# 10570
## TRACKED JAW CRUSHER

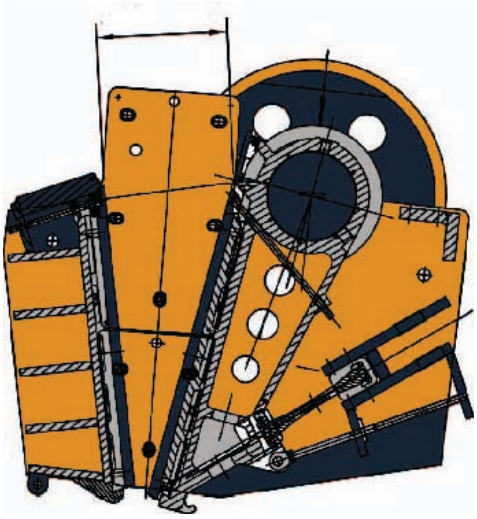
## FEATURES


**The powerful 10570 model is TESAB's highly efficient production machine for primary application.**
**The user friendly design allows rapid setup to achieve maximum output.**

- Powerful and reliable C9 Caterpillar Powerpack
- Extra heavy duty construction to cope with the rigorous demands of primary crushing
- Hydraulically Adjustable Jaws to maximise working time
- Built in safety release should un--crushable objects enter the crusher – decreasing downtime
- Variable speed primary vibrating plate feeder
- Secondary independent, two deck screening scalper for highly efficient screening
- Side dirt conveyor with optional extended version to give 3.15m discharge height/ 3.28m outreach for increased fines stockpile
- 3.71m high product conveyor with hydraulic lowering for transport
- Long run fuel tank capacity of 750 litres
- Optional magnet, dust suppression and radio remote control
- Easy access panels throughout
- Full backup provided by our dealer network

## JAW CRUSHER

**Crusher Type:** Heavy Duty Single Toggle Jaw
**Feed Opening:** 1100mm x 700mm
**Jaw Length:** 1550mm
**Bearings:** Self aligning spherical roller design



**Lubrication:** Grease
**Drive:** Direct drive V-belts to adjustable engine
**Factory Preset:** 75mm CSS
**Minimum Setting:** 75mm CSS
**Maximum Setting:** 150mm CSS
**Adjustment:** Wedge system operated by hydraulics via dog lead
**Safety Release:** Automatic with jaw overload
**Toggle Springs:** Self adjusting system whereby no manual tensioning is required
**Safety System:** The jaw design incorporates three early protection systems to prevent costly blockages before they occur:

1.) **Hydraulic Jaw Release**
2.) **Flywheel Speed Sensor**
3.) **Overfill Sensor Eye**

## HYDRAULIC JAW RELEASE

The hydraulic jaw release works by sensing an overload on the jaws and thereby adjusting the jaw to maximum setting with the aim of allowing oversized material to pass through the jaw. The jaw can then be adjusted back to the desired setting via the the dog lead controls.

