



# EVOLUTION ON THE OUTSIDE REVOLUTION ON THE INSIDE

SANDVIK 800i CONNECTED CONE CRUSHER SERIES





# STRONGER SMARTER SAFER CONNECTED CRUSHERS

Sandvik 800i is a series of strong, robust cone crushers connected 24/7 to boost productivity, predict performance and maximize uptime. With Sandvik Reborn and overhaul kits, crushing has never been as cost-efficient to operate, and as easy to upgrade.

According to IndustryARC, the Industrial Internet of Things (IIoT) market will reach 123.89 billion USD by 2021.

## THE FUTURE OF CRUSHING IS HERE

The Industrial Internet of Things will have a profound effect on machines and industrial processes. Areas like predictive maintenance where machines give an alert when a part needs changing, e-commerce, to automatically order and reorder parts for just-in-time maintenance, and actionable information to continually improve machine and process performance – are just some of the benefits we are already experiencing. Now we introduce the first series of connected crushers. Part of always leading the field to improve performance.



# SAM BY SANDVIK – YOUR ALWAYS-ON DIGITAL ASSISTANT

SAM is the ever-evolving digital service designed to support operational excellence, intended for team members responsible for running daily operations.

It's your digital assistant which brings people, activities and data together in an easy-to-use seamless collaboration tool that will power tomorrow's operations.

Customized settings

Spare parts catalog

E-commerce

Perform <sup>daily</sup> inspections  
<sup>weekly</sup>

All in one place

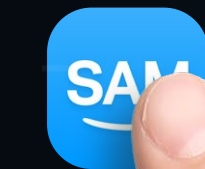
Fleet overview

Top 5 actions

Interactive  
& smart

Predictions

Alerts  
& notifications



SAM by S

Team tools

Equipment behavior

Manuals

Notes

Inspection reports

Actual data  
& trends

## FLEET OVERVIEW

COMPLETE OVERVIEW OF EQUIPMENT AND FLEET DATA.

Includes equipment behavior, predictions based on AI, notice-board, reports, and equipment basics (manuals, warranty info, configurations, etc.)

- Real-time fleet insights
- Data-based support

Make Improved business performance decisions based on accurate, reliable data

## INSPECTIONS

AN OUTSTANDING SET OF SERVICE- AND MAINTENANCE RELATED TOOLS.

Daily and weekly equipment checklists help your operators identify and document reliability risks.

- Identifies reliability risks

Higher reliability, availability and productivity – reducing operating costs

## TEAM TOOLS

ONE CENTRAL LOCATION FOR DOCUMENTATION, COMMUNICATION AND INFORMATION SHARING.

Get a full, transparent overview of your team's data, communications and actions.

- The "digital glue" between people, activities, tools and machines
- Full transparency between data, communications and actions

## E-COMMERCE

YOUR COMPLETE WEB SHOP WITH PARTS AND CONSUMABLES. BROWSE BY PRODUCT OR INTERACTIVE SPARE PARTS CATALOGUES.

