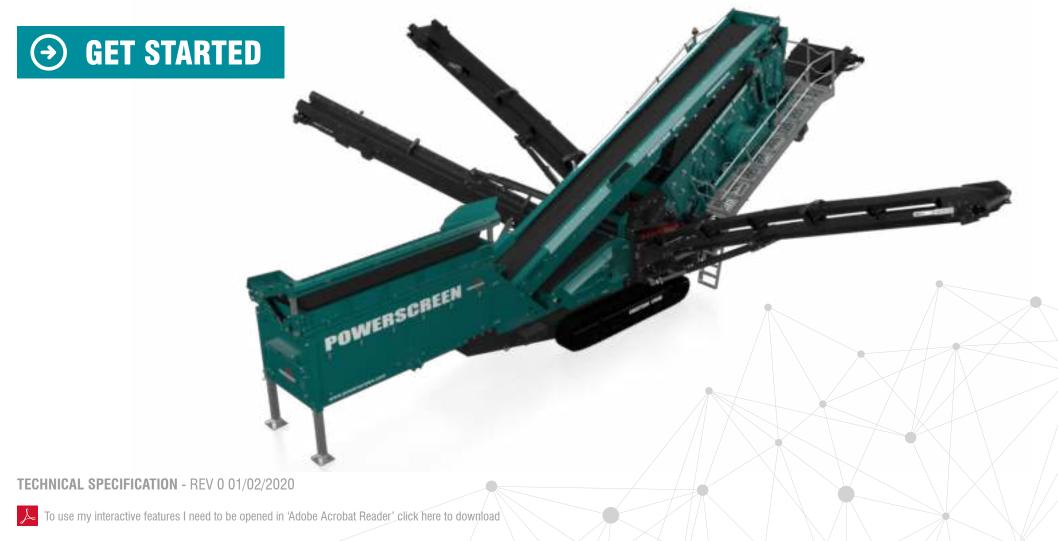
POWERSCREEN® CHIEFTAIN 1700X



3 DECK INCLINE SCREEN







- OVERVIEW
- HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - OTHER OPTIONS
- ▶ POWERSCREEN® PULSE
- DIMENSIONS



SPECIFICATION

14ft Hopper (with grid)

Total weight: 30,516kg (67,276lbs)

Transport Length 16.6m (54' 6")

 Width
 3m (9' 10")

 Height
 3.5m (11' 7")

Working Length 17.2m (56' 5") Width 17.3m (56' 11")

Height 5.89m (19' 4")

Screenbox: 4.8m x 1.5m (16' x 5')

Power unit: Diesel / Hydraulic

Plant Colour: RAL 5021, RAL 7024 & RAL 9005

(Weight & dimensions are approximate base unit values)

FEATURES & BENEFITS

- High capacity up to 500 tph / 551 US tph (depending on media sizes & material type)
- Maximum feed size 150mm (6")
- Ability to easily change between 2 and 4 bearings using patent pending drive system
- 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 & fully riveted construction
- Hydraulically folding conveyors for transport
- Fines conveyor drop down facility to aid bottom deck mesh access
- Hydraulic raise / lower of head section for 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







- OVERVIEW
- HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - **▶ SIDE CONVEYORS**
 - **▶ AUXILIARY CONVEYORS**
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - **▶** OTHER OPTIONS
- ▶ POWERSCREEN® PULSE
- DIMENSIONS

HOPPER & GRID

Target area: 4.75m (15' 7") long x 2m (6' 7") wide

Grid aperture: 108mm (4.3")

Hopper capacity: 5.35m³ (7 cu. yd.)

Adjustable angle tipping grid with integral loading and wing plates

Feed in height with grid: 3.59m (11' 9") (rear)









- ↑ OVERVIEW
- HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - ▶ OTHER OPTIONS
- POWERSCREEN® PULSE
- DIMENSIONS



 $4.8m \times 1.5m (16' \times 5')$ 3 deck incline screen Highly aggressive screen drive Grease filled 2 or 4 bearing screenbox (leaves the factory as 4 bearing)

 $4.8 \,\mathrm{m} \times 1.5 \,\mathrm{m}$ (16' $\times 5$ ') top & middle deck $4.12 \,\mathrm{m} \times 1.52 \,\mathrm{m}$ (13' 6'' $\times 5$ ') bottom deck









- ♠ OVERVIEW
- HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - ▶ OTHER OPTIONS
- POWERSCREEN® PULSE
- DIMENSIONS



FEED CONVEYOR

1050mm (41'') 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)

Feeder stop / start comes as standard

MAIN CONVEYOR

1050mm (41") 3 ply plain belt 9.89m (32' 5") drum centres 286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

