

C-1545P

CONE CRUSHER



Cone Head Diameter: 1150mm (45")

Net Engine Power: Tier 3/Stage IIIA:

Tier 4F:

Stage V:

Portability:

Tracked

Operating Weight: 51,680kg (113,935lbs) (Without options)

Caterpillar C13 Acert 328kW (440hp)

Scania DC13 331kW (450hp)

Scania DC13 331kW (450hp)

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 **FINLAY**[®]
A TEREX BRAND

SPECIFICATION

HOPPER / FEEDER

Hopper capacity: 6m³ (7.8yd³)

Feed height: 3.1m (10' 2") Pre-screen position, 3.1m (10' 2") Direct feed position

Feed height with optional hopper extensions: 3.3m (10' 10") Pre-screen position, 3.3m (10' 10") Direct feed position

Hopper fabricated in 10mm mild steel plate with combination of 10mm and 6mm wear resistant steel liners at impact point

Hopper Width at rear: 2.25m (7' 5")

Hopper Width at rear with optional hopper extensions: 4.1m (13' 6")

Belt Spec: Plain

Belt Width: 1.3m (51")

Speed range: variable, 0-32 m/min (0-105 ft/min)

Working Angle: 18° Direct Feed
22° Pre-screen Feed

Drive: Hydraulic variable speed drive via gearbox

Drop down rear door for auxiliary crusher feed

Crash bar fitted to reduce impact load on feed conveyor

Rubber covered impact rollers fitted

Hydraulic retraction system for ease of movement between transport and working modes

Tapered hopper and side barge boards to aid material flow

Full length skirting to head drum

Automatic variable speed conveyor ensures maximum output from plant

Metal detection system with 'auto-stop' feature is suitable for detecting steel and manganese steel contained in the feed material

CONE CHAMBER

Terex 1150mm (45") cone chamber

Cone Counter Shaft Speed Range: 1550 - 1700 rpm

Variable speed control settings for producing a quality aggregate

Long throw fitted on standard configuration

Drive arrangement: Direct drive via clutch and v-belts

'On the fly' hydraulically adjustable closed side setting with monitoring system

Mantle/concave wear indicator



Hopper and Feeder



Hopper and Feeder



Cone Chamber

Concave	Maximum Feed Size	Maximum CSS	Minimum Recommended CSS
Medium Coarse	180mm (7 1/16")	45mm (1 25/32")	18mm (23/32")
Extra Coarse	205mm (8 1/8")	45mm (1 25/32")	25mm (1")
Fine	110mm (4 5/16")	45mm (1 25/32")	14mm (9/16")

*Note: Minimum Recommended CSS subject to feed conditions

Cone Chamber

CONE CHAMBER continued

Hydraulic overload protection with automatic reset. This allows the upper frame to lift up, to permit the passage of tramp iron and other un-crushable material. The system then automatically returns the upper frame to its original position

Unrestricted feed opening reduces blockages, bridging and maximizes output

Independent cone oil lubrication tank with separate oil cooler

Level sensor fitted over inlet feed box maintains the optimum choke feed condition hence maximizing the reduction and manganese life

Dust suppression fitted at cone outlet

MAIN CONVEYOR

Belt Width: 1.0m (40")

Belt Spec: Plain

Working Angle: 23°

Speed: 105 – 115 m/min (344 – 377 ft/min)

Discharge Height: 3.3m (10' 10")

Impact bars and wear resistant liners at feed point

High spec scraper at head drum

Dust suppression: fitted with hose and spraybars as standard (no pump supplied)

Full length skirting to head drum

Dust covers (Optional)

Stockpile level sensor (Optional)

Stockpile capacity: 51.1m³ (66.8yds³) @ 40°

POWERPACK

Tier 3 / Stage IIIA : Caterpillar C13 ACERT

Engine Power: 328kW (440hp)

Engine Speed : 1750 - 1900 rpm

Tier 4F: Scania DC13

Engine Power: 331kW (450hp)

Engine Speed: 1550 - 1700 rpm

Stage V: Scania DC13

Engine Power: 331kW (450hp)

Engine Speed: 1550 - 1700 rpm

TANK CAPACITIES

Hydraulic Tank: 660 litres / 145 UK gal / 174 US gal

Fuel Tank: 1000 litres / 220 UK gal / 264 US gal

Urea Tank: 60 litres / 13 UK gal / 15 US gal

UNDERCARRIAGE

Shoe Width: 500mm (20")