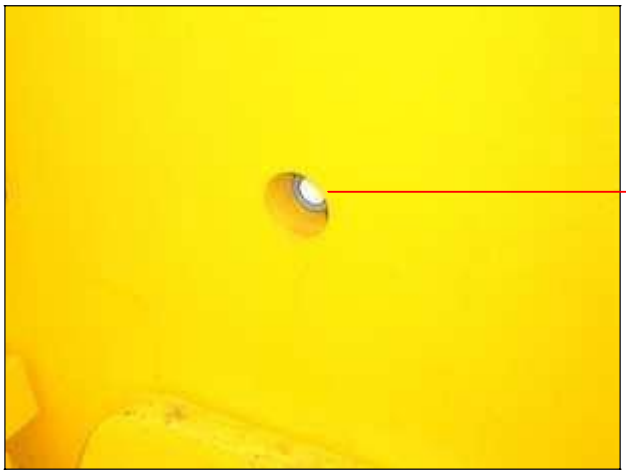
## FLYWHEEL SPEED SENSOR

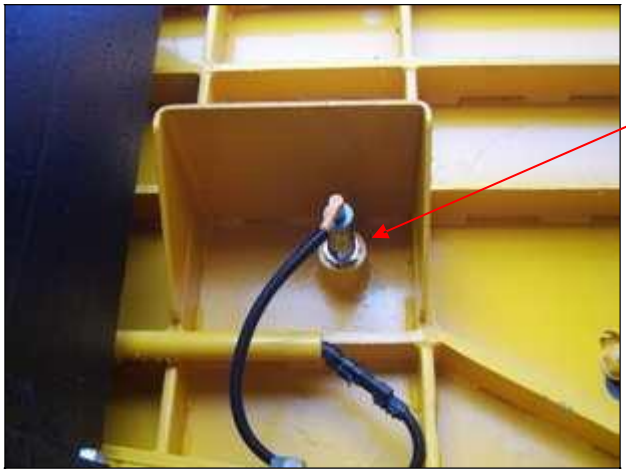
The speed sensor continually monitors the revolutions of the flywheel. Should the speed of the flywheel fall below a preset range, both the feeders will cut off automatically. When the crusher speed recovers to the required rpm the feeders will automatically start again.

Speed Sensor position on flywheel guard

## OVERFILL SENSOR EYE

The overfill sensor is securely fitted to the feed in chute and detects when the jaws overfill. When this occurs the feed will cut off to give time for the jaws to recover. At this stage the feeders will automatically start again.





Exterior position of eye

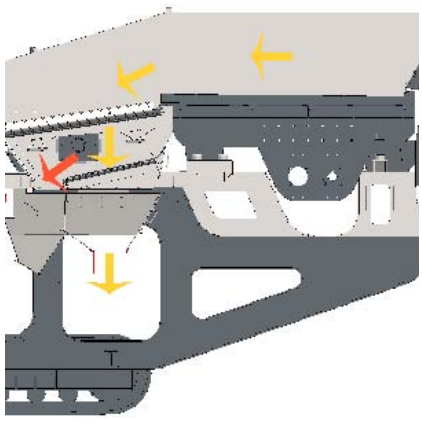
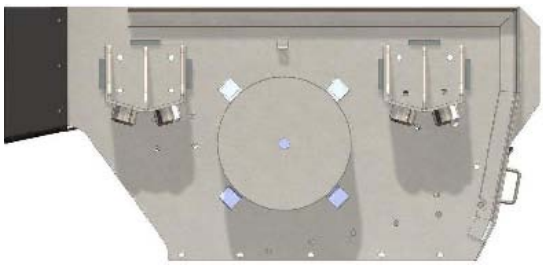
# PRIMARY VIBRATING FEEDER

| | |
|---|---|
| **Type:** | Spring mounted heavy duty (20mm Hardox) |
| **Vibrating Unit:** | Twin shaft, geared design |
| **Length:** | 2.6m |
| **Width:** | 0.9m |
| **Drive:** | Hydraulic motor via flexible coupling to drive shaft |
| **Control:** | Variable speed control with remote stop/start |

# SCALPING FEEDER

The scalping feeder consists of two deck system. This highly efficient feeder is designed to „screen out' the fines allowing for increased tonnage through the crusher.

**Vibrating Unit:** Spring mounted, two bearing design
**Drive:** Hydraulic motor via flexible coupling

| TOP DECK | BOTTOM DECK |
|---|---|
| **Length:** 1750mm<br>**Width:** 1000mm<br>**Bar Type:** Bofar Bar<br>**Spacing:** Tapered | **Length:** 950mm<br>**Width:** 1000mm<br>**Mesh Type:** Variable |
| The bofar bar screening deck design allows for increased surface area for screening purposes, increasing efficiency. | Furthermore the interchangeable mesh grid screen allows further screening of the fines to take place and mesh can be changed to suit the application. |
|  |  |

