

www.strikercrushing.com



# Mobile Crushing & Screening CQR400

Features & Benefits





#### **Tracked Cone Crusher CQR400**





### **Transport Dimensions**

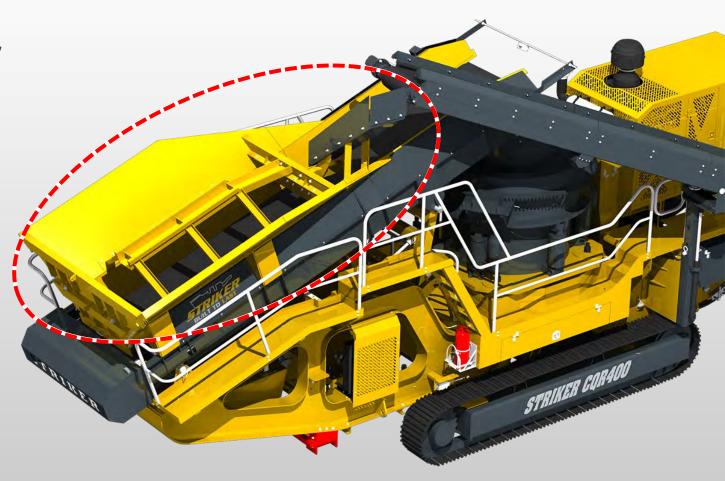
CQR400	
Operating Dimensions:	
	17686mm 58'
#	4091mm
0-0	13' 5"
	4973mm
	16'4"
Transport Dimensions:	
5.5	18727mm
000	61'5"
	3514mm
" <u>i=i</u> "	11' 6"
<b>1</b>	3766mm
	12' 4"
Weight (T):	52T
Weight (lbs):	114,640lbs







**Feed Hopper** 



- Fixed wear resistant feed hopper
- Metal detector
- 1200mm (48") wide

- Loading Height 3283mm (10' 9")
- Feed Hopper Capacity 5.0m³ (6yd³)



#### **Feed Hopper**



Heavy duty hopper sides

Reinforcement webs & box section to strengthen the side walls against continuous rigors of operation

Hopper length 3700mm (12' 2")

Hopper width 2500mm (8' 2")

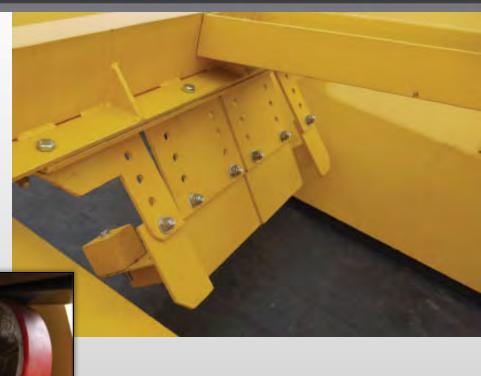
Impact spider to protect the belt feeder from falling feed material



### **Feed Hopper**

Spreader plates ensure even spread of material on the feed belt

Spreader plates are height adjustable



Hydraulically lifts up into the operating position raising the feeder on rollers under the feeder belt