Sprocket Centres: 3.80m (12' 6")

Tracking Speed: 0.7 km/h

Gradeability: 25°



Main Conveyor



Main Conveyor



Powerunit (Scania)



Undercarriage

TOOL BOX

Mounted lockable toolbox

Tool kit supplied

Two grease guns supplied – one for machine, one for cone

CHUTES

Quick release cone feed box for cone wear part changes

Cone chamber feed box fabricated in 6mm mild steel plate

Cone chamber discharge chute fabricated in 10mm mild steel plate with 10mm wear resistant steel liners at impact point

CONTROL SYSTEM

Advanced CANBUS compliant system

Large colour display screen

Main menu consists of five modes:

Automatic mode: For automatically starting the machine in a set sequence

Track mode: For moving machine

Setup mode: For folding / setting up machine

Cone setup mode: For testing / setting of cone

Configuration mode: For testing / setting individual components / monitoring engine performance and faults / monitoring machine faults

User friendly incremental selection of feeder and engine speed, enable the operator to achieve the optimal throughput and product shape

The main control panel is mounted to the side of the machine in a lockable compartment

Detachable umbilical control for tracking

PLATFORMS

Galvanised catwalks and ladders for full maintenance and service access

Catwalks on both sides of the machine

Compact folding for transport

REMOTE CONTROL UNIT (OPTIONAL)

Full function radio remote unit:

- Auto start / stop
- Feed conveyor start / stop
- Adjust feed conveyor speed
- Adjust engine rpm
- Tracking



Cone Chamber feed box



Platforms



Platforms

PRE-SCREEN MODULE

A) Screen

Top Deck: 2.1m x 1.5m (7' x 5')

Total screening area: 3.15m (35 ft²)

Tensioning top deck: side

Drive: 2 x External hydraulic vibrators

Screen Angle: 13°

Screen Speed: 950 - 975 rpm

The Pre-screen module will maximise production through the cone by removing as much fine material as possible before it enters the cone chamber. This will also reduce wear within the cone camber.

Pre-screen can be by-passed and material feed directly into cone if required.

Hydraulically folds for transport



Pre-Screen

PRE-SCREEN SIDE CONVEYOR (OPTIONAL)

Belt Width: 650mm (26")

Belt Spec: Plain

Working Angle: 22°

Speed: 110 - 130 m/min (361 - 427 ft/min)

Hydraulically folds for transport

Conveyor discharges to plant right hand side

Discharge Height: 2.8m (9' 2")

Stockpile capacity: 32.6m³ (42.6yds³) @ 40°



Pre-Screen Side Conveyor (Optional)



Pre-Screen & Pre-Screen Side Conveyor (Optional)

STANDARD FEATURES

ENGINE:

Tier 3 / Stage IIIA - Caterpillar C13 ACERT 328kW (440hp)

Tier 4 Final: Scania DC13 331kW (450hp)

Stage V: Scania DC13 331kW (450hp)

CONE CHAMBER:

Terex TC1150

Long throw eccentric, medium coarse concave (max feed size 180mm)

Direct drive via clutch

HOPPER / FEEDER:

Fixed hopper c/w wear resistant liner plates

Belt width: 1.3m (51")

Metal detector

MAIN CONVEYOR:

Belt width: 1000mm (40")

PRE-SCREEN:

2.13m x 1.52m (7' x 5') single deck screen. 20mm aperture punch plate fitted, unless specified otherwise

CLIMATE SPEC:

Standard oils (Recommended for ambient temperatures between -5 to +30°C)

DUST SUPPRESSION:

Piped for dust suppression c/w spraybars

ELECTRICAL:

Emergency stops

Hand held track control set with connection lead

T-Link Telemetry System fitted c/w 7 years data subscription

GENERAL:

Safety guards in compliance to machinery directive

OPTIONAL EQUIPMENT

Extra coarse concave - max feed size 205mm (check leadtime) ¹

Fine concave - max feed size 110mm (check leadtime) ¹

Short throw eccentric (check leadtime) ¹

Camera & Viewing screen

Hydraulic hopper extensions

Dust covers

Belt weigher

Stockpile level sensor

Side conveyor

Hot climate lubrication kit (Recommended for ambient temperatures between +15 to +50°C)

