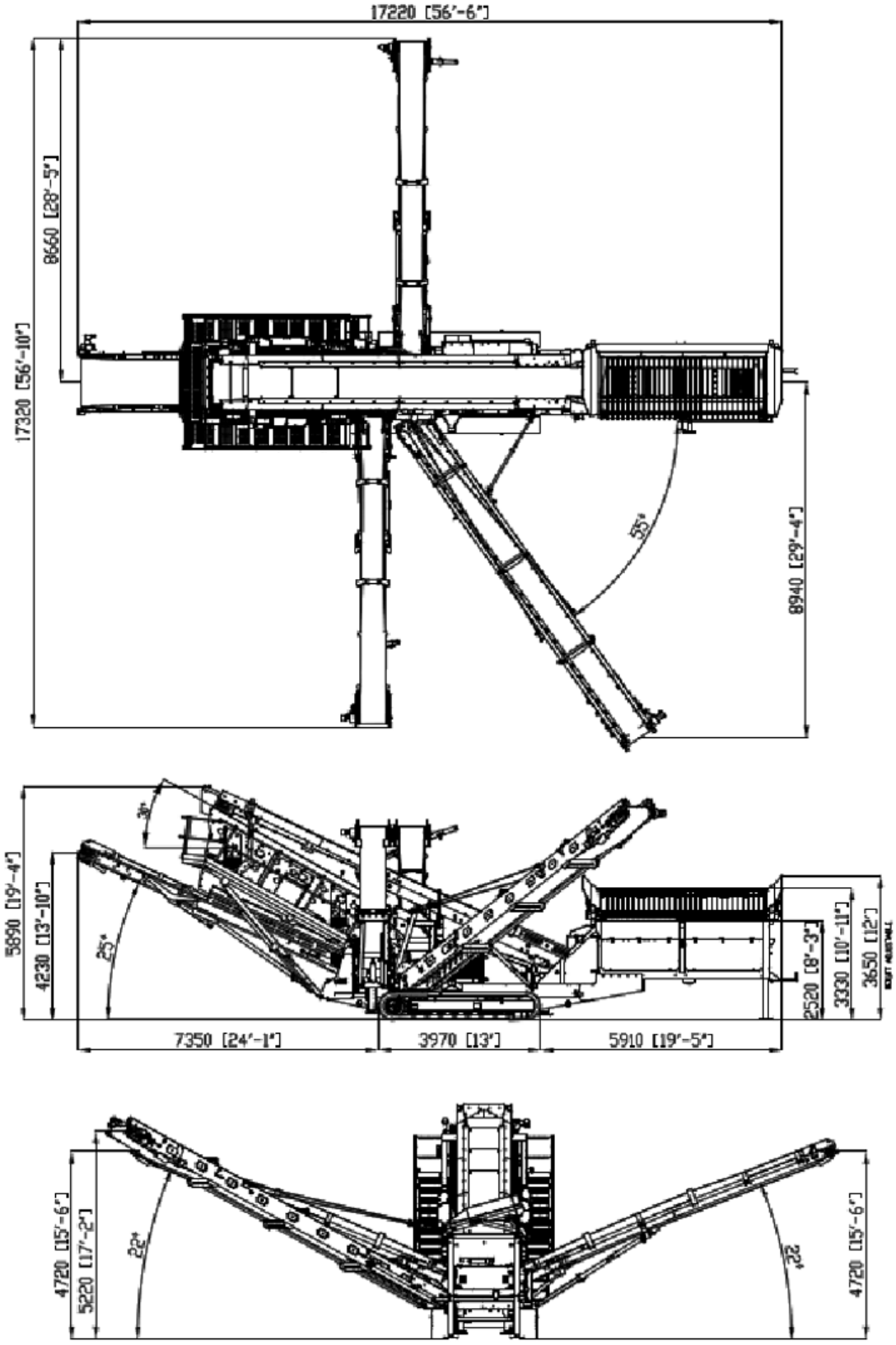

Figure 3: Chieftain 1700S 3 Deck Track Extended Length Auxiliary Conveyor Working Position