# HOPPER

| | |
|---|---|
| **Hopper Type:** | Heavy duty, fully lined, hydraulic folding |
| **Hopper Length:** | 5050 mm |
| **Hopper Width:** | 2600 mm |
| **Hopper Capacity:** | 7m³ |
| **Hopper Body:** | 15 mm thick |
| **Folding:** | Hydraulic c/w locking wedges |



# PRODUCT CONVEYOR

| | |
|---|---|
| **Conveyor Type:** | Troughed belt conveyor with hydraulic lower/raise for transport |
| **Belt Type:** | Heavy duty 4 ply belt |
| **Belt Specification:** | EP630/4<br>6mm top cover<br>2mm bottom cover |
| **Belt Width:** | 1200 mm |
| **Discharge Height:** | 3710 mm |

| | |
|---|---|
| **Drive:** | Hydraulic Torque hub through flexible coupling |
| **Skirting:** | Fully Skirted |
| **Belt Adjustment:** | At top end down, guide rollers to prevent belt run off |
| **Dust Covers:** | Dust Covers at Crusher feed out and under Engine, full belt dust covers optional. |
| **Lubrication:** | All grease points at ground level |
| **Crusher Feedout Clearance:** | Heavy duty rubber impact mat. |

# DIRT CONVEYOR

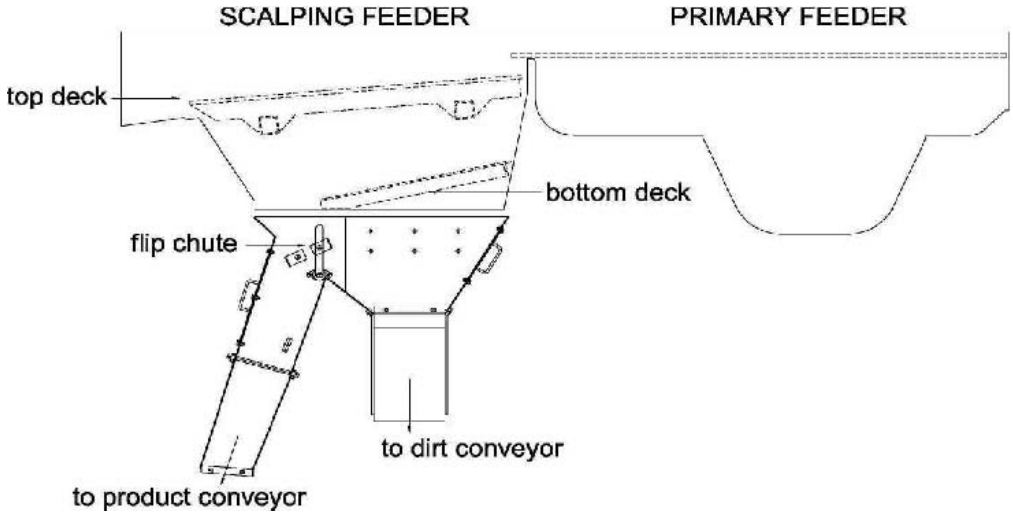
**TELESCOPIC**

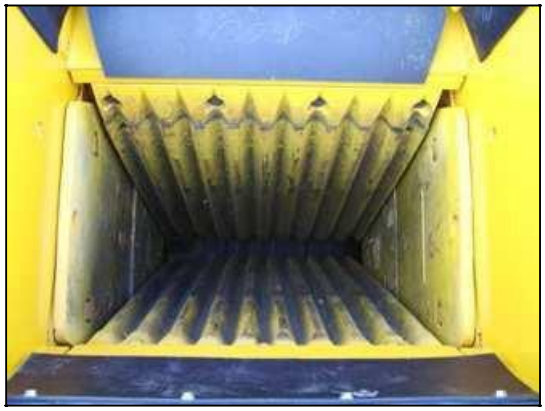
| | |
|---|---|
| **Conveyor Type:** | Troughed belt conveyor with hydraulic lower/raise |
| **Belt Type:** | Heavy duty 3 ply belt |
| **Belt Specification:** | EP500/3<br>5mm top cover<br>1.5mm bottom cover |
| **Belt Width:** | 650mm |
| **Discharge Height:** | 3130mm |
| **Discharge Outreach:** | 3220mm |
| **Drive:** | Hydraulic Motor |
| **Feedboot:** | Flexible coupling |
| **Belt Adjustment**: | Via top end down |
| **Belt Covers:** | Optional |
| **Lubrication:** | Grease points at ground level |