Quick set-up time

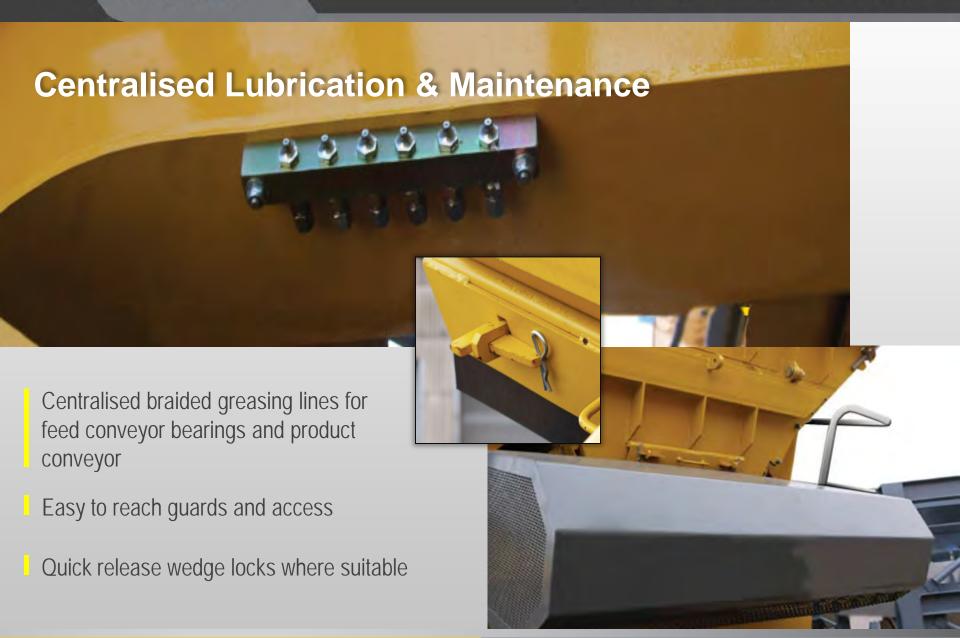


#### **Metal Detector**

- Eriez metal detector fitted as standard
- Protects the cone crusher from ferrous tramp metal
- Detection of metal stops the feed belt instantaneously
- Audible warning alarm

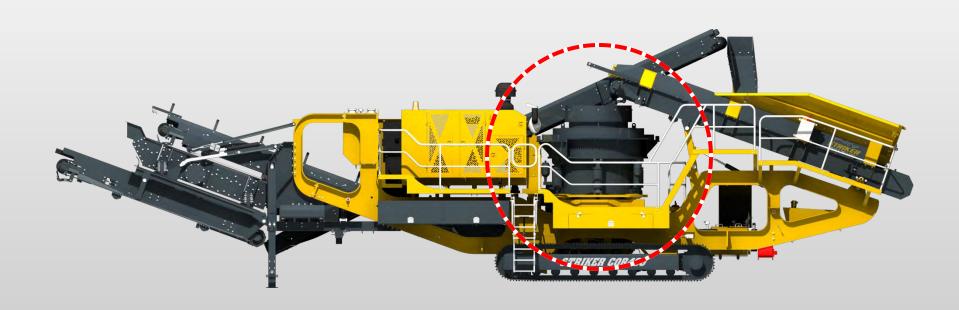








#### **CS Cone Crusher**





#### STRIKER CS Crusher



High performance tried & tested cone crushers

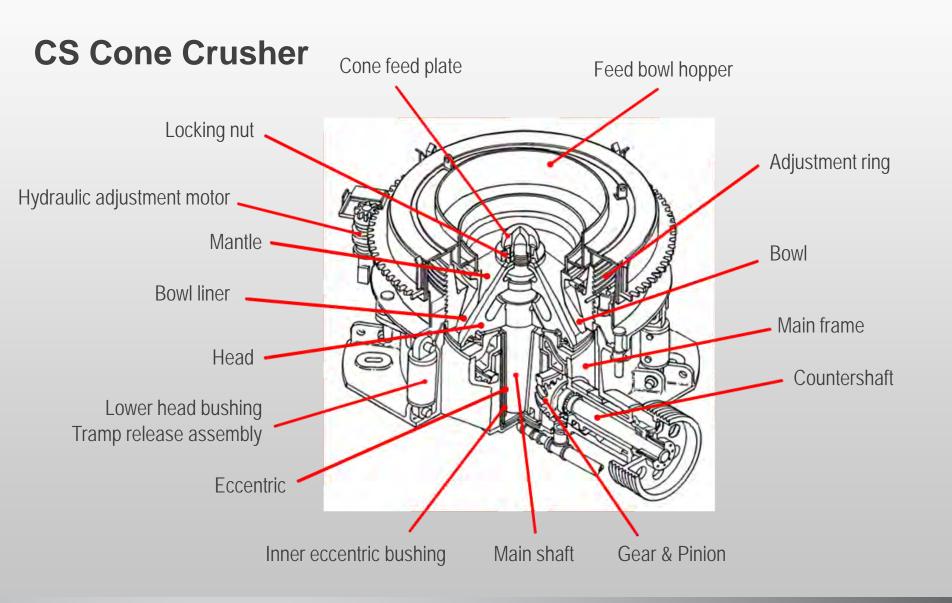
Extremely rugged and reliable design based on the Symons design platform

