



QI441 PRISEC™ IMPACTOR PIONEERING SOLUTIONS FOR YOU

TECHNICAL SPECIFICATION

The QI441 is a heavy duty, tracked, self propelled impact crusher which features the unique Sandvik CI421 Prisec™ impact chamber, offering customers unparalleled flexibility through the ability to work in both primary and secondary applications.

It is available with an optional double deck hanging screen system, which will allow customers an even greater return on investment through the facility to produce accurately sized products for immediate use.

KEY BENEFITS

- The Sandvik Prisec™ impactor is the most flexible impactor currently available on the market designed to meet end product specifications.
- The machine is fitted with a pre-screen to ensure maximum scalping capability in order to prevent any undersize material passing through the impactor, thereby maximising throughput and reducing wear costs. This also allows a specified sized product to be produced from the natural fines conveyor.
- The pre-screen has a choice of grizzly or punch plate top deck and mesh bottom deck, providing the flexibility to suit any application.
- The QI441 is fitted with an underpan feeder which drastically reduces any spillage issues generally associated with impact crushers. The underpan feeder eliminates the need for skirt rubbers that are normally situated in the severe impact zone of a feed boot.
- The underpan feeder also protects the conveyor belt from high velocity material from the rotor. This material is contained on the wear resistant underpan feeder liners and gently delivered onto the conveyor belt.
- Two hydraulically adjustable apron curtains can be positioned to produce a wide range of material, product sizes and specifications.
- The above combined with the variable engine speed gives a tip speed range of 30 m/s to 37 m/s resulting in a wide range of product gradations being achievable.
- Capable of operating in the most hostile environments with a 50°C ambient temperature capability without any oil changes.



KEY SPECIFICATIONS	QI441
Hopper	
Hopper width	2540 mm / 8' 4"
Length	4290 mm / 14' 1"
Capacity (heaped)	6 m ³ / 7.85 yd ³
Primary Feeder	
Wear resistant lined feeder	1278 mm x 2365 mm / 4' 2" x 7' 9"
Speed	550 rpm to 1000 rpm
Pre screen	
Hardox top deck grizzly / punch plate	1360 mm x 2160 mm / 4' 6" x 7' 1"
Bottom deck mesh	1360 mm x 1730 mm / 4' 6" x 5' 8"
Punch Plate	40 mm / 1 1/2"
Underscreen mesh	20 mm / 3/4"
Impactor	
Sandvik CI421 Prisec™ Impactor	
Feed opening	1360 mm x 800 mm / 54" x 31 1/2"
Hydraulic inlet opening	1360 mm x 1000 mm / 54" x 39 1/2"
4 Bar rotor	1150 mm / 45 1/4" diameter
Speed	502 rpm to 620 rpm
Peripheral velocity	34 - 42 m/s / 108 - 138 ft/s
2 aprons	Hydraulic assist
Maximum feed size	800 mm / 31 1/2"
Main conveyor	
Belt width	1200 mm / 47 1/4"
Belt length (endless)	20,700 mm / 67' 11"
Discharge height	4074 mm / 13' 4"
Hydraulic drive	Twin 500 cc / 30.5 cu inch x 2
Underpan feeder	
Type	Spring mounted stepped vibrating feeder
Width	1022 mm / 40 1/4"
Length	2400 mm / 94 1/2"
Pan feeder amplitude	9 mm / 3/8"
Magnet	
Model	Eriez CP20/100-SC2
Weight	998 kg / 2200 lbs
Type	Self cleaning suspended

OPTIONS

Hopper extensions for rear loading
Hopper extensions for rear loading with wear resistant liners
Hopper extensions for rear loading with rubber liners
Hopper wear resistant liner plates back and sides
Hopper high impact Sandvik rubber liners back and sides
Pre screen grizzly spacing option
Pre screen top deck punch plate - 30, 60, 80, 100 mm
Pre screen open aperture bottom rubber to feed natural fines conveyor (high fines / sticky applications)
Pre screen blanking deck
Mesh underscreen - 30, 40, 50 mm
Central auto lube (crusher)
Central auto lube (conveyors)
Water pump (Hydraulic)

KEY SPECIFICATIONS	QI441
Power pack	
Engine	Stage 3A / Tier 3 CAT C13 Acert / Stage 3B / Tier 4i CAT C13 Acert / Stage 4 / Tier 4 Final CAT C13 Acert
Engine power	328 kW / 440 hp
Drive type	Direct / Hydraulic
Fuel tank	660 litres / 174 USG
Hydraulic tank	660 litres / 174 USG
Tracks	
Length (centres)	3715 mm / 12' 2"
Width (shoe)	500 mm / 19 3/4"
Drive	Hydraulic motors / Gearbox
Control	Radio / Umbilical
Natural fines conveyor (option)	
Belt width	650 mm / 25 1/2"
Belt length (endless)	12,063 mm / 39' 7"
Discharge height	3084 mm / 10' 1"
Hydraulic drive	400 cc / 24.4 cu inch
Twin pole high power magnet (option)	
Model	Eriez TP20/100-SC2
Belt width	750 mm / 29 1/2"
Height from belt	Adjustable
Type	Self cleaning
Weight	1434 kg / 3162 lbs
Operating dimensions	
Length	16.57 m / 54' 4"
Width	3.53 m / 11' 0"
Height	4.32 m / 14' 2"
Transport dimensions	
Length	15.67 m / 51' 5"
Width	3.00 m / 9' 10"
Height	3.60 m / 11' 10"
Weight	49,205 kg / 108,478 lbs
Performance	
Max feed size	800 mm / 31 1/2"
Capacity (up to)	500 tph / 551 stph
Travel speed	1.4 km/h / 0.87 mph
Max incline / Side to side	20° / 10°

Note. All weights and dimensions are for standard units only

Arctic package -20°C (-4°F) (32 grade hyd oil and engine oil)
Arctic package -30°C (-22°F) (arctic hyd oil, engine oil, lubrication oil and webasto coolant heater)
Lighting mast and cabinet lights
Remote diesel pump (electric)
Double deck hanging screen system
Pull stop cords for natural fines and main conveyor
Engine filter kit - 250 hours (air and oil filters - for 3A engines only)
Plant and engine filter kit - 500 hours
Intelligent line multi-machine communication
Main conveyor level sensor (stockpile monitor)
Natural fines conveyor
Radio remote control
Jacking legs
Heavy duty twin pole magnet
No overband magnet