

Sandvik UJ440i



Intelligence on crawler tracks

The UJ440i embodies the new generation of Sandvik mobile units, already proven for many years in hard rock applications. The “i” stands for “intelligence” because that’s what we’ve added.

The control system provides loads of useful information and facilitates sequenced start-ups and close-downs, and fault tracing. The intelligence gives full control of the process and provides the operator with an insight into the unit’s operation regarding production data and history, indications of service and maintenance, etc. The process is continuously and automatically monitored by the intelligence. Productivity is maximized through a steady and smooth flow of material. A number of sensors at key locations ensure a trouble-free operation and safeguard against costly breakdowns.

Material flow is controlled automatically but the automation can be overridden manually. User-friendly messages explain each function step-by-step. In a multi-stage crushing process set-up, the system communicates with subsequent units.



What can the Sandvik UJ440i do for you?

The Sandvik UJ440i can be used in any climatic condition – thanks to a careful choice of quality components.

Advanced process automation through interlocking.

Easy to move away and back into position when blasting thanks to crawler tracks and radio remote control, and no need to dismantle equipment.

Quick set-up and close-down thanks to road transport in one piece and hydraulically foldable feed hopper sides.

Easy inspection and maintenance thanks to roomy build and easily accessible maintenance items. Detailed manuals offer clear, simple instructions.

Economical operation thanks to one operator for loader and crushing unit. Quick return on invest-

ment thanks to low operation cost and high productivity.

Crusher with large feed opening, vast choice of plate configuration and fast close side setting.

Good working environment thanks to suppression of dust, noise and emission. Dust sealed product discharge conveyor.

Powerful and economical thanks to modern, on-board diesel engine with low fuel consumption and minimum transmission losses. Emissions comply with EU and USA step III norms.

No spillage of hydraulic oil during filter changes thanks to vacuumized system.

Staff training and commissioning under the supervision of Sandvik Mining and Construction are part of the delivery.



Maximum production with minimum effort

Product discharge conveyor with a drop height of 3.3-3.7 m (11'-12')

Dust sealed conveyor

Over band magnet for protection of secondary stage crusher and cleaning of crushed product (optional)

Mast with signaling flash lights and four flood lights

Dust collector (optional)

Level monitor (optional)

Radio remote control (optional)

Easy maintenance – roomy and open build

High safety level, six emergency stops distributed throughout the unit

Flood lights for the crawler tracks (optional)

The photo shows the Sandvik UJ440i version Comfort.

User-friendly menus with icons and symbols are used in the intelligent control systems featuring computer monitor where selected.



Minimized hazards during manual inspections thanks to protective grid and platform by the crusher opening.

The discharge product conveyor is dust sealed. It features impact bars, belt scrapers and self-lubrication idlers and requires little maintenance.





Three versions suited to your very needs

The three members of the Sandvik UJ440i family are versatile, highly mobile crushing units. All three provide unsurpassed mobility on site thanks to crawler tracks. They have crusher, crawlers, diesel engine and main product belt conveyor in common. The feed hopper bottom is lined with Sandvik rubber protection for reduced noise, wear and sticking of material. They all have good access to vital service points.

Comfort for clean rock

Purpose designed for crushing clean rock, the Sandvik UJ440i Comfort crushing units have a feeder with a grizzly section and an extra, single screen deck. There are two chutes under the grizzly/screen, one for bypassing the crusher and one for stockpiling natural fines (NF). An NF discharge belt conveyor for right- or left-hand side connection is optional. The feed station is removable in order to accommodate road transport where required.

Classic for rock and gravel

The Sandvik UJ440i Classic, designed for crushing of rock and gravel, is equipped with a grizzly feeder and a separate screen for the removal of natural fines (NF) under exceptionally difficult conditions. The chute and optional NF-conveyor under the screen are similar to the corresponding parts on Comfort crushing units. The feed station is removable in order to accommodate road transport where required.

Trend for unclean rock and gravel with much fine material

Sandvik UJ440i Trend crushing units have been designed for rock and gravel containing lots of fine material. They are equipped with a separate screen with a stepped grizzly and a conventional lower deck, operating at maximum capacity at all times independent of the feeder. The separated fine material can either be stockpiled or bypass the crusher. Chutes and belt conveyors are similar to those on Sandvik UJ440i Classic and Comfort crushing units.

COMFORT



CLASSIC



TREND





Split the product into two fractions

The Sandvik UJ440i Comfort and Classic can be equipped with a screen module that makes it possible to split the product in two fractions.

The newly developed screen offers very high performance with high tonnage and fine separation.

The screen and the conveyors are designed to maximize capacity. Highest priority is given to total crushing and screening performance, no compromises.

Easy to replace Sandvik screening media and modular wear protection.

Fully dust encapsulated screen and conveyors.

High discharge height of the two product conveyors allowing two large deposits. Front loader operators have plenty of freedom.

The main product conveyor of the mobile unit does not sacrifice discharge height due to the screen module. When the screen module is detached, the Sandvik UJ440i offers the usual unmatched performance.

Every Sandvik UJ440i that we deliver can be subsequently upgraded with the screen module.

The screen module with its conveyors is detachable and can be parked as a complete unit.

The screen module operates with the same high level of intelligence as the mobile unit and works in concert with it.

Attachment is quick and easy. No need for lifting equipment. All hydraulics and electrical leads are attached with quick couplings.

In operation, the entire unit is supported by self-leveling support legs.



The Sandvik UJ440i can be equipped with a screen module that makes it possible to split the product in two fractions.

Optimize your unit

Oversize boulder fix with on-board Sandvik hydraulic hammer complete with hammer and boom. The hammer stays onboard during road transport.

Protection of secondary stage crusher and cleaning of crushed product with over band magnet.