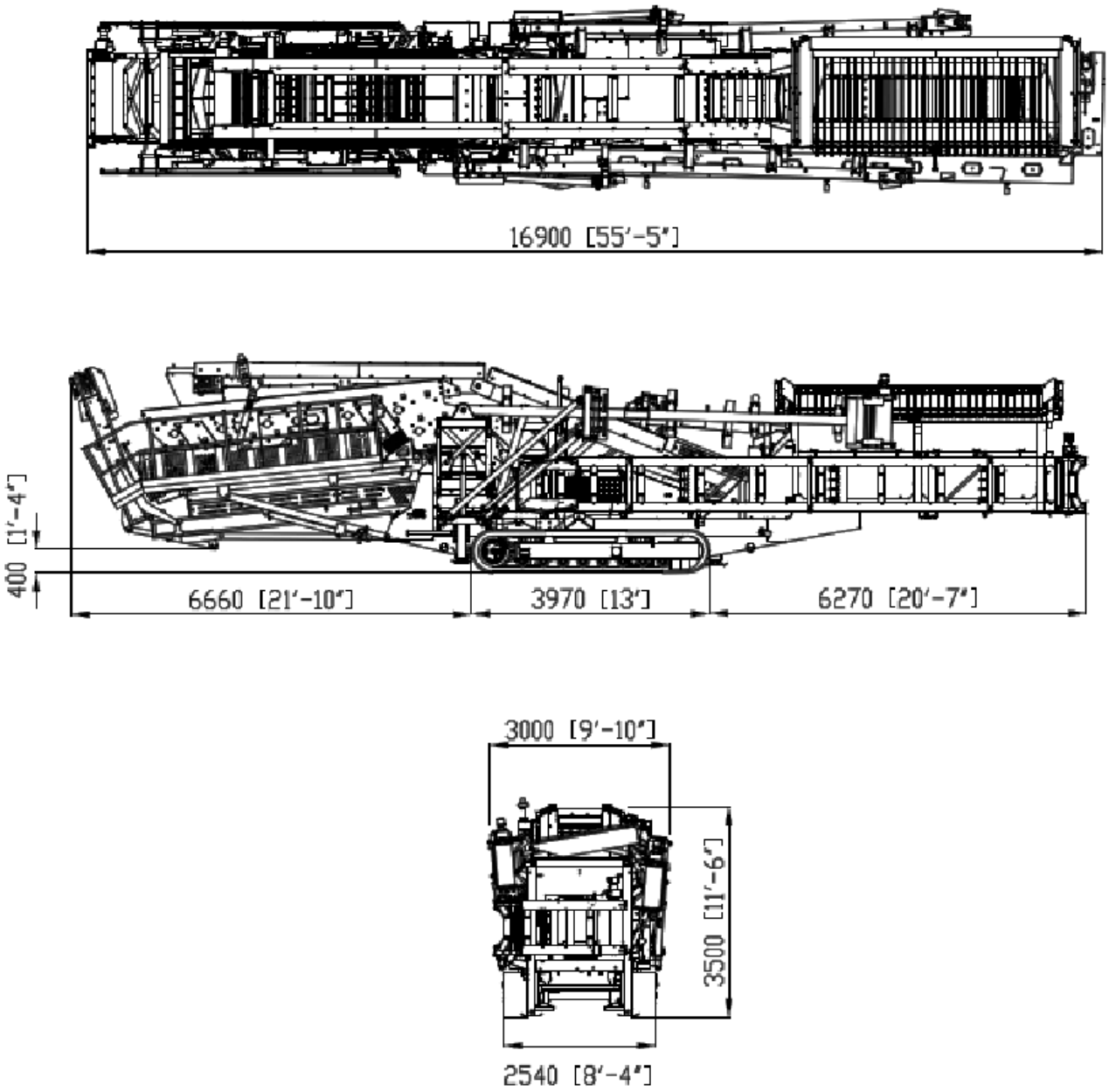

Figure 4: Chieftain 1700S 3 Deck Track Extended Length Auxiliary Conveyor Transport Position