# PLANT CHUTEWORK

**Crusher Feed Chute:** 12mm thick plate with hinged safety grid

The two way dirt chute is provided to allow the fines to be diverted onto the dirt conveyor or the product conveyor if desired. This is done via a hand operated flap door using a blanking mat in place of mesh. Belt protection is provided by a heavy duty rubber impact bed.



# POWERPACK

| | |
|---|---|
| **Powerpack Type:** | Caterpillar Tier III C9 Powerpack |
| **Performance**: | 300 HP, 225 KW |
| **Fuel Tank Capacity:** | 750 litres |
| **Clutch Type:** | Transfluid 19 KTPO Hydraulic Clutch |
| **Drive:** | Direct V belt drive from Engine to Crusher |
| **Access:** | All areas |
| **Hydraulic Drive:** | Hydraulic Pumps fitted to Caterpillar auxillary drives to power hydraulic system |


| | |
|---|---|
| **Access:** | Easy access provided to engine via 2 catwalk areas. Engine canopy has several hinged access panels. |

## CRAWLER TRACKS


| | |
|---|---|
| **Type:** | Heavy-duty steel tracks |
| **Longitudinal Centers:** | 3750mm |
| **Track Shoes:** | 500mm |
| **Climbing Grade:** | 24° |
| **Track Speed:** | 0.96 km/hr |
| **Drive:** | Gearbox and hydraulic motor |
| **Track Tensioning:** | Heavy duty recoil and grease tensioning |

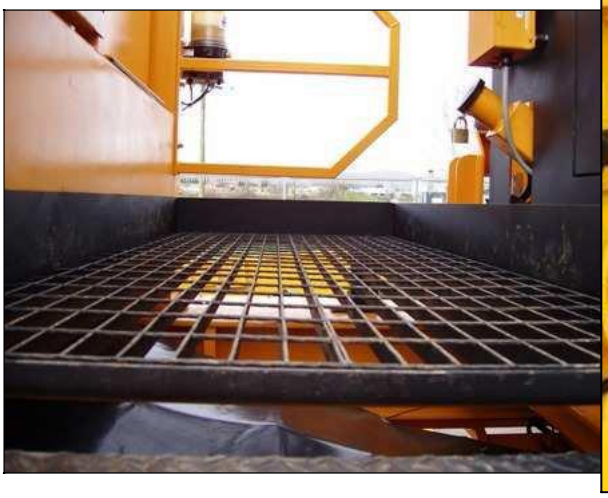
## GUARDING

Guarding is provided by a combination of sheet metal and wire mesh, manufactured for ease of access and maximum safety. All guards comply with health and safety standards and manufactured to meet CE standards.

# CATWALKS AND LADDERS

All relevant catwalks, handrails and ladders are fitted to this machine allowing easy access to either side of the engine and other relevant maintenance points. A viewing platform is provided to supervise the crushing process complete with speed controls for the feed.

Manufacture, materials and design are of a high standard and comply with all essential health and safety requirements.



# CHASSIS

The chassis and main structures are constructed of heavy duty plate and welded steel plates, ribbed and stiffened. As a result this robust construction can withstand all travelling stresses and extreme operational demands. Two front independent hydraulic jacking legs are fitted to give the machine extra support during operation.


A lockable toolbox is incorporated onto the chassis of the machine as standard.