50+ improvements to thoroughly modernize the design for improved productivity, ease of operation, troubleshooting and maintenance

Ability to choose the correct combination of liners, speed and throw to maximize the saleable product tonnages and minimize waste

A genuine profit making machine







#### **CS Cone Crusher**

Fully hydraulic for clamping, adjustment and clearing

Several throw and speed combinations for maximum performance

Higher crushing force to draw full power in all applications

Ruggedness, reliability and simplicity is built in throughout all components

Reliable bronze bearings throughout the crusher except at the ct. shaft

Ct. Shaft box assembly is a sealed unit with heavy duty tapered roller bearings

Fully balanced at all throws and speeds

Compact design for portable plants

Ready for automation

Power unit with integrated controls – remote control box optional

300 - 350 HP



#### **CS Cone Crusher**

Optimised combination of critical variables such as throw, speed and liners can be selected for each application to maximize the production of the premium products and minimize waste

Universal bowl and head assemblies are used in the CS Series allows the machine to be changed from coarse secondary to fine tertiary by only changing the Bowl Liner, the mantle stays the same

Size for size capacity of the Striker CS Cone is double that of a "regular" cone

Proven track record in both aggregate and mining applications throughout the world

The CS design will endure normal abuse of the day to day operation and will keep running under moderate overloads

Design automation friendly and can easily be integrated into any automation scheme of an existing plant

Designed with both operation and maintenance personnel in mind these crushers are easy to operate, maintain, troubleshoot and repair



### **Key Features**

- Hydraulic overload protection against tramp metal
- Bevel helical gear & pinion drive to give smoother running and better power transmission
- Semi fabricated main frame with heavy duty cast steel to main stressed areas
- Fully automatic PLC control of zero setting & closed side setting with built in read wear facility



#### **CS Cone Crusher Features**

The crusher has full hydraulics to clamp, adjust and clear. If the crusher stalls for any reason, it can be cleared safely and automatically within few minutes

CS Cone is balanced crusher, with any combination of throw and speed, to minimize the structural requirements of the foundations and portable plants. Its compact design makes it extremely suitable for portable applications

All components and assemblies are designed for ease of manufacturing to lower their cost and pass on the savings to our customers

CS Cone has two sets of mounting holes so it can be easily installed on any foundation to replace the existing crusher

CS Cone is very safe to operate and maintain. All of the maintenance, assembly and disassembly are done from the top and side



#### **CS Cone Crusher Features Summary**

- Universal Bowl & Head
- 1 Mantle and 6 Bowl Liners
- Very compact design
- Fully balanced with any combination of throw and speed
- Based on Symons design Rugged & Reliable
- Automation friendly
- Designed for ease of Operation, Maintenance, Trouble Shooting & Repair
- Very economical to make so savings are passed on to the customers
- Will mount on any foundation
- Very safe to work on
- Plus many more advances in the design to lower costs and increase profits

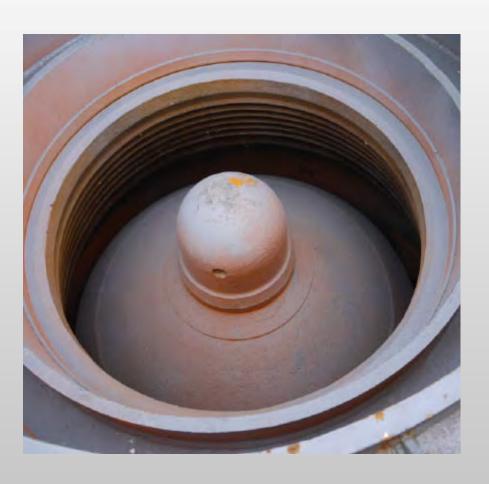


### **Maximising the HP draw**

- You can control the HP draw by changing CS Cone's throw
- You can control the HP draw by changing the Closed Side setting
- You can also control the HP draw by changing the eccentric speed
  - Thus you can select the correct combination of the throw, speed and setting to maximize the HP draw



