

Terex® Minerals Processing Systems

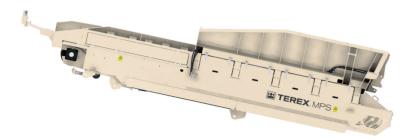


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LC450 Cone Crusher

Product Specification







Hopper and Feeder

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Specification	
Cone Head Diameter	1380mm (54")
Net Engine Power	Tier 2 / Stage IIIA: Caterpillar C18 Acert 571kW (765hp)
Portability	Tracked
Operating Weight	61,060kg (134,482lbs)* *With optional hopper extensions

	Ho	pper	/ Feec	ler
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Hopper capacity: 8m³ (10.4yd³)

Feed height: 3.3m (10' 10")

Feed height with optional hopper extensions: 3.7m (12' 2")

Hopper fabricated in 10mm mild steel plate with combination of 15mm, 10mm and 6mm wear resistant steel liners at impact point

Hopper Width at rear: 2.5m (8' 2")

Hopper Width at rear with optional hopper extensions: 4.16m (13' 8")

Belt Spec: Plain

Belt Width: 1.2m (48")

Speed range: variable, 0 - 43 m/min (0 - 141 ft/min)

Working Angle: 22°

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

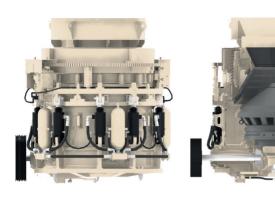
Full length skirting to head drum

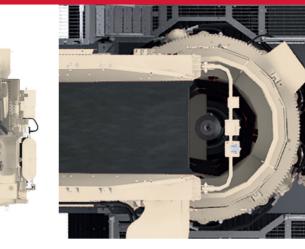
Automatic variable speed conveyor ensures maximum output from plant

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. Note. If the metal detection is de-selected, this is not applicable





Cone Chamber

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Cone Chamber

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Cone Chamber

Terex 1380mm (54") MVP450x cone chamber

Cone Counter Shaft Speed Range: 700 - 1000 rpm

Variable speed control settings for producing a quality aggregate

Drive arrangement: Direct drive via clutch and belts

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

Unrestricted feed opening reduces blockages, bridging and maximizes output

Integrated 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

Liner Configuration	Maximum Feed Size	Maximum CSS	Minimum Recommended CSS
Coarse - Medium	280mm (11")	75mm (3")	19mm (3/4")
Medium - Medium	255mm (10")	75mm (3")	16mm (5/8")
Medium Fine - Medium	155mm (6 1/8")	50mm (2")	13mm (1/2")
Fine - Medium	210mm (8 1/4")	50mm (2")	13mm (1/2")
Extra Fine - Medium	180mm (7")	50mm (2")	6mm (1/4")

Note: All max feed sizes are stated for new liners, feed size will reduce by 30% over life of the liners.





Main Conveyor

Main Conveyor

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Main Conveyor

Belt Width: 1.2m (48")

Belt Spec: Plain

Working Angle: 26°

Discharge Height: 3.55m (11' 8")

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

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Stockpile level sensor option

Stockpile capacity: 69.4m3 (90.8yds3) @ 40°



Powerpack

Tier 2 / Stage IIIA : Caterpillar C18 ACERT

Engine Power: 571kW (765hp)

Engine Speed : 1700 - 2000 rpm

Tank Capacities

Hydraulic Tank: 850 litres / 187 UK gal / 225 US gal Fuel Tank: 1100 litres / 242 UK gal / 290 US gal

Undercarriage

Shoe Width: 500mm (20")

Sprocket Centres: 4.2m (13' 8")

Tracking Speed: 1.1 km/h

Gradeability: 25°

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
- Metal purge sequence
- Tracking



Control System

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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

Emergency stops: 9 off

Tool Box

Mounted lockable toolbox

Tool kit supplied

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

Chutes

Cone chamber feed box fabricated in 6mm mild steel plate

Cone chamber discharge chute fabricated in 10mm mild steel plate with 15mm wear resistant steel liners at impact point

Contamination chute fabricated in 6mm mild steel plate

Note: If metal detection system is de-selected the contemination chute will note be fitted.

