TEREX | FINLAY

C-1540RS CONE CRUSHER

SPECIFICATION:

Cone Head Diameter:		1000mm (40”)
Net Engine Power:	Tier 3 / Stage IIIA:	Caterpillar C13 Acert 328kW (440hp)
	Tier 4F / Stage IV:	Scania DC13 331kW (450hp)
	Stage V:	Scania DC09 294KW (400hp)
Portability:		Tracked
Operating Weight:		51,120kg (112,700lbs)*

**With optional pre-screen, mid-grade transfer & mid- grade stockpiling conveyor*

SPECIFICATION

HOPPER / FEEDER

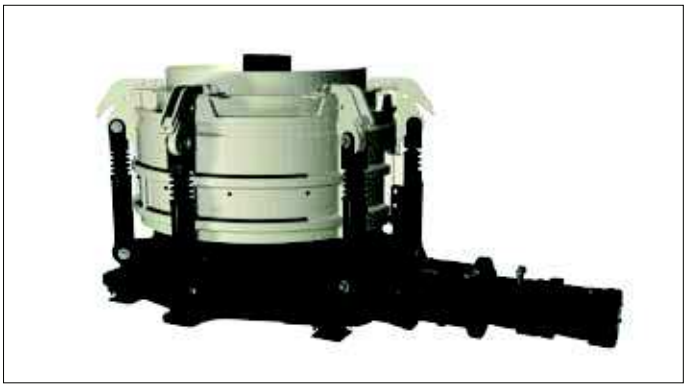
- Hopper capacity: 5m³ (6.5yd³)
- Feed height: 2.93m (9' 7") (Pre-screen position), 2.8m (9' 2") (Direct feed position)
- Feed height with optional hopper extensions: 3.33m (10' 11") (Pre-screen position), 3.2m (10' 6") (Direct feed position)
- Hopper fabricated in 10mm mild steel plate with 10mm wear resistant steel liners at impact point
- Hopper Width at rear: 2.45m (8')
- Hopper Width at rear with optional hopper extensions: 3.7m (12' 2")
- Belt Spec: Plain
- Belt Width: 1.05m (42")
- Speed range: Variable, 0 – 31 m/min (0 – 101 ft/min)
- Working Angle: 24° (Pre-screen feed), 21° (Direct 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
- 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
- Controllable discharge system to purge metal contaminants. This feature allows the operator to clear metal from the feed conveyor when it is detected. The contaminated material is dumped to the side of the machine. This can be done on the main control panel or remotely via the optional radio remote

CONE CHAMBER

- Terex 1000mm (40") cone chamber
- Cone Counter Shaft Speed Range: 840 - 940 rpm
- Variable speed control settings for producing a quality aggregate
- Long throw fitted on standard configuration
- Drive arrangement: Direct hydrostatic cone drive with electronic speed control system
- 'On the fly' hydraulically adjustable closed side setting with monitoring system
- Mantle/concave wear indicator
- 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

Hopper and Feeder

Hopper and Feeder



Cone Chamber

Cone Chamber

CONE CHAMBER continued

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 inlet and outlet

Concave	Maximum Feed Size	Maximum CSS	Minimum Recommended CSS
Medium Coarse	160mm (6 5/16")	36mm (1 7/16")	19mm (3/4")
Coarse	175mm (6 7/8")	36mm (1 7/16")	19mm (3/4")
Extra Coarse	195mm (7 11/16")	36mm (1 7/16")	22mm (7/8")
Sand	63mm (2 1/2")	32mm (1 1/4")	13mm (1/2")

*Note: Minimum Recommended CSS subject to feed conditions

MAIN CONVEYOR

Belt Width: 900mm (36")

Belt Spec: Plain

Working Angle: 21°

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

Standard Stockpile capacity: 53.5m³ (70yd³) @ 40°

Afterscreen & Fines Conveyor

POWERPACK

Tier 3 / Stage IIIA: Caterpillar C13 ACERT
Engine Power: 328kW (440hp)
Engine Speed: 1900 rpm