Hydraulically adjustable conveyor, fully skirted & sealed









- OVERVIEW
- ▶ HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - ▶ OTHER OPTIONS
- POWERSCREEN® PULSE
- DIMENSIONS



FINESIZE - TAIL CONVEYOR

1200mm (47") wide 3 ply plain belt 6.88m (22' 7") drum centres 286mm (11.3") drum diameter (drive) 270mm (10.6") drum diameter (tail)

4.42m (14' 6") stockpile height 128m³ (168 cu. yd.) stockpile volume

Fixed speed Hydraulically folding Chevron belt as option Angle adjustment: 16° - 27° PATENTED A BEARING SCREET







- ♠ OVERVIEW
- ▶ HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- DIMENSIONS



MID-FINESIZE & MID-OVERSIZE - SIDE CONVEYORS

650mm (26") wide 3 ply chevron belt 9.67m (31' 9") drum centres 286mm (11.3") drum diameter (drive) 270mm (10.6") drum diameter (tail)

4.69m (15'4") stockpile height 153m³ (200 cu. yd.) stockpile volume

Variable speed control on each conveyor
Hydraulically folding
Fixed angle: 24°







- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - **▶** SIDE CONVEYORS
 - **▶ AUXILIARY CONVEYORS**
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



OVERSIZE - HYDRAULIC AUXILIARY CONVEYOR (STANDARD)

650mm (26") wide 3 ply chevron belt 7.25m (23' 9") drum centres (standard length) 286mm (11.3") drum diameter (drive) 270mm (10.6") drum diameter (tail)

3.93m (12' 11") stockpile height 90m³ (118 cu. yd.) stockpile volume

Variable speed control Hydraulically folding Fixed angle: 25°

OVERSIZE - HYDRAULIC AUXILIARY CONVEYOR (EXTENDED)

650mm (26") wide 3 ply chevron belt

10.26m (33' 8") drum centres (extended length)

286mm (11.3") drum diameter (drive)

270mm (10.6") drum diameter (tail)

5.21m (17' 1") stockpile height

211m3 (276 cu. yd.) stockpile volume

Variable speed control

Hydraulic folding

Working angle (slew): 0 - 70° Working angle (rake): 8 - 24°







- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - **▶** SIDE CONVEYORS
 - **▶** AUXILIARY CONVEYORS
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - ▶ OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



POWER UNIT & HYDRAULICS

Engine Tier 3:

CAT C4.4

Performance:

77 kW (104hp) @ 1800rpm

Engine Stage IIIA Constant Speed:

CAT C4.4 CS

Performance:

98 kW (131hp) @ 1800rpm

Engine Tier 4F / Stage IV:

CAT C4.4

Performance:

82 kW (110hp) @ 1800rpm

Engine Stage V:

CAT C4.4

Performance:

98 kW (131hp) @ 1800rpm

Tank Capacities:

Fuel: 336 L (88 US Gal)

Hydraulic: 450 L (118 US Gal)

Pumps:

Flywheel pump: Cast iron triple 63/41/41cc/rev

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

Motors:

Belt feeder: Cast iron 160cc/rev

Cast iron 630cc/rev Main conveyor:

Cast iron 500cc/rev Tail conveyor:

Side conveyors: Cast iron 315cc/rev

Auxiliary conveyor: Cast iron 400cc/rev

Cast iron 80cc/rev Screen motor:









- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



Track width: 400mm (1' 4'')

Sprocket centres: 3285mm (10' 9")

Gradability degrees: 23.4°

Gearbox ratio:1:154

Hydraulic motor: 50.9cc/rev

Approximate speed: 0.9kph (0.56mph) **Total flow per track**: 69 Lpm (approx.)







- OVERVIEW
- ► HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - **▶** SIDE CONVEYORS
 - **▶** AUXILIARY CONVEYORS
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- DIMENSIONS





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: +75mm (3")

Increase in machine weight: +3750kg (8,267lbs)



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: This option may alter transport dimensions and feed access. For further details please contact engineering for detailed drawings and dimensions.







- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - **▶ AUXILIARY CONVEYORS**
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



OTHER OPTIONS

- Custom colour machine
- Auto lubrication system
- Quick release wedge tensioning for top & middle deck
- Anti rollback
- Radio controlled tracking
- Hydraulic jacking legs
- Grid aperture: 152mm (6")
- Hydraulic extended auxiliary conveyor

- Vibrating grid discharge chute
- Crusher feed chute (when double deck vibrating grid is selected)
- Adjustable hopper door
- Extra coupling facility
- Screenbox reverse
- Fuel save option
- Bottom deck self cleaning flexi mesh
- Powerscreen Pulse









- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - **▶** SIDE CONVEYORS
 - **▶** AUXILIARY CONVEYORS
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



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

FLEET

OVERVIEW

GPS: MACHINE TRACKING



DASHBOARD DISPLAY

REPORTING

INBOX

UTILISATION, PERFORMANCE & PART SPECIFIC





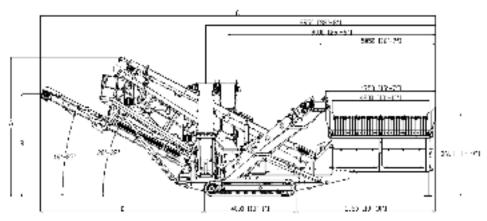


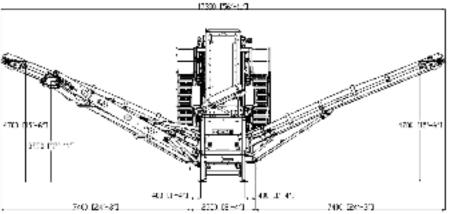
- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - **▶** AUXILIARY CONVEYORS
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - ▶ OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



	SCREENBOX WORKING ANGLES (DEGREES)				
DIMENSION (MM)	20 DEG	24 DEG	28 DEG	30 DEG	32 DEG
А	5403	5611	5809	5886	5993
В	3157	3587	4009	4216	4417
С	17592	17461	17302	17212	17114
D	7358	7215	7045	6950	6850

Figure 1: Chieftain 1700X 3 Deck **Standard Auxiliary Conveyor Working Position**







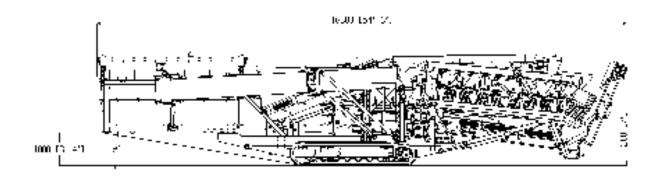


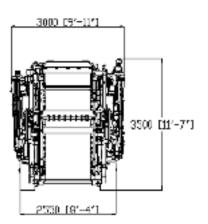


- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **→ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



Figure 2: Chieftain 1700X 3 Deck **Standard Auxiliary Conveyor Transport Position**







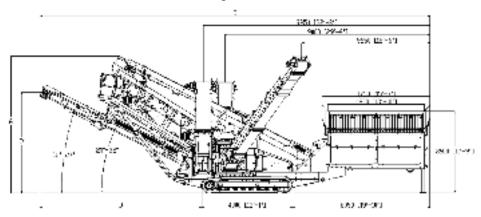


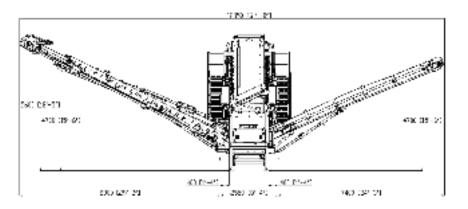
- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - **▶ AUXILIARY CONVEYORS**
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



	SCREENBOX WORKING ANGLES (DEGREES)				
DIMENSION (MM)	20 DEG	24 DEG	28 DEG	30 DEG	32 DEG
А	5403	5611	5809	5886	5993
В	3157	3587	4009	4216	4417
С	17592	17461	17302	17212	17114
D	7358	7215	7045	6950	6850

Figure 3: Chieftain 1700X 3 Deck **Hydraulic Extended Auxiliary Conveyor Working Position**







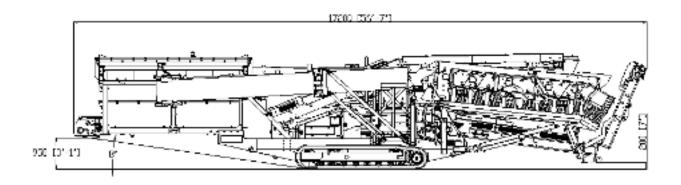


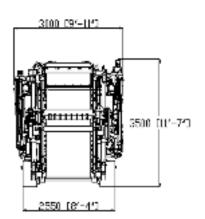


- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ▶ AUXILIARY CONVEYORS
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



Figure 4: Chieftain 1700X 3 Deck **Hydraulic Extended Auxiliary Conveyor Transport Position**