Cold climate lubrication kit (Recommended for ambient temperatures between -20 to +30°C)

Hot climate cooler pack c/w hot climate lubrication kit (Recommended for ambient temperatures > +35°C)

Hydraulic driven water pump

Electric Re-fuelling pump

Radio remote system

Control panel positive air pressurization

Lighting mast

Base System, contains all hardware, 2 x cameras and tablet with attachments

Crusher expansion kit, contains all hardware and 2 x cameras

Powerpack

- ▶ Tier 3 / Stage IIIA : Caterpillar C13 ACERT
- ▶ Engine Power: 328kW (440hp)
- ▶ Engine Speed : 1750 - 1900 rpm
- ▶ Tier 4F: Scania DC13
- ▶ Engine Power: 331kW (450hp)
- ▶ Engine Speed: 1550 - 1700 rpm
- ▶ Stage V: Scania DC13
- ▶ Engine Power: 331kW (450hp)
- ▶ Engine Speed: 1550 - 1700 rpm

Platforms

- ▶ Galvanised catwalks and ladders for full maintenance and service access
- ▶ Catwalks on both sides of the machine
- ▶ Compact folding for transport

Metal Detector

- ▶ Hopper capacity: 6m³ (78yd³)
- ▶ Hopper fabricated in 10mm mild steel plate with combination of 10mm and 6mm wear resistant steel liners at impact point
- ▶ Hopper Width at rear: 2.25m (7' 5")
- ▶ Hopper Width at rear with optional hopper extensions: 4.1m (13' 6")
- ▶ Belt Spec: Plain
- ▶ Belt Width: 1.3m (51")
- ▶ Crash bar fitted to reduce impact load on feed conveyor

Prescreen Conveyor

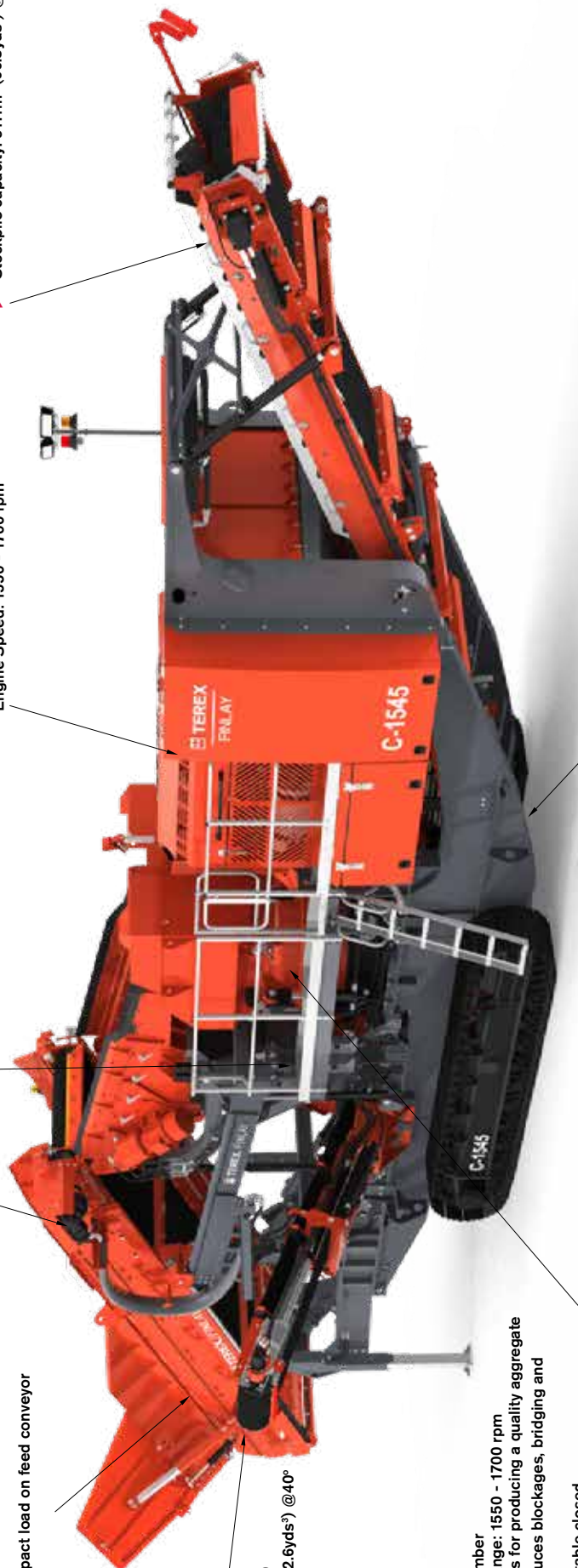
- ▶ Belt Width: 650mm (26")
- ▶ Belt Spec: Plain
- ▶ Discharge Height: 2.8m (9' 2")
- ▶ Stockpile capacity: 32.6m³ (42.6yds³) @40°