Tier 4F / Stage IV: Scania DC13
Engine Power: 331kW (450hp)
Engine Speed: 1900 rpm

Stage V: Scania DC09
Engine Power: 294kW (400hp)
Engine Speed: 1900 rpm

Scania Engine

Cat Engine

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PRE-SCREEN MODULE (OPTIONAL)

A) Screen

Top deck: 1.83m x 1.22m (6' x 4')

Total screening area: 2.23m² (24ft²)

Tensioning top deck: side

Drive: hydraulic with heavy duty bearing

Screen Angle: 25°

Screen Speed: 1200 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 chamber

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

Hydraulically folds for transport

B) Transfer Conveyor

Belt Width: 1m (40")

Belt Spec: Plain

Working Angle: 23°

Speed: 71 – 81 m/min (232 – 265 ft/min)

Hydraullically folds for transport along with pre-screen

Can be raised hydraulically to aid screen mesh changing

Dust cover

Full length skirting to head drum

Pre-screen module in working mode

Pre-screen module in working mode

PRE-SCREEN SIDE CONVEYOR (OPTIONAL)

Belt Width: 650mm (26")

Belt Spec: Plain

Working Angle: 23°

Speed: 85 - 100 m/min (278 - 328 ft/min)

Conveyor has to be manually lifted off for transport & is transported with the plant

Discharge Height: 3.65m (12')

Stockpile capacity: 69.4m³ (90.8yd³) @ 40°

Pre-screen side Conveyor

Pre-screen side Conveyor

RE-CIRCULATING SYSTEM

A) Screen Box

Top deck: 3.66m x 1.53m (12' x 5')

Bottom deck: 3.05m x 1.53m (10' x 5')

Total screening area: 10.1m² (110ft²)

Tensioning top deck: side

Tensioning bottom deck: end

Drive: hydraulic with heavy duty bearing

Screen Angle: 19° - 22°, hydraulic adjust

Screen Speed: 1200 rpm

40mm mesh fitted as standard to top deck

No mesh fitted to bottom deck as standard. Middle-grade blanking chute fitted

Screen can be lowered to a horizontal position for mesh changing and general service access

Screen and Fines Conveyor can be quick detached if not required

B) Oversize Transfer Conveyor

Belt width: 500mm (20")

Belt spec: Plain

Speed: Variable speed, 0 - 90 m/min (0 - 295 ft/min)

Hydraulically folds for transport

Full length conveyor skirting

C) Re-circulating Conveyor

Belt width: 500mm (20")

Belt spec: Chevron

Working Angle: 30°

Speed: Variable speed, 0 - 90 m/min (0 - 295 ft/min)

Hydraulically folds for transport

D) Fines conveyor

Belt width: 1.4m (55")

Belt spec: Plain

Working Angle: 19° - 22° (same as screen box)

Speed: 70 – 80 m/min (229 – 262 ft/min)

Hydraulically folds for transport

Discharge Height: 3.0m (9' 10")

Stockpile capacity: 44.3m³ (58yd³) @ 40°

E) Mid-grade transfer conveyor (option supplied along with mid-grade stockpile conveyor)

Belt width: 500mm (20")

Belt spec: Plain

Speed: Variable speed, 0 - 90 m/min (0 - 295 ft/min)

Full length conveyor skirting

Re-circulating System

Re-circulating System and Screenbox

Re-circulating System

Mid-grade stockpile Conveyor

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RE-CIRCULATING SYSTEM continued

F) Mid-grade stockpile conveyor (option supplied along with mid-grade transfer conveyor)

Belt Width: 650mm (26")

Belt spec: Chevron

Working Angle: 25°

Speed: Variable speed, 0 - 90 m/min (0 - 295 ft/min)

Conveyor has to be manually lifted off for transport & is transported with the plant

Discharge Height: 3.2m (10' 6")

Stockpile capacity: 53.4m³ (70yd³) @ 40°

UNDERCARRIAGE

Shoe Width: 500mm (20")

