



QI441HS PRISEC™ IMPACTOR PIONEERING SOLUTIONS FOR YOU

TECHNICAL SPECIFICATION

The QI441HS 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	Q1441HS
Hopper	
Hopper width	2540 mm / 8' 4"
Length	4290 mm / 14' 1"
Capacity (heaped)	6 m ³ / 7.85yd ³
Primary Feeder	
Wear resistant lined feeder	1278 mm x 2365 mm / 4' 2" x 7' 9"
Speed	550 - 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 C1421 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	30 - 37 m/s / 98 - 121 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
Double Screen	
Screen box 1 top deck	1525 mm x 1525 mm / 5' x 5'
Screen box 1 bottom deck	1525 mm x 1525 mm / 5' x 5'
Screen box 2 top deck	2440 mm x 1525 mm / 8' x 5'
Screen box 2 bottom deck	2440 mm x 1525 mm / 8' x 5'

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
Pre screen open aperture bottom rubber to feed natural fines conveyor (high fines / sticky applications)
Mesh underscreen options
Central auto lube (crusher bearings only)
Central auto lube (plant bearings excluding crusher and screen)
Water pump (Hydraulic)
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)
Tail conveyor level sensor

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Fines Conveyor	
Belt width	1200 mm / 47 1/4"
Belt length (endless)	12800 mm / 42'
Discharge height	3639 mm / 11' 11"
Hydraulic drive	800 cc / 48.8 cu inch
Transfer Conveyors x 2	
Belt width	500 mm / 19 3/4"
Belt length (endless)	5000 mm / 16' 5"
Hydraulic drive	315 cc / 19.2 cu inch
Re-circulating Conveyor	
Belt width	500 mm / 19 3/4"
Belt length (endless)	19300 mm / 63' 4"
Discharge height	5104 mm / 16' 9"
Hydraulic drive	630 cc / 38.4 cu inch
Stockpile Conveyor	
Belt width	500 mm / 19 3/4"
Belt length (endless)	12,020 mm / 39' 5"
Discharge height	3221 mm / 10' 7"
Hydraulic drive	630 cc / 38.4 cu inch
Powerpack	
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 / 174USG
Hydraulic tank	660 litres / 174USG
Tracks	
Tracking speed	0 - 1.4 kph / 0.87 mph
Shoe width	500 mm / 19 3/4"
Drive	Hydraulic motors / gearbox
Control	Radio / Umbilical
HS Operating Dimensions	
Length HS	19.45 m / 63' 10"
Width HS	8.10 m / 26' 7"
Width HS (stockpile and natural fines conveyor)	11.15 m / 36' 7"
Height HS	5.35 m / 17' 6"
HS Transport Dimensions	
Length HS	18.52 m / 60' 9"
Width HS	3.60 m / 11' 10"
Width HS (without stockpile conveyor)	3.36 m / 11' 1"
Height HS	3.75 m / 12' 3"
Weight HS	60,645 kg / 133,700 lbs

Note. All weights and dimensions are for standard units only

Lighting mast and cabinet lights
Remote diesel pump (electric)
Pull stop cords for natural fines and main conveyor
Pull stop cords for re-circulating conveyor
Pull stop cords for stockpile conveyor
Pull stop cords for fines conveyor
Engine filter kit - 250 hours (air and oil filters - for 3A engines only)
Plant and engine filter kit - 500 hours (3A engine)
Plant and engine filter kit - 500 hours (3B engine)
Plant and engine filter kit - 500 hours (4 Final engine)
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