#### **Feed Bowl**



Bowl is designed to spread the feed material equally around the cone opening

The cone should be continuously choke fed to achieve optimum performance

Made from a hard wearing resistant steel

High strength & quality manganese bowl liners & mantle



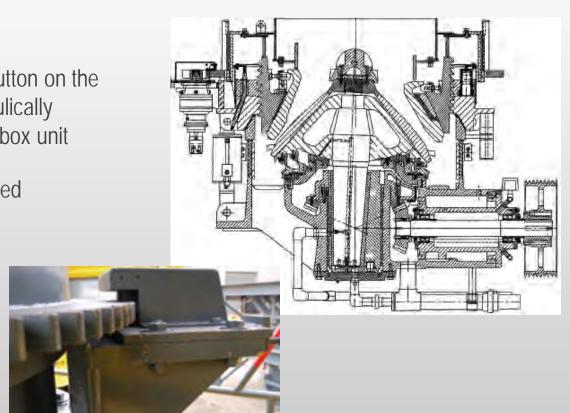
### **Gap Setting**

Gap setting is done at the push of a button on the main control panel interface via hydraulically operated, highly efficient motor & gearbox unit

Quick on the fly adjustment of the closed side setting

The upper section of the cone raises and lowers via the screw top

ZERO set – touch manganese, fully automatic via PLC control





#### **Crusher Drive**

- Dedicated oil cooler for fluid coupling
- Quick easy belt tensioning
- Externally mounted and easily maintained
- Smooth start up, no belt slip
- Shock & overload protection
- No friction linings creating longer life utilization





#### **Cone Supports**



The crusher is mounted on anti vibration pads

These absorb crushing vibrations and prevent any strain expelled throughout the main chassis



### **Level Monitoring**

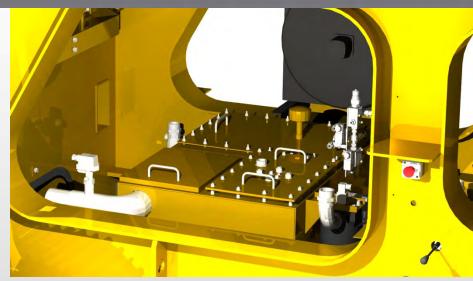
- Automatic feeder speed & ON/OFF control
- Control via the level sensor mounted over the crushing chamber
- Monitoring to ensure a choke feed into the crusher





#### **Lubrication Cooler**

- The crushing system cooler tank is located at the rear of the machine under the feed conveyor
- Easy access for maintenance
- Ensure efficient and reliable operation of the cone crusher
- Lubrication temperature & flow monitored via electronic sensors







### **Forward Product Conveyor**





### **Forward Product Conveyor**

- Clearance between the forward product conveyor & the cone crusher approximately 550mm (1' 10")
- Heavy duty extra wide belt 1200mm (48") wide
- Wear resistant liners at the cone discharge
- Rubber impact rollers to prevent damage to the belt
- Fully skirted conveyor belt to reduce spillage with wear resistant clamp plates
- Top transfer: 500mm (20") wide



### **Conveyor Guards**

- Quick release system for maintenance
- CE Compliant
- Safety against moving & rotating parts





#### **Forward Product Conveyor**

- Hydraulic drive at the head drum
  - Belt cleaner located after the discharge point to ensure that sticky material is removed preventing tracking issues

- Greasing lines to the head drum
- Self-aligning spherical roller bearings
- Lagged head drum to prevent belt slippage