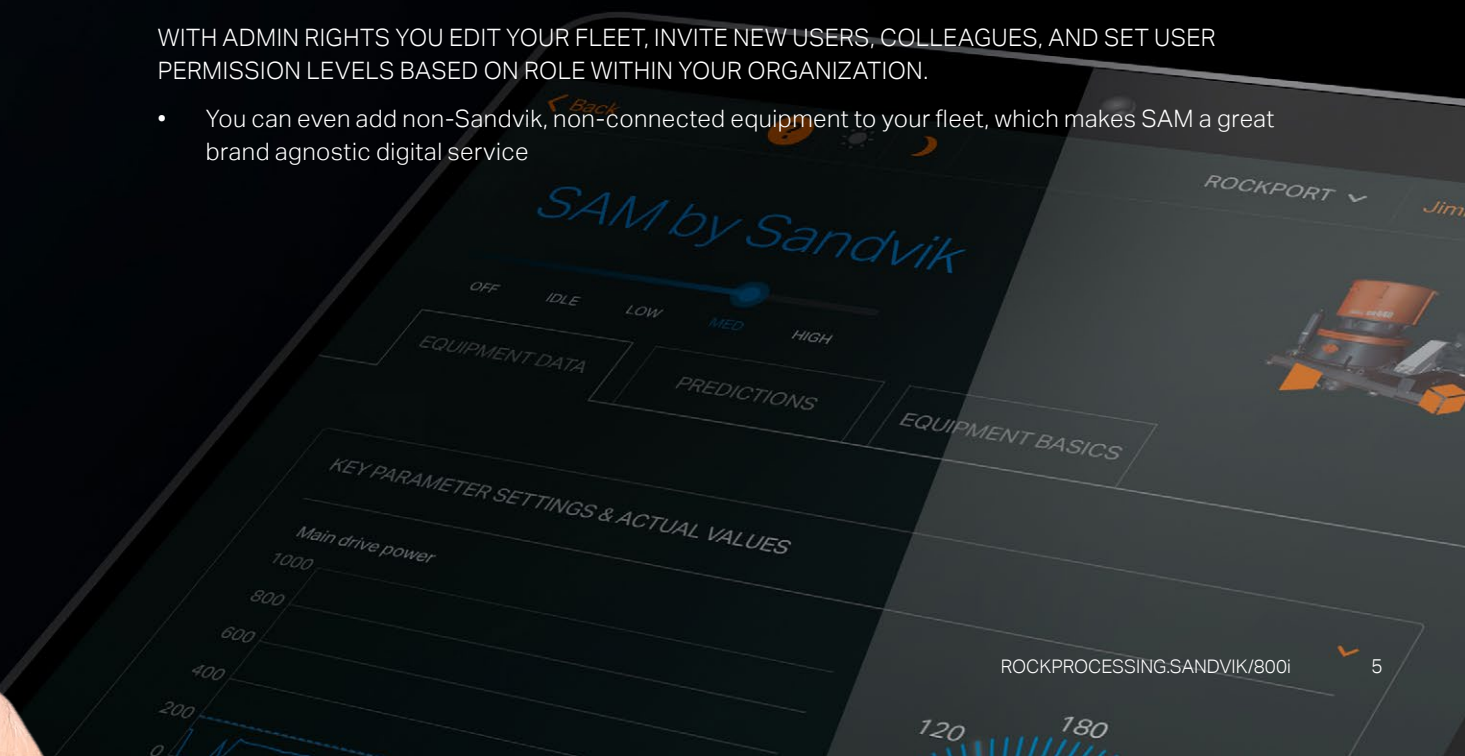
Clear and visible live product availability, order status and order history.

- 24/7/365 access to parts and consumables
- Ordering assistance
- One stop shop for parts, order history and availability

## ADMIN

WITH ADMIN RIGHTS YOU EDIT YOUR FLEET, INVITE NEW USERS, COLLEAGUES, AND SET USER PERMISSION LEVELS BASED ON ROLE WITHIN YOUR ORGANIZATION.

