TESAB

Impactor

TECHNICAL DESCRIPTION

RK623CT ROTOCRUSHER

TESAB RK623CT *SALES SPECIFICATION*

TESAB RK623CT ROTOCRUSHER

Self Contained Tracked Impact Crusher

Feed hopper

Feed belt

Tesab RK623 Impactor

Discharge conveyor

Crusher opening:

600x350mm (24”x14”)

Max feed size:

200mm (8”)

Production:

100 tph+

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Feed Hopper

Capacity:
6 cubic metres

Feed in dimensions:
(with shroud)
4.30 x 1.83m
(without shroud)
3.66m x 1.50m

Feed-in height:
3.80m

Features:

Hinged shroud for
extra capacity.

Removable section for
Screening plant integration.

Adjustable door at the feed
out to control feed rate.

Fully skirted with 15mm
thick rubber.

Load bearing bridge.

10mm thick steel lining.

Feed Conveyor

Belt Width:
800mm

Specification:
EP500 / 3 ply
5mm top cover
1.5mm bottom cover

Conveyor Length:
Approx 6.40m centres

Drive:
High torque reduction gear and hydraulic motor through flexible coupling to rubber lagged drive drum.

Features:
Box section construction.

Full length impact troughing rollers.

Bottom end drum adjustment.

Fully enclosed, sealed and lined feed-in canopy to the crusher.

Guarded and hinged doors to give access to 15mm skirting rubbers.

Spring tensioned belt scrapper.

Return belt scrapper.

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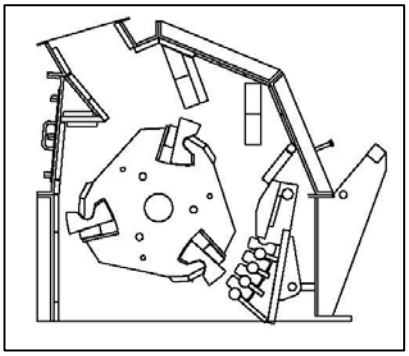
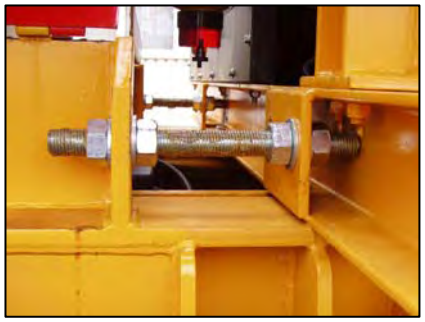
623 Crusher Unit

Feed Opening:
600mm x 350mm.
Rotor Width:
600mm.
Rotor Diameter:
1068mm.
Maximum Feed Size:
Rec max – 200mm.
Crusher Shell:
15mm thick outer shell.
Fully lined to 550 Brinnell.
30mm thick liners.



Rotor:
Runs on rugged spherical self aligning roller bearings, encased in a labyrinth designed housing with easy access grease points.
Rotor Speed:
Standard 36 metres per second. (depending on application appraisal and customer requirements can be increased to 40 m/s by pulley change)

Impact Areas:
Two main fixed impact areas with final bar carrier / grinding area fitted with reversible blow bars for efficient reduction and excellent shaping of material.
Adjustment:
Bar carrier is hydraulic adjustment, using control lever and repositioning of the external shim system.



Drive:
6 x SPC V Belts direct to engine PTO.
Adjustment done with screw tensioning on the engine.
Maintenance:
Hydraulic opening of top quarter to carry out rotor maintenance. Plus manual opening of lower side and rear doors for setting and wear plate maintenance. Rotor and chamber securing pins are located on the crusher for health and safety procedures.

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Product Conveyor

Belt Width:
650mm

Specification:
EP500 / 3 ply
5mm top cover
1.5mm bottom cover

Conveyor Length:
Approx 9.00m centres

Discharge Height:
3.69m (centre of TED)

Drive:
Hydraulic motor through flexible coupling to rubber lagged drive drum.

Deadbox:
Fully lined deadbox under the crusher to accept material exiting from the crusher. Designed with rear shelf to allow material on material impact, thus increasing wear life.

Features:
Box section construction.

Impact bars under crusher exit to support and protect belt as well as preventing skirting spillage.

Bottom end drum adjustment.

Weighted top end drum belt scrapper.

Return belt scrapper.

Self cleaning bottom end drum.

Hydraulic folding for transport.

Chassis & Tracks System

General:

Chassis fabricated from flat and plate formed into I section.
Ribbed and stiffened to deal with all operational and travelling stresses.

Support:

One x set of hydraulically operated support legs to give support to the chassis at the engine area.
One x set of drop down manual support legs under hopper to give additional support to the loading area.

Tracks System:

Heavy duty crawler system bolted to chassis.
3.30m sprocket centre to idler centre.
400mm shoe width.
32 degree gradability.
1.54 km/hour track speed.
Driven through integral gearbox, motor and overcentre motor control valve.
Control through “Doglead” controls.
Heavy duty idler re-coil fitted with grease tensioning device.