### **Central Greasing Point**

Central greasing point

Robust, durable greasing lines, not plastic

- Located at ground level
- Saves on maintenance time





### **Dust Suppression**

Environmentally friendly on-board solution to dust control from the cone crusher

Dust Suppression in two isolated locations

Dust Suppression sprays and manifold

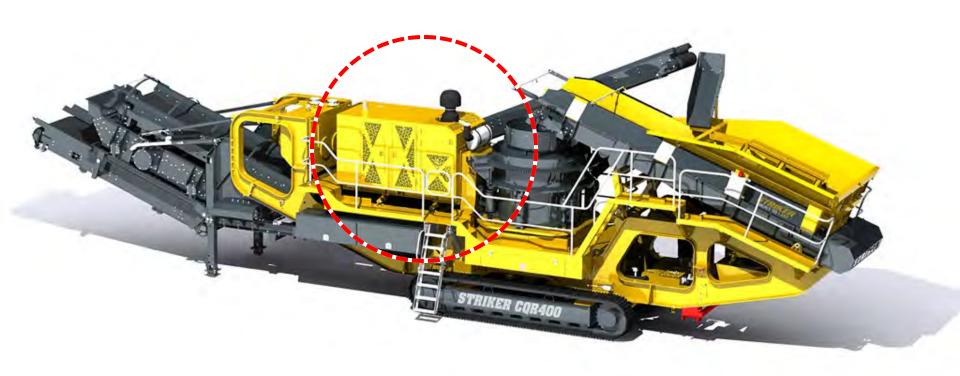


1) Under the cone crusher directly on the conveyor belt

2) At the top of the product conveyor



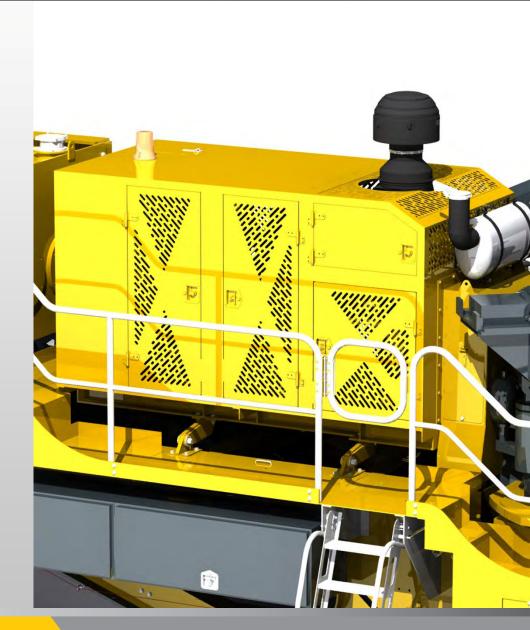
### **Powerpack**





#### **Powerpack**

- Powered by a CATERPILLAR® C13 Acert Tier 3 engine rated (328kW)
- The engine complies with all current Emission laws
- Hot climate oil (Recommended for ambient temperatures between +15 to +50°c)
- Easy access for maintenance via 3 panel doors and generous working platforms
- Easy to maintain, reliable and efficient
- Load sensing hydraulic pumps to maximise fuel efficiency







All round access platforms for maintenance on the diesel engine

Safety handrails with spring loaded swing gates as standard



### Fuel & Hydraulic Tank

820 litre (180.4 gal) standard capacity fuel tank or option to increase to 900 litre (198 gal) with level gauge

Hydraulic multi-stage oil filtration system and air filter with easy access for maintenance







### **Hydraulic Components**

Easy access to hydraulic components for maintenance

Simple ON/OFF hydraulic blocks



The hydraulic system powers

Crusher drive via fluid coupling, crawler tracks, belt feeder, forward product conveyor



#### **Controls**





#### **Controls**

Ability to switch between metric and standard imperial units of measurement

Ability to change the displayed language English, Mandarin, Bahasa, Afrikaans in the HMI settings