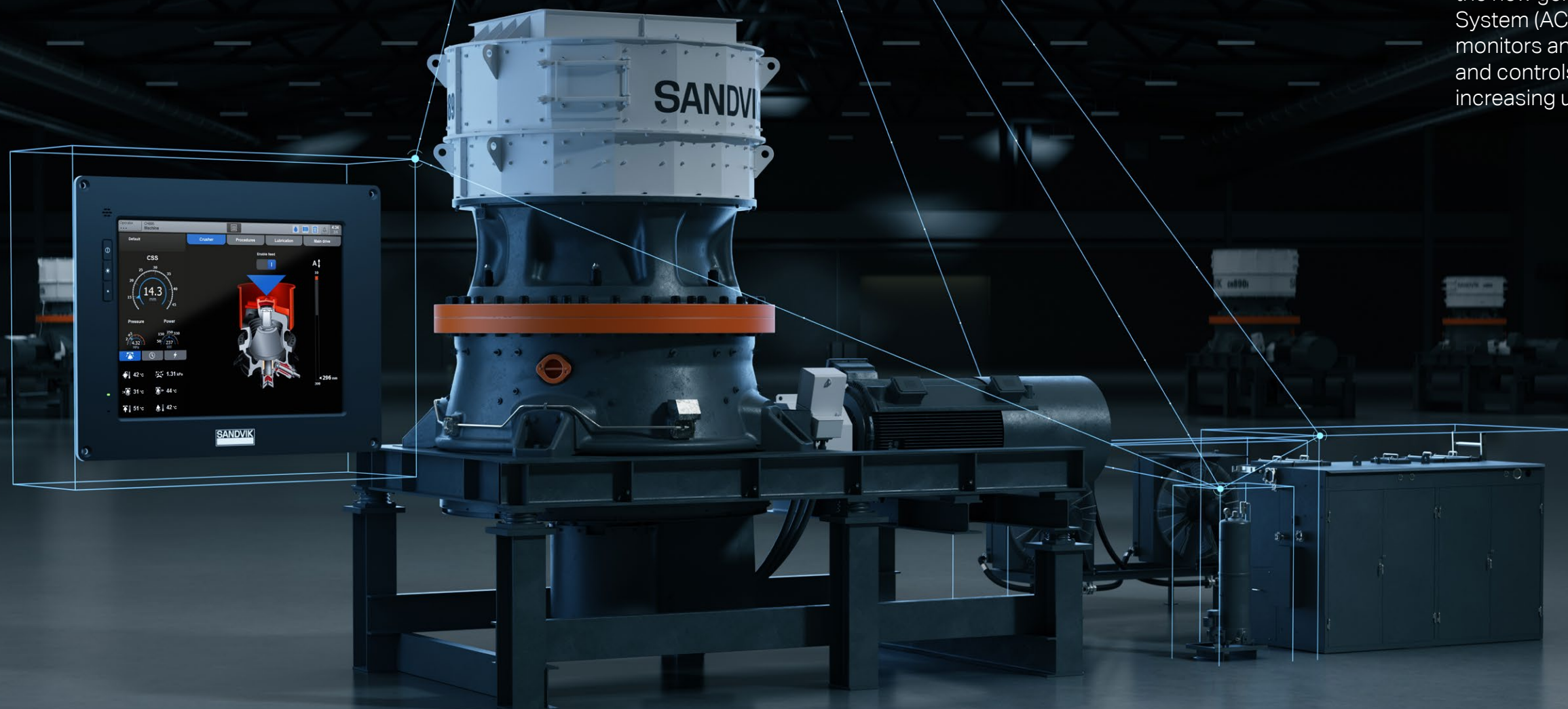
- You can even add non-Sandvik, non-connected equipment to your fleet, which makes SAM a great brand agnostic digital service





# ALWAYS CONNECTED

The 800i connected crusher series comes with the new generation Automation and Connectivity System (ACS) as standard. The system continuously monitors and optimizes crusher performance and controls the complete lubrication system, increasing uptime and reliability.



## 5 | IMPROVEMENTS WITH ACS

1. Full lubrication monitoring and control
2. Full monitoring of the in-line filter
3. Possibility to bypass non-critical sensors in case of failure
4. Improved user interface in HMI
5. With the ACS-Gateway, equipment behavior, analytics and trends are visible in your SAM by Sandvik app



# A REVOLUTION IN CONNECTED CRUSHING

Strong, robust, intelligent crushers designed to increase uptime, availability and profitability.

All Sandvik 800i crushers are technologically advanced cone crushers designed for applications in mines or large quarries. Each has a hydraulically supported main shaft, a robust design, adjustable eccentric throw, constant intake opening and high performance.

Which crusher is right for you?

## CH895i

Technically advanced, high-capacity cone crusher ideal for tertiary and pebble crushing. The 750 kW motor delivers higher power and more crushing force at maximum throw. Higher size reduction results in finer product size. Now with tougher top and bottom shells and main shaft.

## CH890i

Technically advanced, high-capacity cone crusher for secondary crushing. The 750 kW motor delivers higher power and more crushing force at maximum throw. Higher size reduction results in finer product size. Now with tougher top and bottom shells and main shaft.