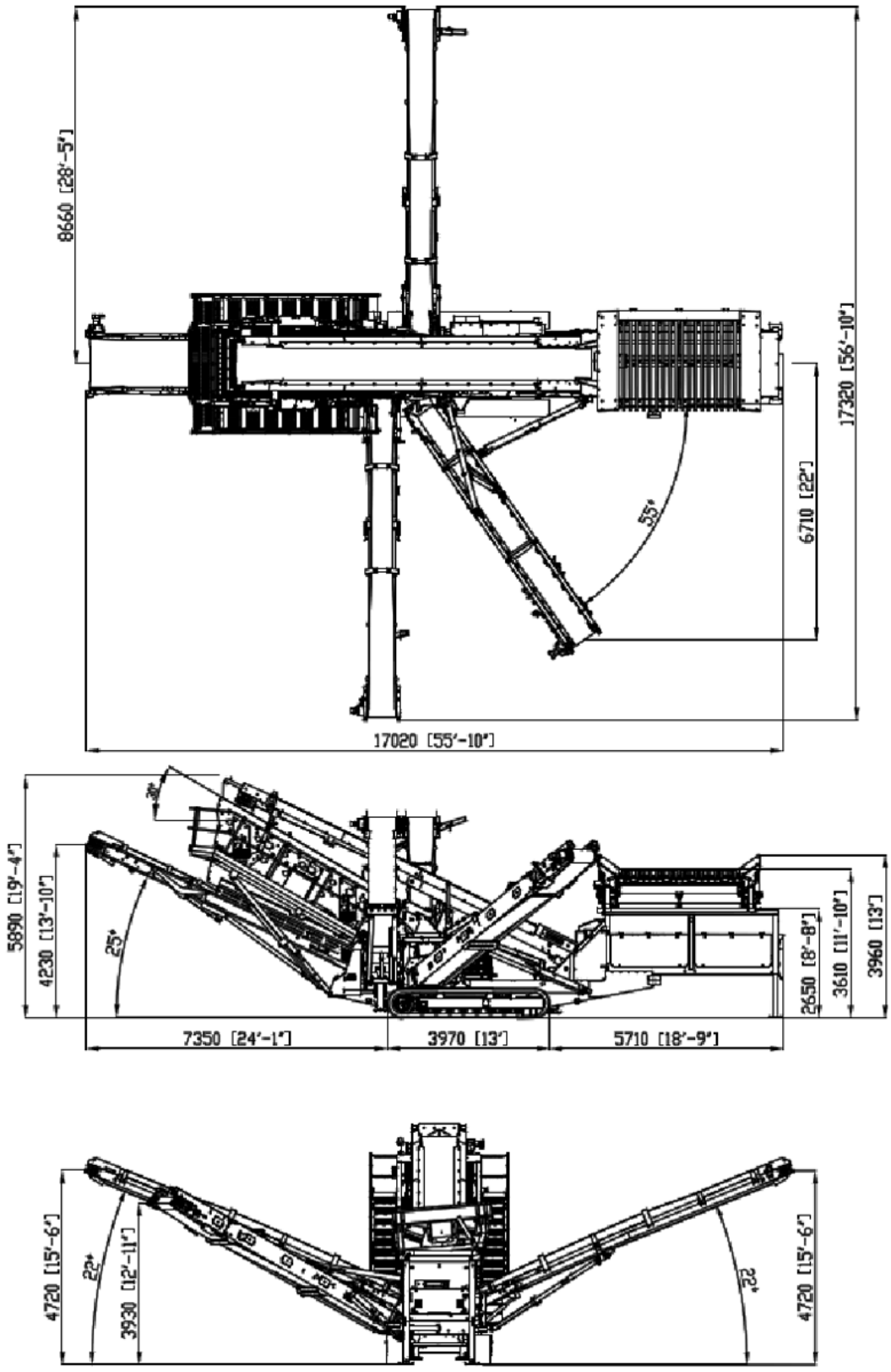

Figure 5: Chieftain 1700S 3 Deck Track
Double Deck Vibrating Grid
Standard Length Auxiliary Conveyor
Working Position