Rugged CAN based modular 1/0

Low voltage 24v system

Sealed IP54 cabinets to prevent the ingress of dust & water



#### **Remote Control Unit**

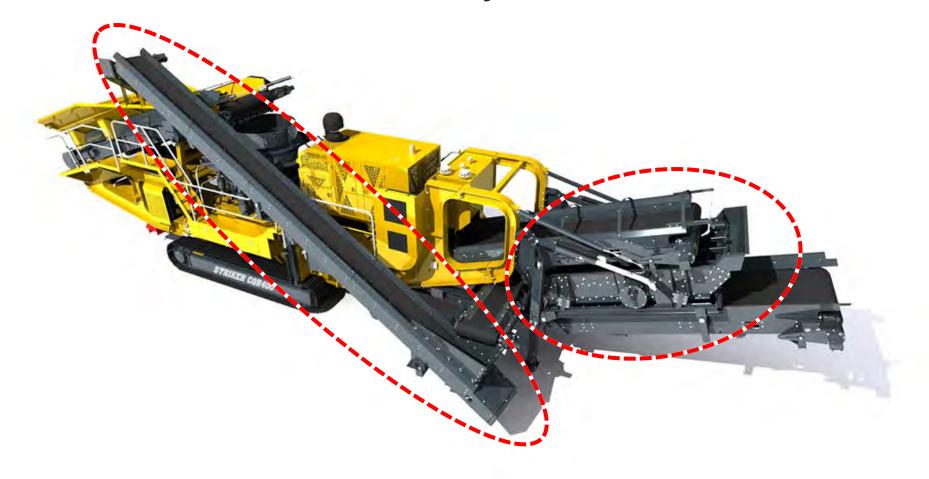
- Battery level indicator (on the display)
- Signal strength indicator (on the display)
- Proportional control of the tracks
- Steer mode
- Tramming mode
- Feeder ON/OFF and speed control
- Radio remote control unit
- Striker optimax engine and feeder controller
- Charging vie a cigarette lighter plug 12/24vdc
- A charging/storage dock mounted on the machine so it's always on hand and full charged







#### **Screen & Recirculation Conveyor**





#### **Screen & Recirculation Conveyor**

- Hydraulic operated single deck vibrating screen 3000mm x 1500mm (10ft x 5ft)
- Hydraulic tilting oversize recirculation conveyor that stows for transport
- Fixed position recirculating conveyor: 500mm (20") wide

- Added ability to produce a graded product
- Negates the need for a separate screen
- Fines product: 1200mm (48") wide
- Detachable single deck vibrating screen 1525mm (5') x 3350mm (11')
- Top deck aperture mesh Max size 45mm (1.8") standard. Please specify size:









#### **Forward Support Legs**

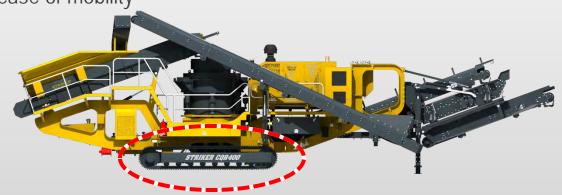
Hydraulically controlled raising and lowering support legs for operational stability

Manual control lever for operation



#### **Tracks**

- Hydraulically driven crawler tracks for ease of mobility
- Track centres 3840mm (12' 7")
- Track shoe width 400mm (1' 4")







#### **STRIKER CS Crusher (Option)**



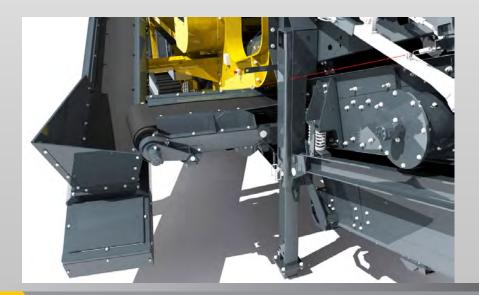
Coarse bowl liner (refer to factory for lead-time)

Fine bowl liner (refer to factory for lead-time)



#### **Recirculation Conveyor (Option)**

Radial recirculating conveyor: 500mm (20") wide





#### **Stacker Outlet (Option)**

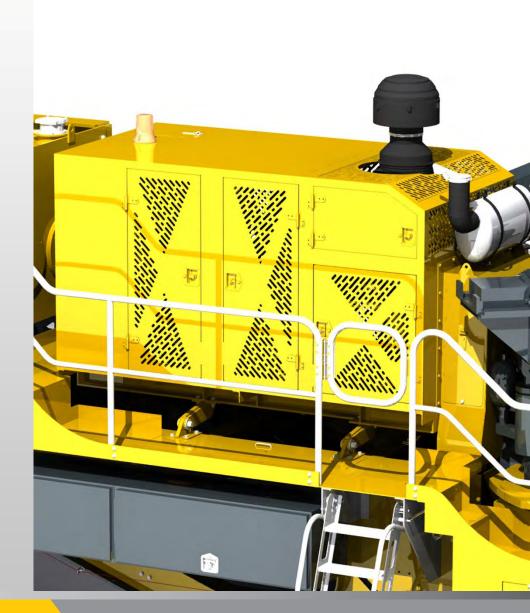
To run Striker radial stacking conveyor





#### **Powerpack (Option)**

- Powered by a CATERPILLAR® C13 Acert Tier 3 engine rated (328kW)
- Radiator blast guards
- Cold climate oil (Recommended for ambient temperatures between -20 to +30°c)
- Plant lighting mast