## CH870i

High-capacity crusher suitable for secondary, tertiary and pebble applications. The 600 kW motor delivers more force at maximum throw. An aggressive crushing action produces more ore with maintained product size. Now with tougher top and bottom shells and main shaft.

## CH865i

Technologically advanced mid-range cone crusher for tertiary and pebble crushing. It performs up to 30% better depending on application. It has a higher size reduction resulting in finer product size. Now with tougher top and bottom shells and main shaft.

## CH860i

High capacity crusher for secondary crushing. This technologically advanced mid-range cone crusher performs up to 30% better depending on application. It has a higher size reduction resulting in finer product size. Now with tougher top and bottom shells and main shaft.

## CS840i

High capacity crusher for secondary crushing. Offers up to 50% more capacity than other crushers in similar applications. It has a 25% greater reduction ratio and 50% less recirculation with the same high-value product compared to similar crushers in its class.

## CH840i & CH830i

High capacity crusher for secondary and tertiary crushing. It offers excellent capacity in relation to crusher size. Wear parts have been adapted to ensuring a longer lifetime per ton produced. An advanced dump valve ensures quick, safe tramp relief if something uncrushable gets into the crusher.

## TOP SERVICEABILITY

minimizes risks and enables safer maintenance.

## ACS

continuously monitors and optimizes crusher performance.

## HYDROSET™

provides safety and setting adjustment functions.

## UNIBODY MAINFRAME

ensures optimal strength and less maintenance.

## ADVANCED DUMP VALVE

automatically provides overload protection to let tramp iron or other uncrushable material pass through.





# SIX REASONS WHY 800i CRUSHERS ARE BETTER

## STRONGER THAN EVER

Stronger just got stronger. We've toughened up the main shaft and top & bottom shells so they're much stronger than before. That spells more reliability, higher availability and a low risk of critical failure.

## CONNECTED CONE CRUSHERS

SAM by Sandvik gives you complete 24/7 access to data generated by your connected Sandvik crusher fleet. Make decisions based on facts, and clearly see areas where you can improve uptime and productivity.

Get access to manuals and an e-commerce platform to easily and efficiently buy and reorder wear and spare parts. SAM by Sandvik lets you track & trace parts online to make maintenance planning simpler. No other crushers are better connected.

## ADVANCED AUTOMATION

The Automation and Connectivity System (ACS) continuously optimizes crusher performance without overloading it, so you get the most out of your crusher. It can automatically adjust crusher settings to compensate for crushing chamber wear – ensuring consistent product size.

Hydroset™ and the electric dump valve automatically provide overload protection to let tramp iron or other uncrushable material pass through. Our automation system automatically adapts the crusher's settings in real time to match feed curve variations and variations in the hardness of the feed material.

## SAFETY FIRST

Bolted rather than welded top and bottom shell liners reduce maintenance time and are much safer. It's 90% faster to change liners compared to welding.

The improved over-pressure system with dedicated air channel inlets keeps dust out to increase reliability. The standard offline filter unit keeps lub oil cleaner with 24/7 fine filtration, reducing wear on your internal crusher components and extending oil life by up to 5 times.

## ALL NEW? OR AS NEW?

Sandvik Reborn replaces your existing cone crusher for a new one, reutilizing existing auxiliaries and infrastructure. The plug and play installation minimizes disruption and maximizes productivity, giving up to 40% cost savings compared to a new complete crusher system.

Or order an overhaul kit or major components to change the top shell, bottom shell or/and main shaft of your crusher.

## INCREASE PRODUCTIVITY THROUGH LIFECYCLE SERVICES

With Sandvik Services, we support your new equipment throughout its entire lifecycle, helping you increase productivity by up to 10%.

Get genuine parts, service solutions, extensive training and a wide range of wear and crushing chamber solutions that deliver lower operating costs, improved product quality and maximum productivity.



# SANDVIK REBORN REPLACES YOUR EXISTING CRUSHER

Sandvik Reborn rebuilds your crusher system by exchanging your worn-out Sandvik crusher with a new one, and reutilizing your crusher auxiliaries and infrastructure. This plug and play installation minimizes disruption and maximizes productivity, giving up to 40% cost savings compared to a new complete crusher system.