Sprocket Centres: 3.80m (12' 6")

Tracking Speed: 0.9 km/h

Gradeability: 25°

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 5mm mild steel plate with 15mm wear resistant steel liners fitted at impact point

Contamination chute fabricated in 6mm mild steel plate

Re-circulating conveyor discharge chute fabricated in 5mm mild steel with 6mm wear resistant steel liners fitted 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

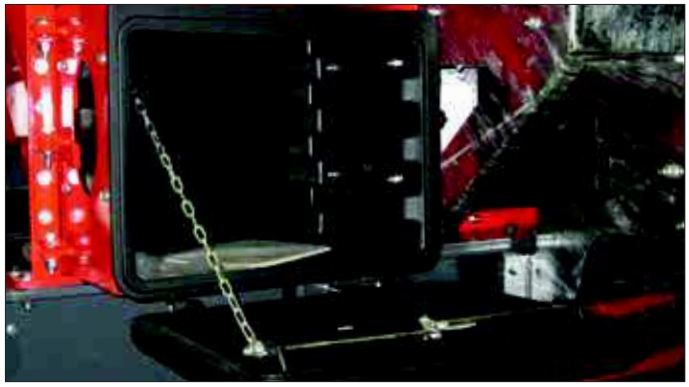
Configuration mode: For testing / setting individual components / monitoring engine performance and faults / monitoring machine faults

User friendly incremental selection of feeder and crusher 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

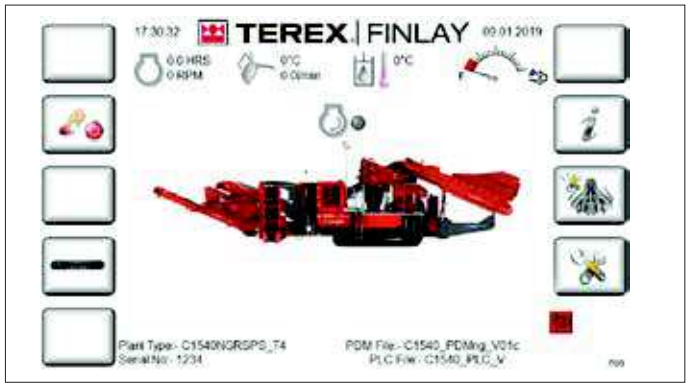
Detachable umbilical control for tracking

Undercarriage



Tool Box

Chutes



Control System

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PLATFORMS

Galvanised catwalks and ladders for full maintenance and service access

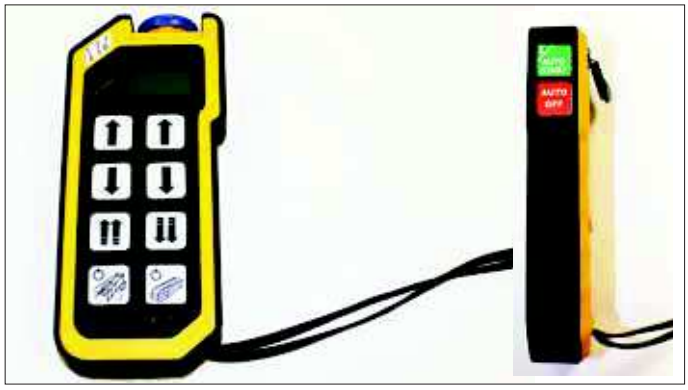
Catwalks on left-hand side of the machine

Compact folding for transport

REMOTE CONTROL UNIT (OPTIONAL)

Full function radio remote unit:
- Auto start / stop
- Feed conveyor start / stop
- Metal purge sequence
- Tracking

Platforms



Remote Control Unit (Optional)

STANDARD FEATURES

ENGINE:

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

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

CONE CHAMBER:

Terex TC1000

Long throw eccentric, medium coarse concave (max feed size 160mm)

Hydrostatic cone drive

HOPPER / FEEDER:

Fixed hopper c/w wear resistant liner plates

Belt width: 1050mm (42")