Improved working environment with dust suppression by self-cleaning dust collector and water spray system with nozzles on crusher and on discharge conveyor.

Efficient removal of natural fines (NF), thanks to a conveyor for left-hand or right-hand side connection with a 3 m (10 ft) discharge height.

Simplified daily maintenance with automatic lubrication system for the jaw crusher.

Work and move around the clock with extra flood lights mounted close to the crawlers.

Fast adaptation of production with a fully automatic crusher setting as standard. Different optional jaw plate designs allow to fine-tune operations.

Operator's increased mobility thanks to remote control by radio. The control box can be placed in the cabin of the excavator or wheel loader.

Undisputable production data with belt scale on discharge conveyor. This feature is also useful in order to maximize jaw plate wear life.

Proven to handle the most extreme weather conditions with a choice of engine pre-heater and various types of oils.

Sandvik mobile jaw crusher units are characterized by low weight, excellent mobility, high capacity and an intelligent, user-friendly control system.



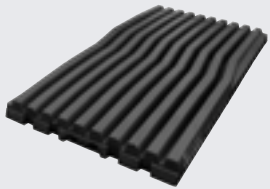
Smooth, quick transfers mean a great deal in terms of profitability.



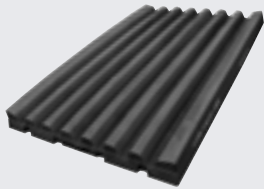
Sandvik UH440i and US440i communicate cordlessly (option) with the Sandvik UJ440i, thanks to an optional sonar on the Sandvik UJ440i's discharge conveyor.

Performance in all types of applications

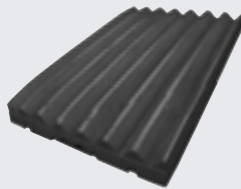
Sandvik's wear parts are designed to give high performance and low operating costs. High quality material and experienced design ensure quality parts. Fine tuning in applications are ensured through the available range of alternative jaw plate designs. All jaw plates are reversible.



WT: Wide Teeth



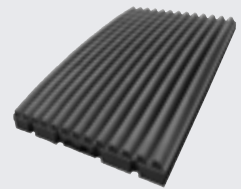
CC: Coarse Corrugated



ST: Sharp Teeth



HD: Heavy Duty



C: Corrugated

Protect your business... and your bottom line

For most people, service is a matter of being available when problems occur. But we at Sandvik prefer seeing it as a matter of being proactive. Investment in, for instance, scheduled inspections and maintenance will help you protect your business from unexpected risks.

Moreover, availability of essential parts and consumables, efficient and quick logistical processes, fully trained operators... all these ensure trouble-free operations and maximize productivity.



Technical data

Dimension		Comfort & Classic	Trend
<i>Operation</i>	Height	4.25 m / 13.9'	4.90 m / 15.1'
	Width	3.13 m / 10.3'	3.58 m / 11.7'
	Length	16.37 m / 54'	17.90 m / 58.7'
<i>Transport</i>	Height	3.90 m / 12.8'	3.90 m / 12.8'
	Width	3.00 m / 9.8'	3.39 m / 11.1' *
	Length	16.43 m / 54'	18.00 m / 59'

* Including feed hopper sides mounted

Weight (excl. options)	Comfort	Classic	Trend
tons	62.5	63	74
short tons	69	69.5	81.5

Feed station	Comfort	Classic	Trend
<i>Feeder type</i>	SW1252H	SW1252H	ST1241
<i>Grizzly section</i>	1.2 m / 4'	1.2 m / 4'	–
<i>Hopper volume</i>	6 m ³ / 210 ft ³	6 m ³ / 210 ft ³	10 m ³ / 350 ft ³
<i>Screen type</i>	–	SS1012H	ST1222
<i>Decks</i>	–	2	2 (stepped grizzly on top)

Crusher	
Type	CJ412
Feed opening	1200x800 mm / 48x32"
Drive	From diesel engine via V-belts and hydraulic coupling

Discharge conveyor	
Belt width	1400 mm / 52"
Drive	Fixed speed hydraulic motors
Approx. Discharge height under drum	3.3–3.8 m / 10'10" ± 10"

On-board power pack	
Diesel engine	Volvo TAD 1252 Tier III
Rated output	300 kW / 408 hp at 1500 rpm
Fuel tank volume	1125 dm ³ / 300 US gallons

Hydraulic system	
Power source	Pumps mounted on power pack
Oil tank volume	415 dm ³ / 110 US gallons

Crawler tracks	
Type	D6C
Length c-c	4170 mm / 164"
Track shoe width	500 mm / 20"

Performance	
Max. feed size	760 mm / 30"
Capacity (up to)	600 mtph
Approx fuel consumption	25–35 l/h / 7–9 US gallons/h at 75 % continuous load
Traveling speed	1.2 km/h
Max. slope-climbing capability	Approx. 20°

HS module (hanging screen) option	
Screen:	HS 1530 single deck
Product conveyor B4 (side):	width 1000 mm / 3'4"
	Approx. discharge height under drum: 3.2 m / 10'6"
Product conveyor B5:	width 1200 mm / 4'
	Approx. discharge height under drum: 3.2 m / 10'6"

Sandvik is a global industrial group with advanced products and world-leading positions in selected areas – tools for metal cutting, machinery and tools for rock excavation, stainless materials, special alloys, metallic and ceramic resistance materials as well as process systems. The Group had at the end of 2007 about 47,000 employees and representation in 130 countries, with annual sales of more than SEK 86,000 M.

Sandvik Mining and Construction is a business area within the Sandvik Group and a leading global supplier of machinery, cemented-carbide tools, service and technical solutions for the excavation of rock and minerals in the mining and construction industries. Annual sales 2007 amounted to about SEK 33,100 M, with approximately 15,200 employees.