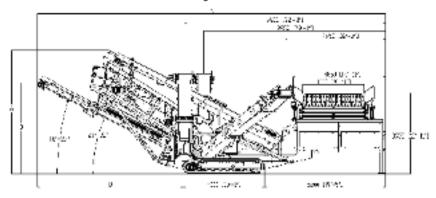


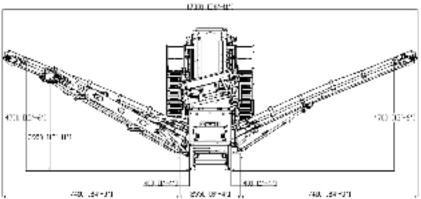
- ♠ OVERVIEW
- ▶ HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - **▶** AUXILIARY CONVEYORS
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - **▶** OTHER OPTIONS
- ▶ POWERSCREEN® PULSE
- DIMENSIONS



	SCREENBOX WORKING ANGLES (DEGREES)				
DIMENSION (MM)	20 DEG	24 DEG	28 DEG	30 DEG	32 DEG
А	5403	5611	5809	5886	5993
В	3157	3587	4009	4216	4417
С	17471	17340	17181	17091	16996
D	7358	7215	7045	6950	6850

Figure 5: Chieftain 1700X 3 Deck
Double Deck Vibrating Grid
Standard Auxiliary Conveyor
Working Position







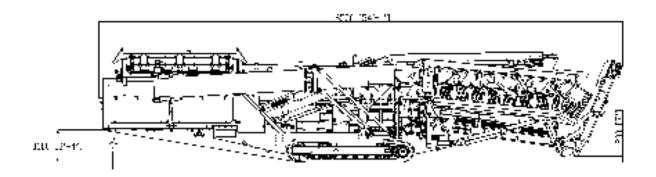


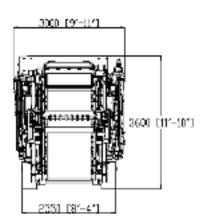


- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **→ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



Figure 6: Chieftain 1700X 3 Deck **Double Deck Vibrating Grid Standard Auxiliary Conveyor Transport Position**







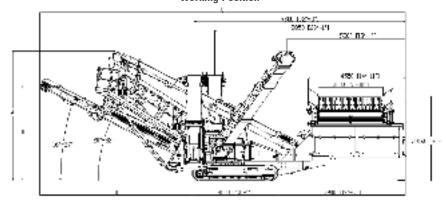


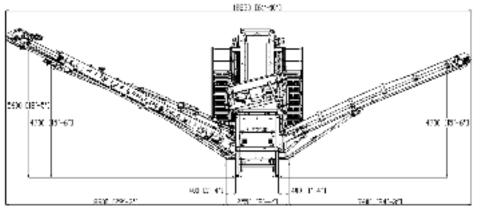
- **OVERVIEW**
- **HOPPER & GRID**
- **SCREENBOX**
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - **▶** AUXILIARY CONVEYORS
- **POWER UNIT & HYDRAULICS**
- **TRACKS**
- **OPTIONS**
 - ▶ OTHER OPTIONS
- POWERSCREEN® PULSE
- **DIMENSIONS**



	SCREENBOX WORKING ANGLES (DEGREES)				
DIMENSION (MM)	20 DEG	24 DEG	28 DEG	30 DEG	32 DEG
А	5403	5611	5809	5886	5993
В	3157	3587	4009	4216	4417
С	17471	17340	17181	17091	16996
D	7358	7215	7045	6950	6850

Figure 7: Chieftain 1700X 3 Deck **Double Deck Vibrating Grid Hydraulic Extended Auxiliary Conveyor Working Position**





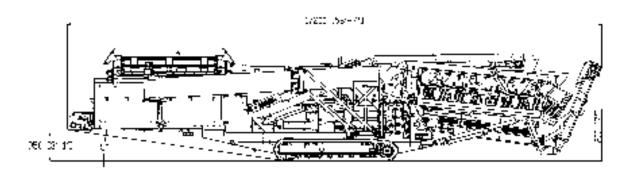


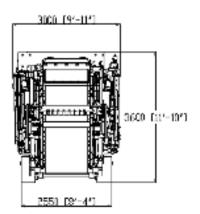


- OVERVIEW
- HOPPER & GRID
- SCREENBOX
- MAIN CONVEYOR
 - **▶ TAIL CONVEYOR**
 - ▶ SIDE CONVEYORS
 - ► AUXILIARY CONVEYORS
- POWER UNIT & HYDRAULICS
- TRACKS
- OPTIONS
 - **▶** OTHER OPTIONS
- POWERSCREEN® PULSE
- DIMENSIONS



Figure 8: Chieftain 1700X 3 Deck
Double Deck Vibrating Grid
Hydraulic Extended 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

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