Cone chamber

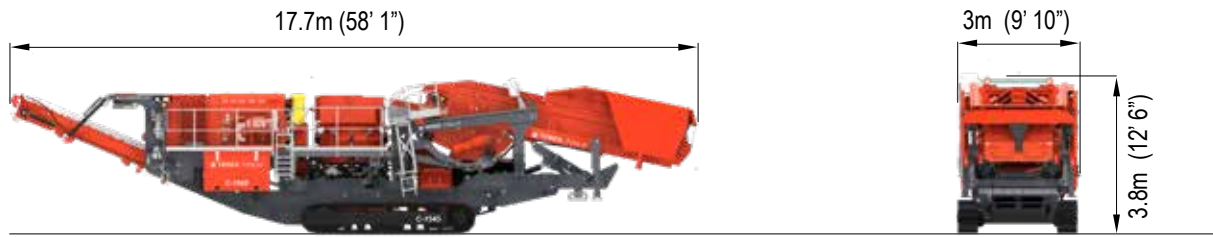
- ▶ Terex 1150mm (45") cone chamber
- ▶ Cone Counter Shaft Speed Range: 1550 - 1700 rpm
- ▶ Variable speed control settings for producing a quality aggregate
- ▶ Unrestricted feed opening reduces blockages, bridging and maximizes output
- ▶ 'On the fly' hydraulically adjustable closed side setting with monitoring system
- ▶ Hydraulic overload protection with automatic reset. This allows the upper frame to lift up, to permit the passage of tramp iron and other un-crushable material. The system then automatically returns the upper frame to its original position
- ▶ Dust suppression fitted at cone outlet

Undercarriage

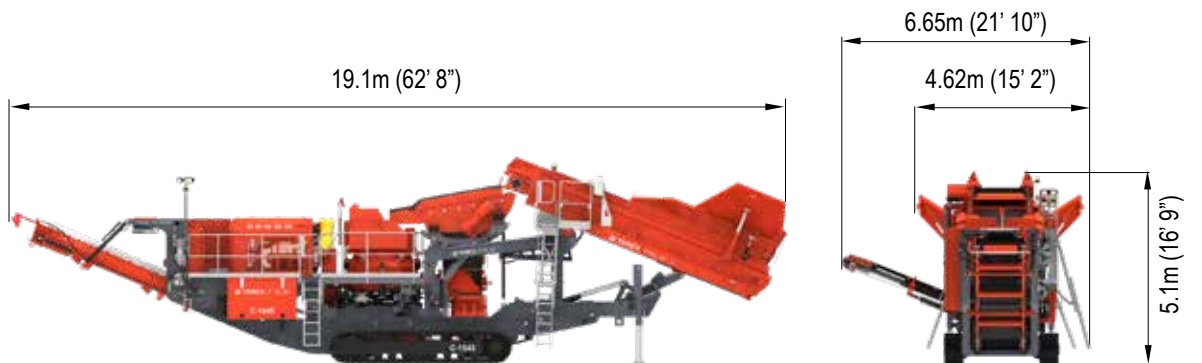
- ▶ Shoe Width: 500mm (20")
- ▶ Sprocket Centres: 3.80m (12' 6")
- ▶ Tracking Speed: 0.7 km/h
- ▶ Gradeability: 25°



Transport Dimensions



Working Dimensions



MACHINE WEIGHT:

51,680kg (113,935lbs)

without options

53,680kg (118,344lbs)

with optional pre-screen side conveyor, hopper extension and main conveyor dust covers

For further information on specific machine weight configurations please consult Terex Finlay