Metal detector & Metal contaminants purge system

MAIN CONVEYOR:

Belt width: 900mm (36")

Dust covers

RE-CIRCULATING SYSTEM:

3.66m x 1.52m (12' x 5') two deck screen. Top deck 40mm aperture mesh fitted, unless specified otherwise

CLIMATE SPEC:

High specification hydraulic oil cooler

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

DUST SUPRESSION:

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 3 years data subscription

GENERAL:

Safety guards in compliance to machinery directive

One auxiliary drive (NOTE - SOME OPTIONS REQUIRE AN AUXILARY WHICH CAN USE THIS)

OPTIONAL EQUIPMENT

Stage V: Scania DC09 294kW (400hp)

Extra coarse concave - max feed size 195mm (check lead time) [1] (NOTE - NOT RECOMMENDED TO BE USED WITH PRE-SCREEN SYSTEM)

Coarse concave - max feed size 175mm (check lead time) [1]

Sand concave - max feed size 63mm (check lead-time) [1] (RECOMMENDED TO TAKE SHORT THROW ECCENTRIC OPTION)

Short throw eccentric (check lead time) [1]

Manual hopper extensions

PRE-SCREEN:

- 1.83m x 1.22m (6' x 4') single deck screen. 16mm aperture mesh fitted, unless specified otherwise. Max feed size 160mm. Requires 1 auxiliary drive

Pre-Screen Side conveyor

Belt weigher

Middle grade stockpiling conveyor c/w bottom deck 20mm mesh (unless specified otherwise) and middle grade transfer 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 lubrication oil cooler (Recommended for ambient temperatures between > +35°C)

Hydraulic driven water pump. Requires 1 auxiliary drive

Electric Re-fuelling pump

Radio remote system

Control panel positive air pressurization

Lighting mast

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Hopper / Feeder

- Hopper capacity: 5m³ (6.5yd³)
- Hopper fabricated in 10mm mild steel plate with 10mm wear resistant steel liners at impact point
- Hopper Width at rear: 2.45m (8')
- Hopper Width at rear with optional hopper extensions: 3.7m (12' 2")
- Belt Spec: Plain
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- Speed range: variable, 0 – 31 m/min (0 – 101 ft/min)
- Working Angle: 24° (Pre-screen feed), 21° (Direct feed)
- Drop down rear door for auxiliary crusher feed
- Crash bar fitted to reduce impact load on feed conveyor

Powerpack

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Fines Conveyor

- Belt width: 1.4m (55")
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- Hydraulically folds for transport
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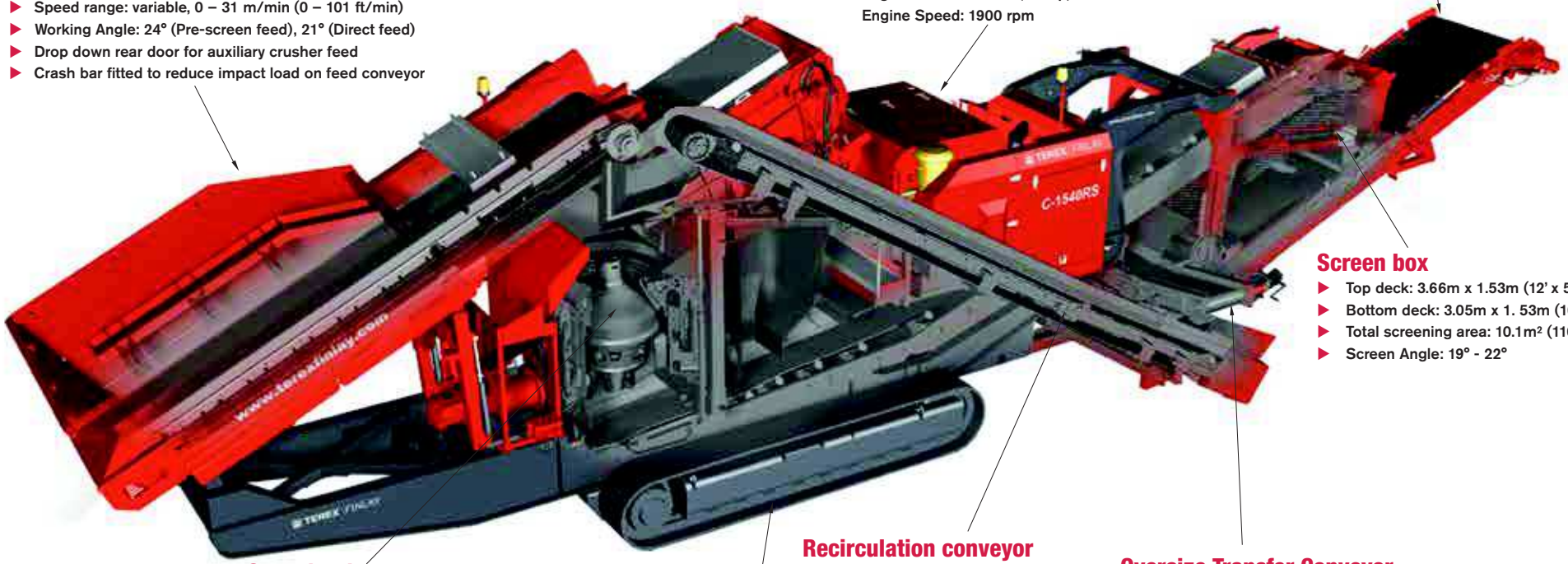