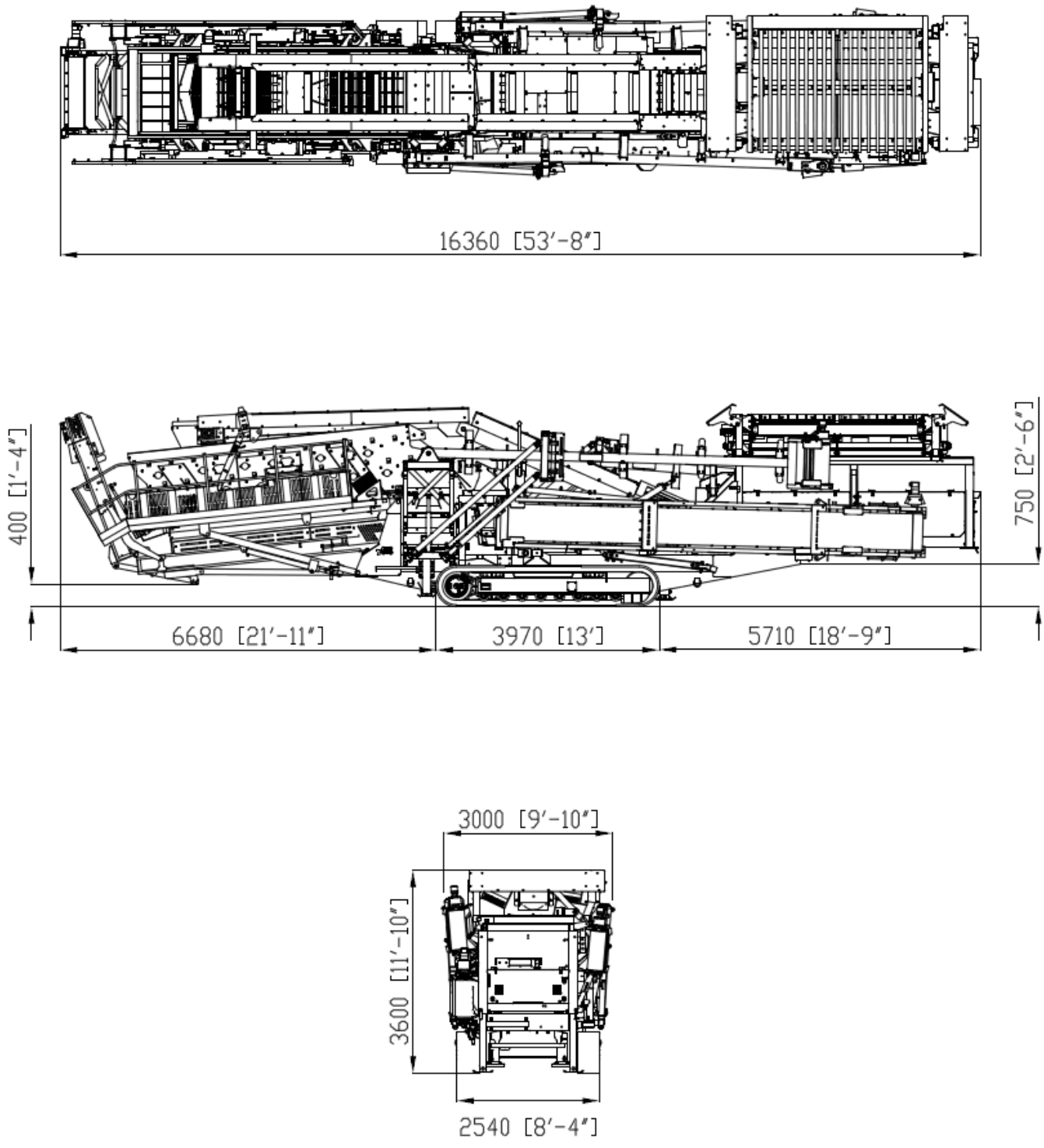

Figure 6: Chieftain 1700S 3 Deck Track
Double Deck Vibrating Grid
Standard Length Auxiliary Conveyor
Transport Position