## CENTRAL CONTROL PANEL

A central control panel is located at the side of the machine to allow operation of:

- ENGINE
- CRUSHER
- PRODUCT CONVEYOR
- FEEDER
- DIRT CONVEYOR
- OPTIONAL EXTRAS IF FITTED


Each item is operated through a push button system and the panel is manufactured to an IP66 standard.

## UMBILICAL CONTROLS

The tracks are operated via “dog lead” control complete with emergency stop. The hydraulic adjustment on the crusher is also operated via dog lead to let the operator view the crusher jaws during the setting procedure (see crusher section).

# FEEDER CONTROLS

The primary and scalping feeders are fitted with the following controls as standard:

- Independent push button controls at the central control panel
- Primary feeder speed control on the viewing platform
- Both feeders linked to remote control start/stop
- Overfill sensor on feed in chute to stop feeders when jaws overfill
- Speed sensor on crusher pulley to stop feeders if crusher speed slows down, thus preventing jamming

## OPTIONAL EXTRAS

- **Manual Clutch**
- **Autolube**
- **Radio Remote Control**
- **Belt Scales**
- **Magnet**
- **Dust Suppression Spray Bars**
- **Long Dirt Conveyor**
- **Feed Hopper Extensions**
- **Plant Lighting**
- **Other options on request**

## AUTOMATIC LUBRICATION SYSTEM OPTIONAL

Autolube operates at regular intervals supplying grease to various points around the machine.

**Pump:** Lincoln, compact, multiline, central lubricating pump, with easy fill point.

**Operation:** Automatic controlled by a timer with test run/additional lube function operated from control panel.

Includes a pressure relief system to indicate if pipe is “squeezed”.

## MANUAL CLUTCH

OPTIONAL

**Type:** Twin Disc CAT

Heavy duty 3 plate PTO
Manual Engagement

## RADIO REMOTE CONROL

OPTIONAL

The radio remote allows operation of the tracks and is fitted with emergency stop.

## BELT SCALES

OPTIONAL

A modular design, self aligning load cell fitted onto “TESAB” roller system. Heavy duty belt speed wheel sensor.
Corrosion resistant enclosure housing the display which is located to customer requirements ( standard position is beside control panel).
Accuracy: ± 0.5% - 1%

## MAGNET

OPTIONAL

| | |
|---|---|
| **Type:** | Self cleaning suspended overboard magnet |
| **Width:** | 531mm |
| **Length:** | 1050mm |
| **Conveyor Drive:** | From machine hydraulic system to hydraulic motor via flexible coupling |
| **Control:** | Independent start/stop at central control panel |
| **Power:** | 570 Gauss @ 200mm<br>450 Gauss @ 250mm |
| **Discharge Chute:** | Non Magnetic |

## DUST SUPPRESSION SPRAY BARS OPTIONAL

Dust suppression spraybars fitted at two points:

- Feed into crusher
- Discharge of product conveyor

Both spraybars are independently controlled via gate valves.
Both of the spraybars are piped back to ground level manifold with shutoff valves.

## FEED HOPPER EXTENSIONS OPTIONAL

Additional hinged extension pieces can be fitted to allow extra capacity and use of a larger loader or side load capabilities.

## PLANT LIGHTING

OPTIONAL

Working lights are positioned at two locations:

- On chassis facing product conveyor feed out
- On viewing platform facing the feed in and also lighting to face engine compartment