Screen box

- Top deck: 3.66m x 1.53m (12' x 5')
- Bottom deck: 3.05m x 1. 53m (10' x 5')
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- Screen Angle: 19° - 22°

Cone chamber

- Terex 1000mm (40") cone chamber
- Cone Counter Shaft Speed Range: 840 - 940 rpm
- Variable speed control settings for producing a quality aggregate
- 'On the fly' hydraulically adjustable closed side setting with monitoring system

Recirculation conveyor

- Belt width: 500mm (20")
- Belt spec: Chevron
- Working Angle: 30°
- Speed: Variable speed, 0 - 90 m/min (0 - 295 ft/min)
- Hydraulically folds for transport

Oversize Transfer Conveyor

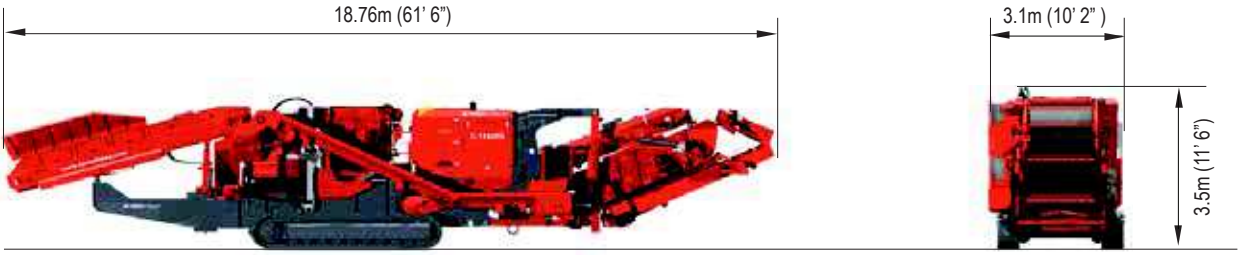
- Belt width: 500mm (20")
- Belt spec: Plain
- Speed: Variable speed, 0 - 90 m/min (0 - 295 ft/min)
- Hydraulically folds for transport

Undercarriage

- Shoe Width: 500mm (20")
- Sprocket Centres: 3.80m (12' 6")
- Tracking Speed: 0.9 km/h
- Gradeability: 25°

C-1540RS

TRANSPORT DIMENSIONS



WORKING DIMENSIONS

MACHINE WEIGHT:

51,120kg (112,700lbs)
(with optional pre-screen, mid-grade transfer & mid-grade stockpiling conveyor)

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

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