Standard Features

Engine

Tier 3 / Stage IIIA (Equivalent):-Caterpillar C18 ACERT 575kW (770hp) (Engines are available to meet both US EPA emission standards, under CFR 1039.625 and EU flexibility provisions of Directive 97/68/EC)

Cone

Terex MVP450X

Coarse-Medium Liners, Medium Mantle & Coarse concave 18% (max feed 255mm)

Direct cone drive via wet clutch

Minimum chamber tramp of 115mm (4.5") this is not a permissable limit.

Feed Conveyor/Hopper

Hopper capacity: 8m3 (10.4yd3)

Belt width: 1.2m (48")

Metal detector

Metal contaminants purge system

Wear resistant liner plates

Main Conveyor

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Belt width: 1.2m (47")

High spec scraper at head drum

Wear resistant liners at crusher discharge point

Dust Covers

General

Galvanised catwalk c/w handrail, kick board and access ladders

Heavy duty track unit, sprocket centres 3.8m, pad width 500mm

Hand held track control set with connection lead

Safety guards in compliance to machinery directive

One auxiliary drive

Emergency stops

Piped for dust suppression c/w spraybars

Standard oils

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

Metal Detector

Remove Metal detector from feeder, along with purge chute. Note: The non-selection of the metal detector is at your own risk. Any damage caused to the chamber by tramp metal in feed will non-warrantable.

Optional Equipment

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Special paint colour - RAL must be specified on order.

Hydraulically driven water pump

Electric re-fuelling pump

Hydraulic extensions for feed hopper (capacity 10m³/13yd³)

Radio remote system

Belt weigher for main conveyor

Stockpile sensor for main conveyor

Lighting mast

Second auxiliary drive

Hot climate lubrication kit (recommended for ambient temperatures between 15 to $+50^{\circ}$ c)

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

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

Camera over crusher

Control panel positive air pressurization

Cone Liners - Note Extended lead time. Contact Sales Department. (Max feed size with Coarse Liner configuration is 355mm with new liners)

Cone Chamber

- Terex MVP450X (1380mm/54")
- Range of liner configurations available, 18%, max feed size dependent on liner configuration and wear
- Direct cone drive via clutch and belts
- Cone Counter Shaft Speed Range: 700 - 1000 rpm
- Variable speed control settings for producing a quality aggregate
- Hydraulically adjustable closed side setting with monitoring system
- Hydraulic overload protection with automatic reset.

Hopper / Feeder

- Hopper Capacity: 8m³ (10.4yd³)
- Belt width: 1.2m (48")
- Wear resistant liner plates
- Hopper Width at rear: 2.5m (8' 2")
- · Hopper Width at rear with optional hopper extensions: 4.16m (13' 8")
- Belt Spec: Plain
- Belt Width: 1.2m (48")
- Speed range: variable, 0 43 m/min (0 141 ft/min)
- 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
- Automatic variable speed conveyor ensures maximum output from plant

Undercarriage

• Shoe Width: 500mm (20") • Sprocket Centres: 3.80m (12' 6")

 Tracking Speed: 1.2 km/h Gradeability: 25°

Machine Weight

61,000kg (134,482 lbs) *with hopper extensions

Caterpillar C18 ACERT • Engine Power: 571kW (765hp) • Engine Speed : 1700 - 2000 rpm

17m (55' 6")

3m (9' 10")



18.5m (60' 8")



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Main Conveyor

• Belt Spec: Plain

• Dust Covers

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• Belt Width: 1.2m (48")

· Wear resistant liners at

· Impact bars and wear

(90.8yds3) @ 40°

crusher discharge point

resistant liners at feed point

Powerpack • Tier 2 / Stage IIIA:

• Stockpile capacity: 69.4m3

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