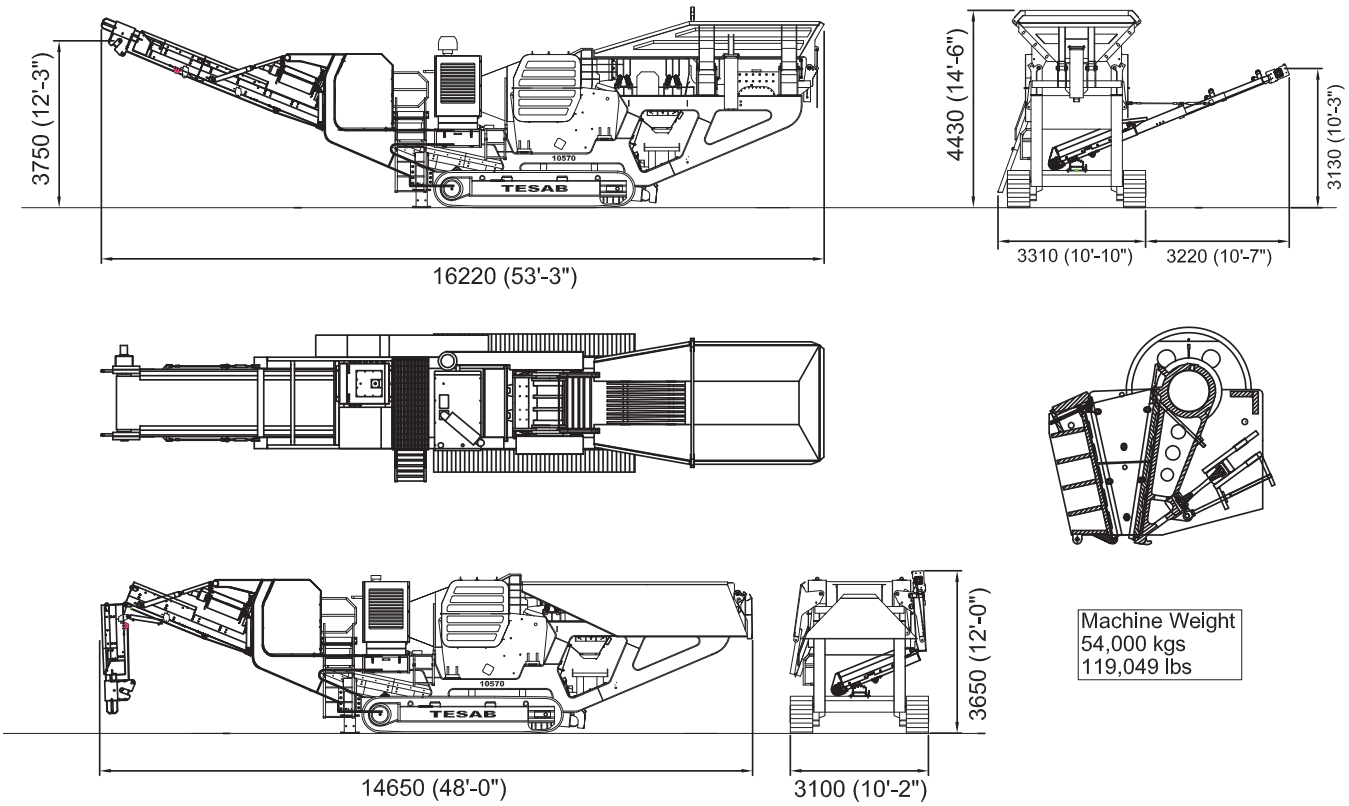
The control switch for these lighting extras is located at the central control panel.

## OTHER OPTIONS ON REQUEST

OPTIONAL

TESAB aim to provide a solution to specific customers requirements at all times and other custom specification can be arranged.

# DIMENSIONS




## APPROXIMATE OVERALL PLANT WEIGHTS AND DIMENSIONS

| | |
|---|---|
| Operating Length: | 16220mm |
| Operating Height: | 4170mm |
| Transport Length: | 14650mm |
| Transport Width: | 3100mm |
| Transport Height: | 3650mm |
| Total Plant Weight: | 54000kg |

## PAINT FINISH

The plant is finished painted in RAL 1007 Yellow. & RAL 7024 Graphite Grey
The tracks, canopies, handrails, ladders and catwalks are finished in B401 Matt Black.

General
Specification is correct at time of going to print however due to continual product development amendments may be made.