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Drive System

Type:
Tier III Caterpillar C9 Powerpack.
(6 cylinder-4 stroke-direct injection)

Power:
275 hp

Operating Speed:
1800 rpm

Canopy:
Enclosed in weatherproof steel canopy with relevant removeable panels for maintenance.

Safety Sensors:
Operated through Caterpillar Messenger system which includes constant monitoring, automatic de-rate and shutdown.

Cooling System:
Engine fitted with Caterpillar factory fitted radiator.

Engine Warranty:
Caterpillar standard 24 month warranty on Tier III products.

Machine Controls:
Integrated engine starter panel and machine operation panel with adjacent feed speed knob and ram levers.

Drive System (contd)

Crusher Drive:
The crusher is driven through a Twin Disc / Caterpillar IBF 314 heavy duty overcentre clutch fitted to the engine flywheel
(optional Transfluid 19 KPTO – see options).

Diesel Supply:
655 litre capacity diesel tank fitted inside the chassis with easy access, lockable, filler cap and level gauge.

Diesel Filtration:
External Caterpillar “Water Trap” prior to standard engine fuel filtration system.

Hydraulic Drive:
Hydraulic pumps coupled direct to Caterpillar pump drives (driven of flywheel) - drive for tracks conveyors and rams.

Hydraulic Supply:
580 litre hydraulic tank fitted with a:
12 micron absolute
Beta 1000
micro fibre element
high pressure filtration system.

Access

Information:

Catwalks, handrails and steps are positioned around the crusher to give easy maintenance and inspection access.

Auxiliary drive

Information:
The machine is equipped with an additional auxiliary hydraulic drive.

Can be used to drive small stockpiler.

Drive taken form the return line of the product conveyor.

Location:
On the side of the engine stand

Grease Points

Information:

All grease points brought to easy access points either at ground level or catwalk level.

(see options regarding Automatic lubrication system).

Dust Suppression

Location:

1x spraybar at feed into crusher.

1x spraybar at feed out of deadbox.

General:
3 x spray nozzles at feed-in.
2 x spray nozzles at feed-out

Spray nozzles are quick release for easy maintenance.

Each nozzle rated at 0.19 litres/minute @ 4 bar.

Both spraybars fitted with gate valve to control flow.

Both spraybars piped back to central manifold for external water attachment.

Guarding

General:
Machine fully guarded to essential health and safety requirements.

Machine carries the internationally acknowledged CE mark.

OPTIONS

Hydraulic Clutch

Transfluid 19 KPTO:

Hydraulically operated power take off for the crusher drive.

Simple start/stop buttons located on the control panel.

Self engaging.

No manual adjustment required.

No greasing required.

Simple maintenance requirements (oil and filter change)

Reject Grid

General:
Hopper can be fitted with tipping reject grid.

Required if oversize material in the feed product.

Tipping options:

Manual tipping using shovel.

Hydraulic tipping using control lever.

Remote control tipping from loading vehicle.

OPTIONS (contd)

Metal Detector

Detector:
Metal detector coil fitted to the feed conveyor to detect steel and stop the feed conveyor. Thus preventing steel from entering the crusher and causing damage.

Control Panel:
Re-set panel, which includes a sensitivity switch (enabling operator to increase or decrease sensitivity of steel detection).

Picking Platform:
Picking platform and access ladder at the detector coil to remove detected objects.

Automatic Lubrication

General:
Automatic lubrication system fitted to all grease points and piped back to central grease tank. Calibrated to give each grease point the required amount of daily grease.

Also included is an over-ride button to give extra grease if required.
Pressure relief system fitted to detect squeezed pipes.

OPTIONS (contd)

Short Product Conveyor

General:
Shorter version product conveyor to allow easier integration, to close the cicuit, with 3 way split screening plant.

Transport:
Manual folding for shipping. Can be transported in working position.

Working Lights

General:
4 x working lights mounted on the feed-in canopy to the crusher.

2 x facing feed-in
and 2 x facing feed-out.

The lights are control via a switch on the control panel.

Remote Control Tracks

General:
Hetronic remote control system
for controlling the tracks remotely.
The hand held unit includes emergency stop.
Dog lead is still supplied as standard.

OPTIONS (contd)

Scales

General:
Belt scales fitted to the product conveyor to weigh crushed product exiting the crusher.

Display Panel:
Located near the control panel, it can give a combination of readouts including current production, total production from re-set and belt speed.

Accuracy:
Plus or minus 0.5 to 1%.

Screenbox

General:
A vibrating Screenbox can be fitted to the end of the product conveyor to scalp of rejected material.

Size and Design:
1.8m x 0.9m.
Two bearing.
Single deck.
Spreader plate.
Support structure.
Front and rear chutework.