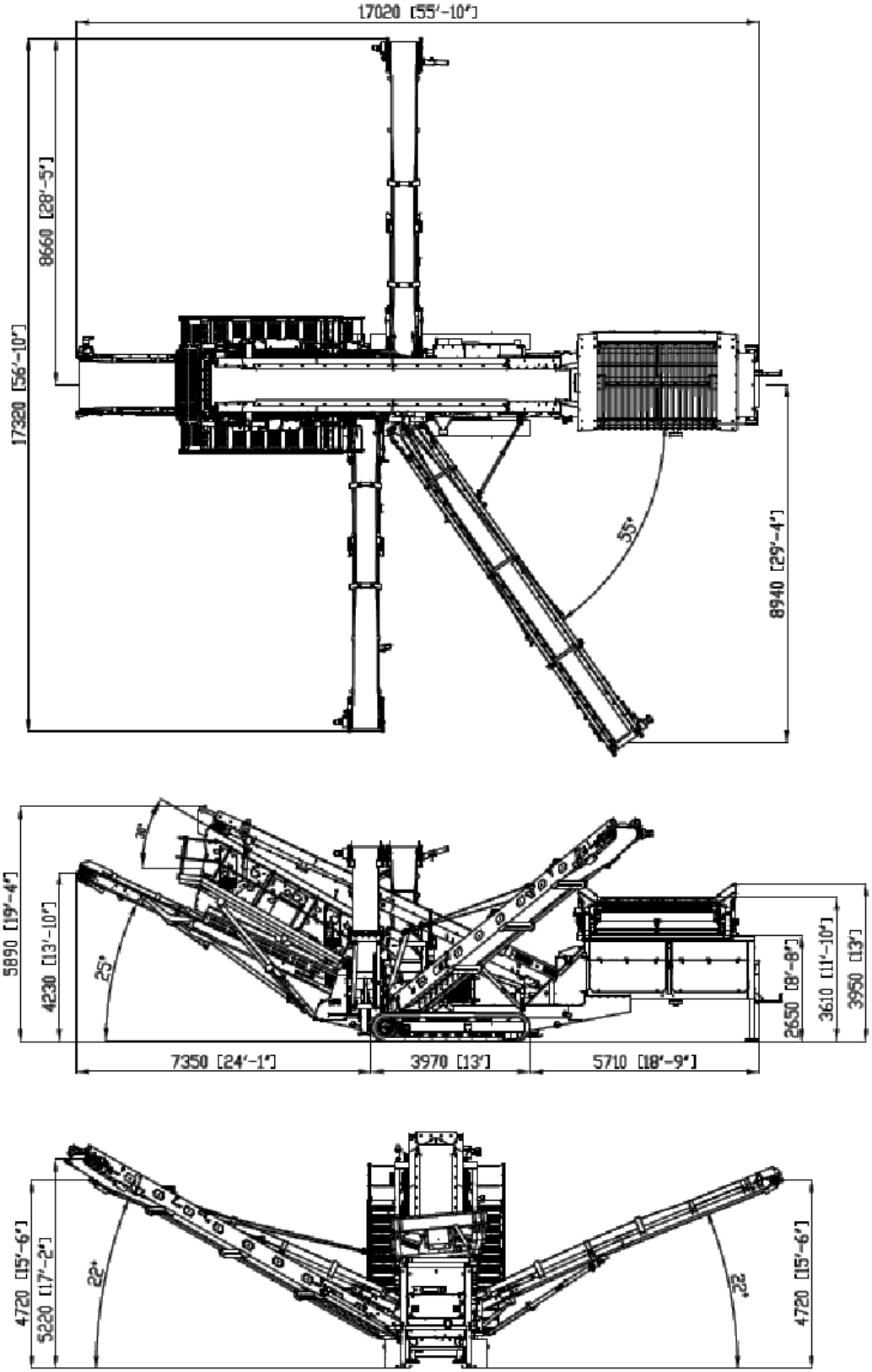

Figure 7: Chieftain 1700S 3 Deck Track
Double Deck Vibrating Grid
Extended Length Auxiliary Conveyor
Working Position

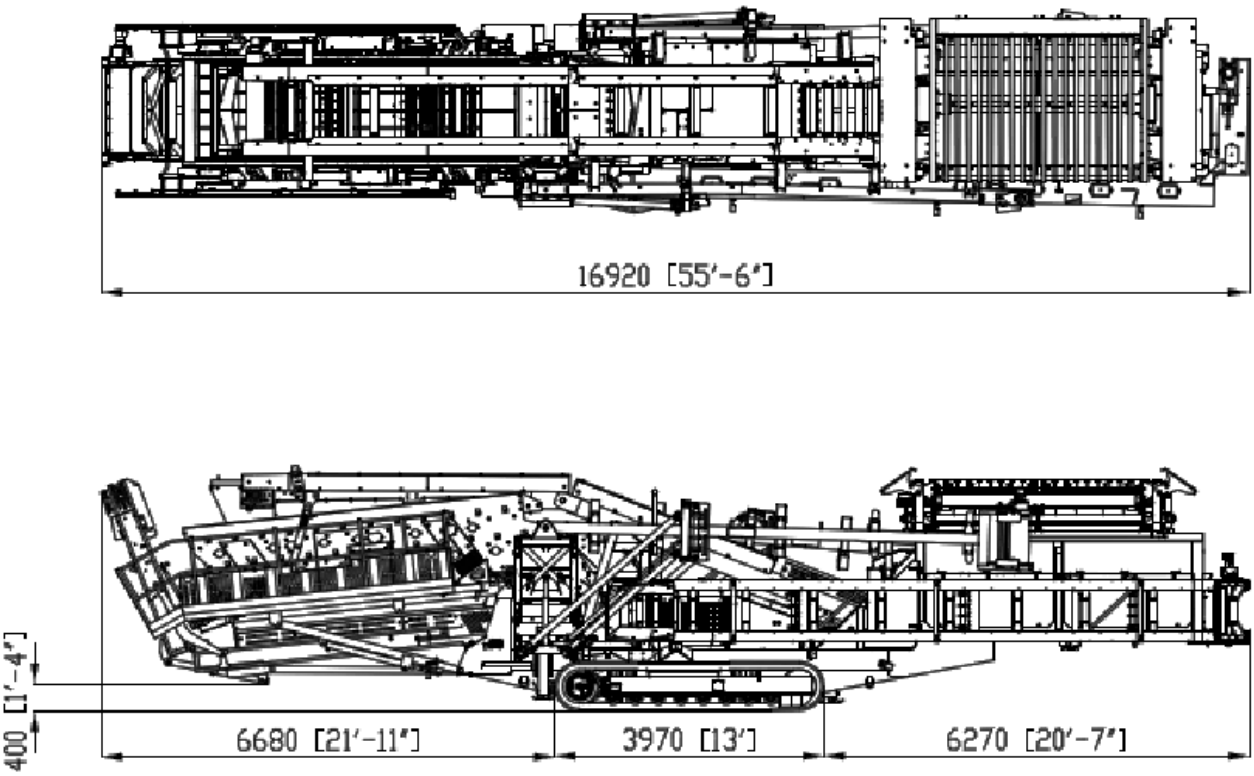

Figure 8: Chieftain 1700S 3 Deck Track
Double Deck Vibrating Grid
Extended Length Auxiliary Conveyor
Transport Position