#### **Tracks (Option)**

Lift and widen machine track kit for extra ground clearance







#### **Dust Suppression (Option)**





#### **Remote Control Unit (Option)**

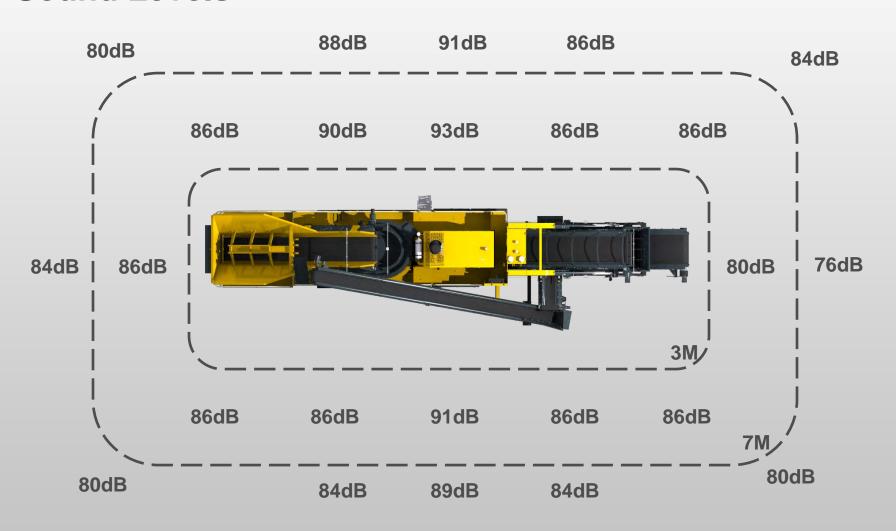
- Umbiical remote control unit
- Control panel positive pressurisation







#### **Sound Levels**





#### **Options**

- Product conveyor weigh scale
- Wear resistant steel hopper liners
- Centralised lubrication system
- Product conveyor dust covers
- Higher & wider track kit (Mining Spec)
- Hydraulic water pump
- Engine bay fire suppression
- Auto cone adjustment
- High or low throw
- Increased fuel tank capacity

- Remote diesel fill pump
- Arctic package for operating conditions 20 ° C
- Desert package for operating conditions + 50 ° C
- Plant lighting tower
- Hydraulic PTO for driving stacking conveyors
- Control cabinet air pressuriser
- 3 meter air extension kit for engine air cleaner
- Dual drive forward conveyor
- Snorkel



#### **Machine Safety Aspects**

- Nip point guarding
- Remote greasing
- Engine start delay and siren
- Warning siren to alert the machine tracking and start up
- Engine emergency stops



#### **Selling Features Summary**

- Strong, reliable, robust heavy duty body designed & engineered web & flange chassis, fully welded & fabricated from high grade steel to withstand the rigors of operation & transportation
- Manufactured from wear resistant steel with impact diverter bars to protect the heavy duty feeder belt
- Variable belt speed for a controlled continuous feed, monitored by a flow sensor and a metal detector
- Striker CS Cone offer excellent capacities for their size. Hydraulic adjustment and clearing as standard with automatic overload protection featuring a higher eccentric height for optimum crushing ration and higher crushing efficiency
- Efficient lubrication cooler to ensure reliable operation

- CATERPILLAR® engine as standard, compliant to industry regulations
- Extra wide product conveyor with full length rubber side skirts utilising wear resistant steel clamp plates. Maximised discharge height for product stockpiling. Optional screen and recirculation conveyor can be provided
- Water spray system fitted to the forward product conveyor
- Heavy duty tracks suitable for any environment
  - Access platforms to hydraulic tank, engine, cone crusher, and feed hopper