OPTIONS (contd)

Dust Covers

General:
Dust cover tarpaulins, fixed with bungee rope can be fitted on both the feed and product conveyors to reduce air contamination and pollution.

Emergency Pull Wires

General:
Emergency pull wires, complete with emergency stop button can be fitted to both sides of the feed and product conveyor.

OPTIONS (contd)

CTW (Bogie) Version

General:

The RK623CT can be fitted with a braking, sprung axle bogie and king pin attachment for road transport. Eliminating the requirement for a low loader trailer.

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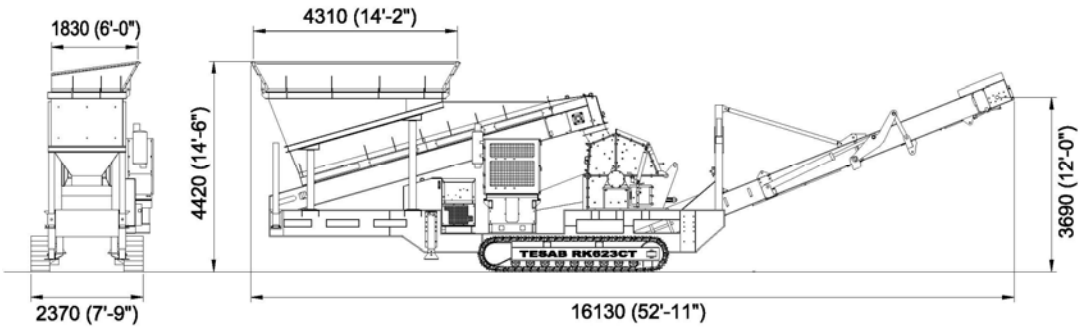
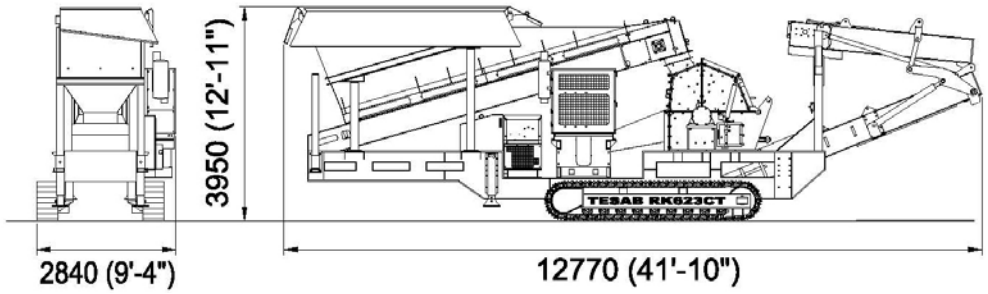
TECHNICAL DETAILS

RK623CT - *Working*

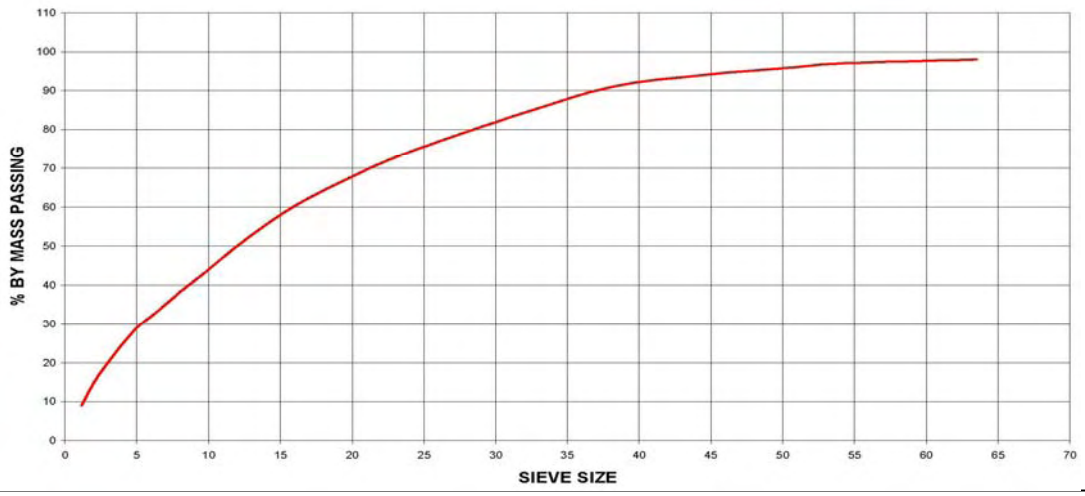


RK623CT – *Transport*

Machine Weight: 26,000 kgs



Typical Sieve Curve:



Paint Finish:

The main machine paint is finished in RAL 1007 - Yellow.
The tracks, canopies, handrails and ladders are finished B401 – Matt Black.

Important Notice:

Specifications are correct at time of going to print, however due to continual product development amendments may be made without notification.