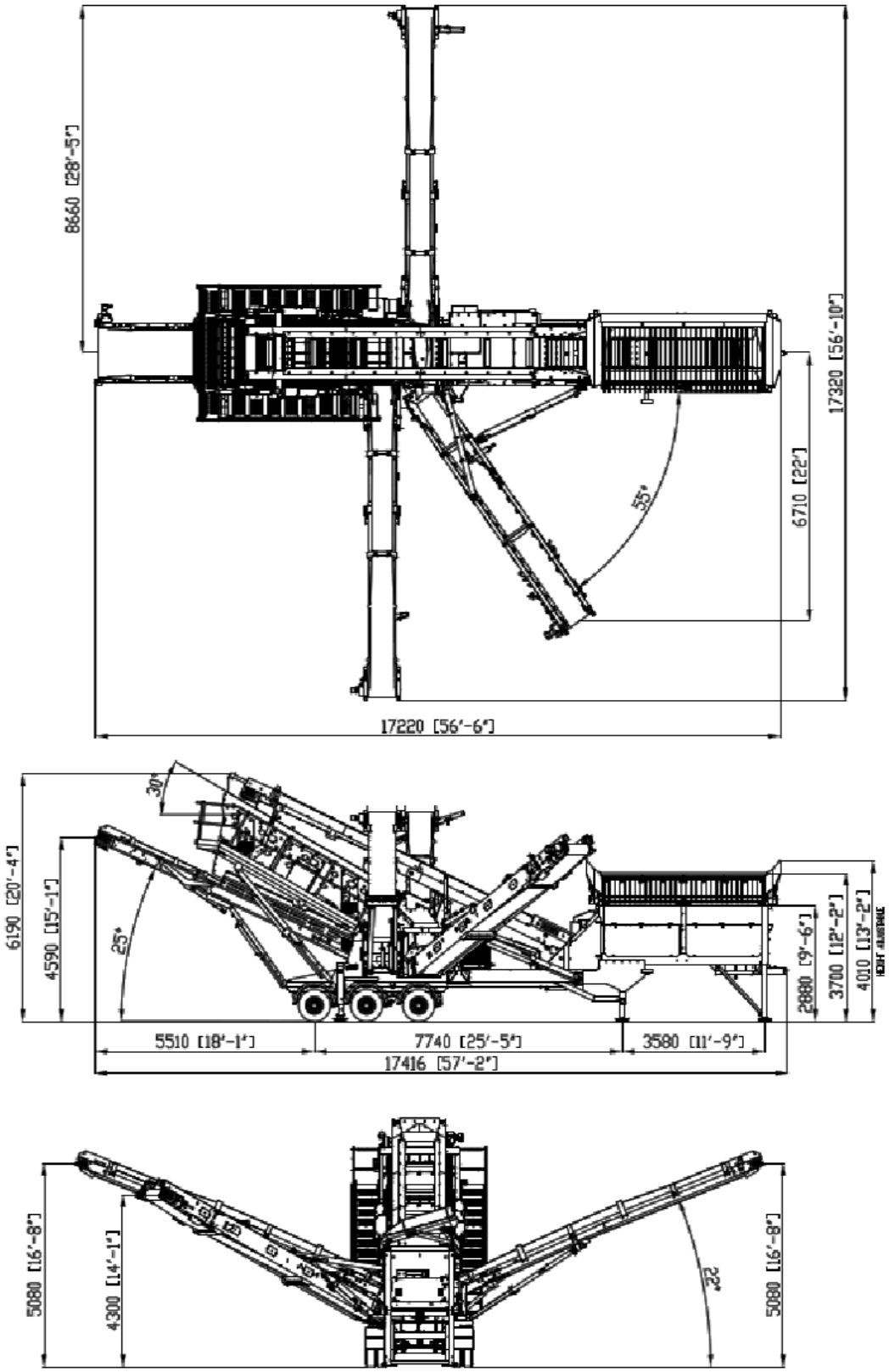

Figure 9: Chieftain 1700S 3 Deck Wheel Standard Length Auxiliary Conveyor Working Position

