



QI441SDHS PRISEC™ IMPACTOR PIONEERING SOLUTIONS FOR YOU

TECHNICAL SPECIFICATION

The QI441 SDHS 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.

Fitted with two bearing 13' x 5' / 4 x 1.5 m single 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 SDHS 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 34 m/s to 42 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	QI441SDHS
Hopper	
Length	4200 mm / 13' 9"
Rear loading width	2530 mm / 8' 4"
Rear loading width with extensions	4090 mm / 13' 5"
Nominal capacity	6.0 m ³ / 7.85 yds ³
Nominal capacity with extensions	10.2 m ³ / 13.3 yds ³
Rear loading height std	3975 mm / 13' 1"
Primary Feeder	
Drive	Hydraulic variable speed
Motor	Twin 40 cc / 2.44 cu inch
Length	2405 mm / 8' 4"
Width	1290 mm / 4' 3"
Speed	550 - 960 rpm
Hopper Liner Thickness	8 mm / 3/8"
Amplitud	10mm / 3/8"
Pre Screen	
Type	Double Deck
Top deck	2160 mm x 1360 mm / 7' 1" x 4' 6"
Bottom deck	1730 mm x 1360 mm / 5' 8" x 4' 6"
Punch plate	40 mm / 1 1/2"
Underscreen mesh	20 mm / 3/4"
Motor	49.2 cc / 3 cu inch
Speed	990 rpm
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	563 rpm to 696 rpm
Peripheral velocity	34 - 42 m/s / 112 - 138 ft/s
2 aprons	Hydraulic assist
Maximum feed size	800 mm / 31 1/2"
Capacity (up to)	500 tph / 551 stph
Crusher weight	13,857 kg / 30,549 lbs
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
Underpan feeder	
Type	Spring mounted stepped vibrating feeder
Width	1022 mm / 40 1/4"
Length	2400 mm / 94 1/2"
Hydraulic drive	Twin 30 cc / 1.83 cu inch
Speed	960 rpm
Pan feeder amplitude	10 mm / 3/8"
Magnet	
Model	Eriez CP20/100-SC2
Weight	1295 kg / 2855 lbs
Type	Self cleaning suspended
Belt width	750 mm / 29 1/2"
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 14" PT Tech wet clutch
Fuel tank	660 litres / 174 USG
Hydraulic tank	660 litres / 174 USG

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 options 30, 60, 80, 100 mm
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)	12,800 mm / 42'
Discharge height	3930 mm / 12' 11"
Hydraulic drive	395 cc / 24 cu inch
Transfer Conveyor	
Belt width	500 mm / 19 3/4"
Belt length (endless)	4630 mm / 15' 2"
Hydraulic drive	315 cc / 19.2 cu inch
Re-circulating Conveyor	
Belt width	500 mm / 19 3/4"
Belt length (endless)	19,965 mm / 65' 6"
Discharge height	4730 mm / 15' 6"
Hydraulic drive	500 cc / 30.5 cu inch
Natural fines Conveyor (optional)	
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
Screen	
Size (open area)	3962 x 1525 mm / 13' x 5'
Number of decks	1
Number of bearings	2
Operating angle	22°
Minimum mesh size	34 mm / 1 1/4"
Maximum mesh size	75 mm / 3"
Motor size	32.9 cc / 2.00 cu inch
Tracks	
Length (centres)	4170 mm / 13' 8"
Width (shoe)	500 mm / 19 3/4"
Drive	Hydraulic / Gearbox
Control	Radio / Umbilical (proportional)
Tracking speed	1.4 km/h / 0.87 mph
Max incline	9°
Max incline / Side to side	10°
Operating Dimensions	
Length	19.63 m / 64' 5"
Width (without NF conveyor)	3.61 m / 11' 10"
Width (with NF conveyor)	6.72 m / 22'
Width (stockpile position)	12.19 m / 40'
Height	4.73 m / 15' 6"
Weight	61,280 kg / 135,099 lbs
Transport Dimensions	
Length	18.95 m / 62' 2"
Width	3.26 m / 10' 8"
Height	3.78 m / 12' 5"
Cubic volume	250 m ³ / 8828 ft ³
Weight	61,280 kg / 135,099 lbs
Transport Dimensions HS removed	
Length	15.74 m / 51' 8"
Width	3.04 m / 10'
Height	3.62 m / 11' 11"
Cubic volume	173 m ³ / 6109 ft ³
Weight	55,060 kg / 121,386 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 fines 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
Single Deck Hanging Screen mesh options - 34, 42, 45, 50, 75 mm
Heavy duty twin pole magnet
No overband magnet