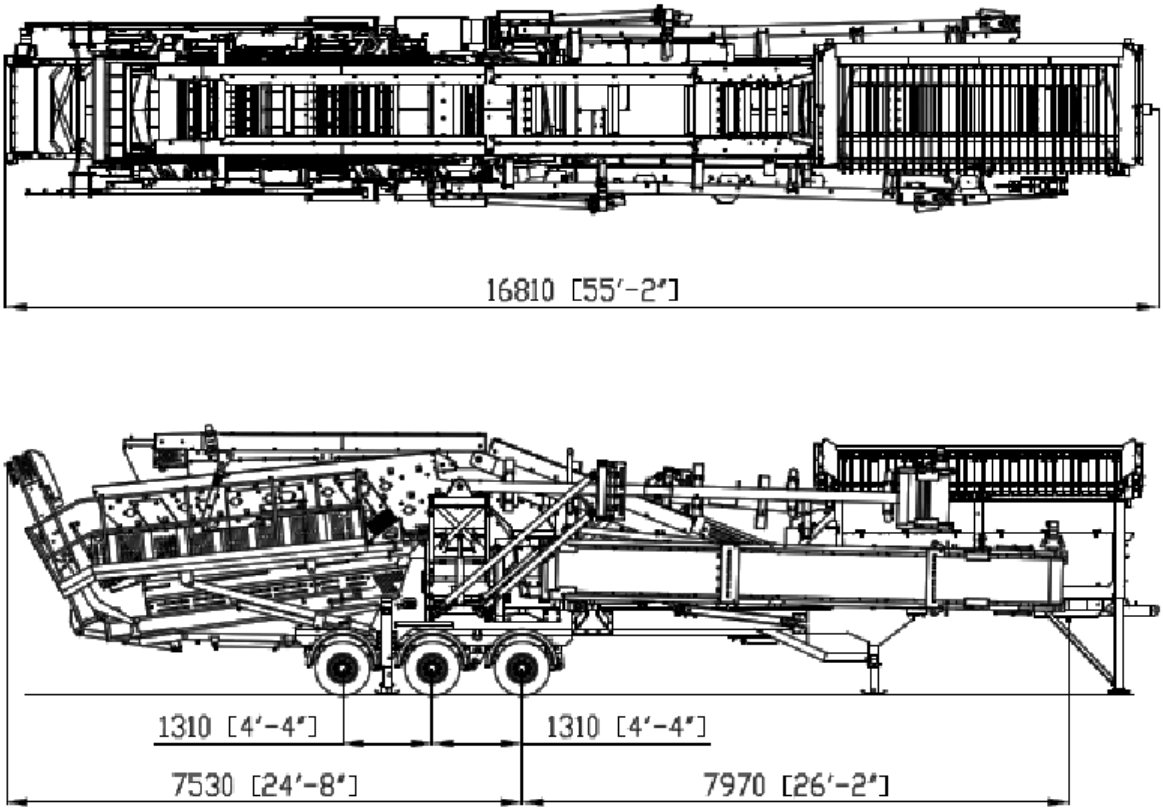

Figure 10: Chieftain 1700S 3 Deck Wheel Standard Length Auxiliary Conveyor Transport Position

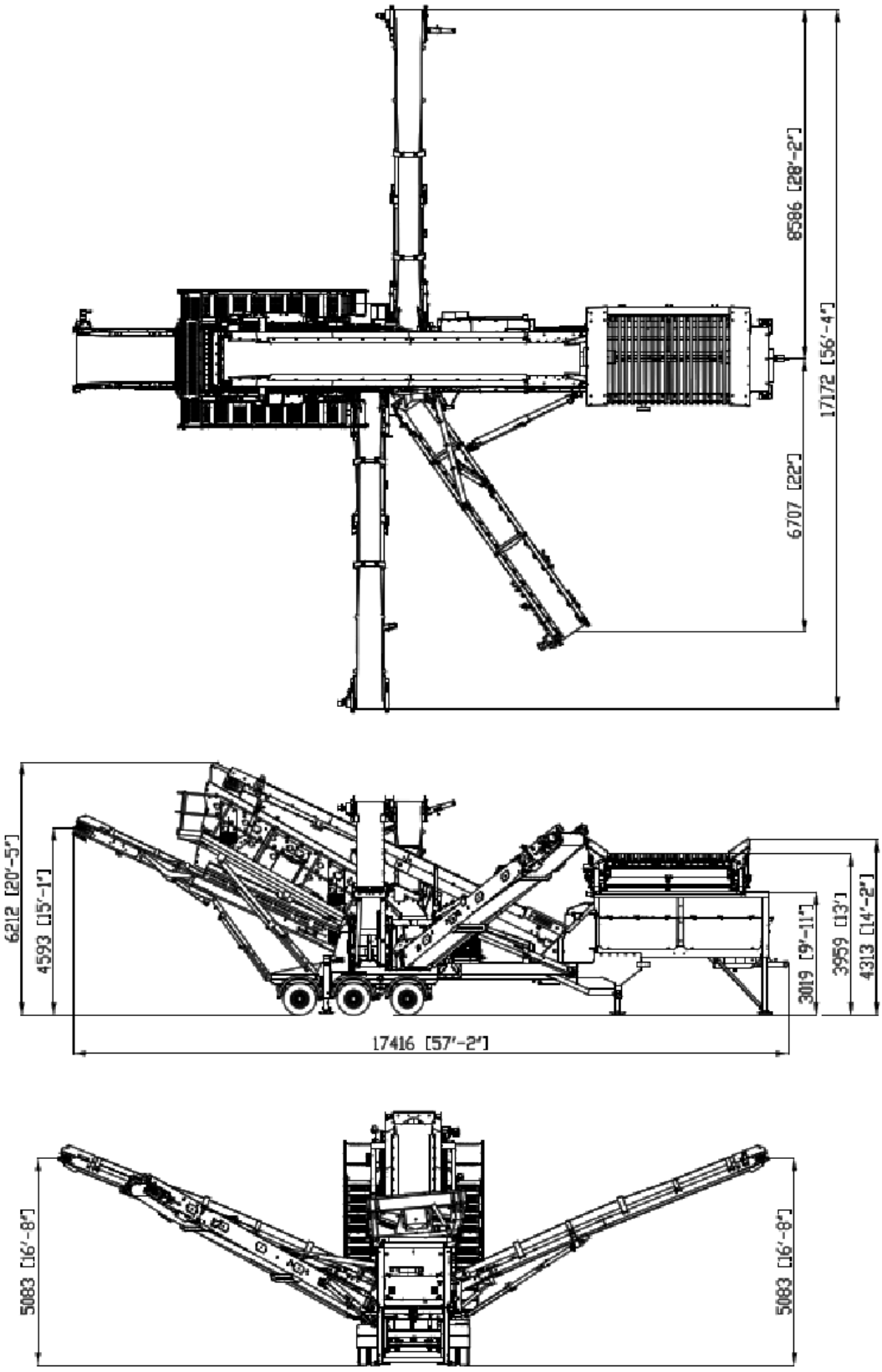

Figure 11: Chieftain 1700S 3 Deck Wheel
Double Deck Vibrating Grid
Standard Length Auxiliary Conveyor
Working Position

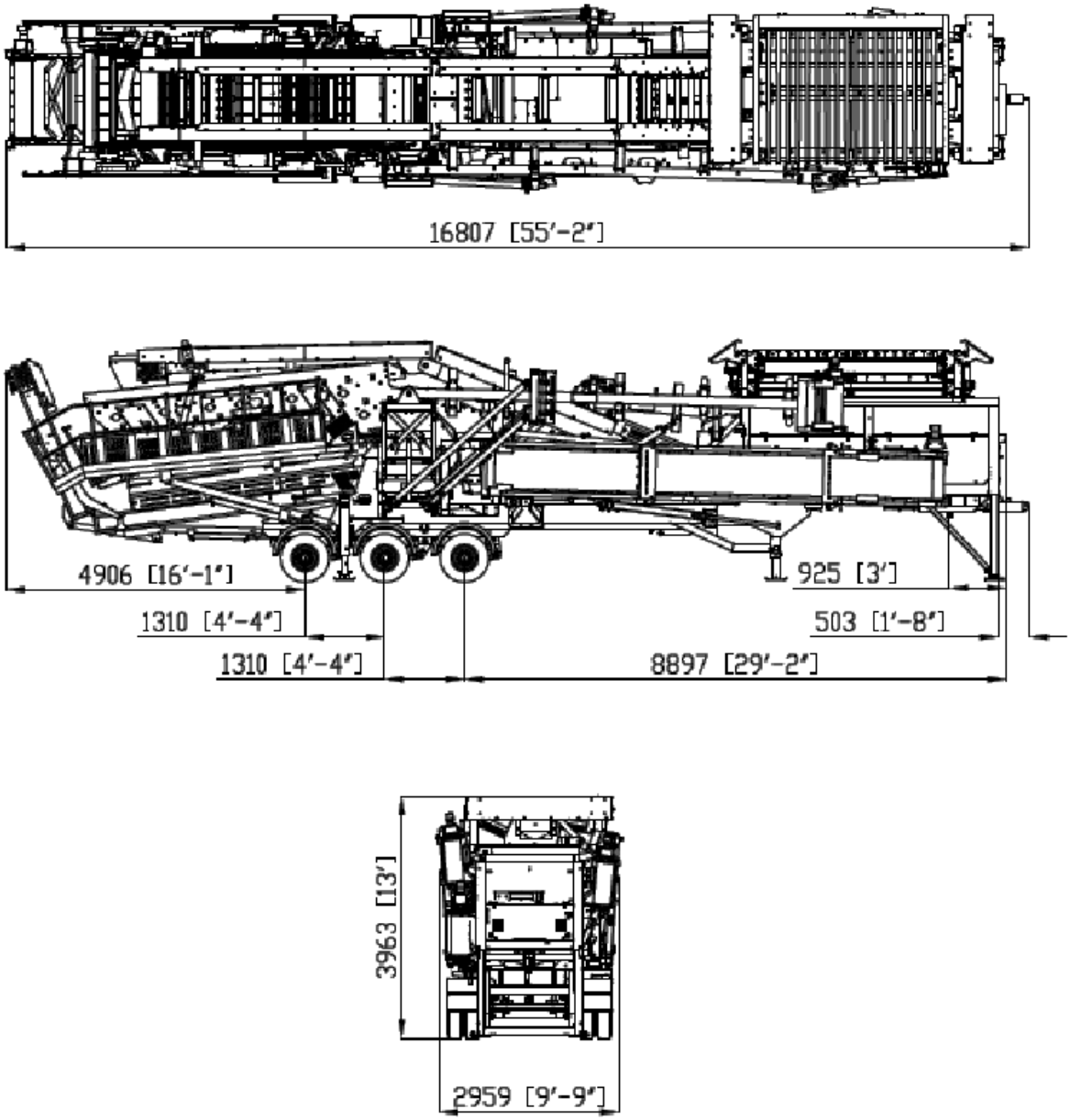

Figure 12: Chieftain 1700S 3 Deck Wheel
Double Deck Vibrating Grid
Standard Length Auxiliary Conveyor
Transport Position

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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