## REBORN PACKAGE INCLUDES

- New factory-tested crusher covered by a three-year extended warranty
- Access to equipment behavior, analytics and trends in your SAM by Sandvik account
- Crusher equipped with all model-specific upgrades that improve reliability
- Expert installation supervision
- Comprehensive on-site training covering crusher operation and maintenance, periodic condition inspections

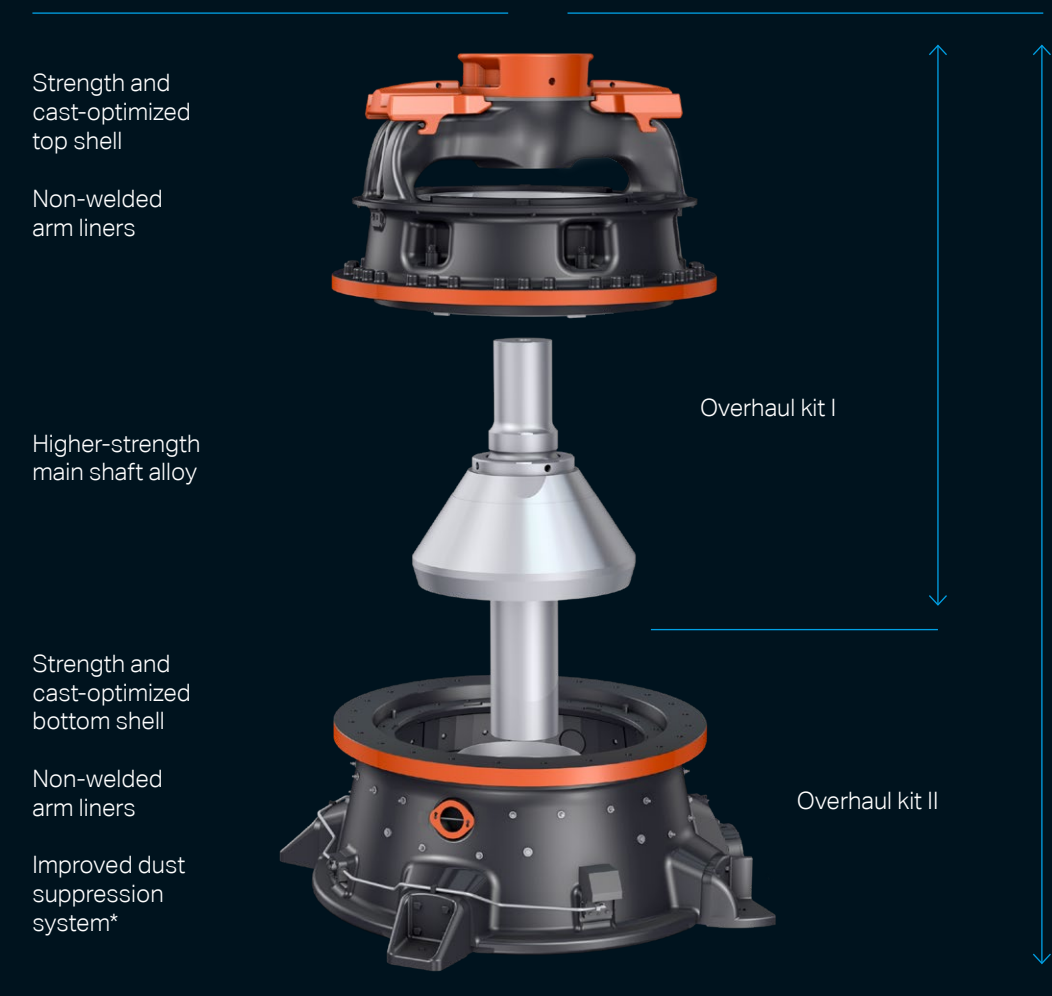
## COMPATIBILITY

- |         |         |
|---------|---------|
| • H7800 | • CH880 |
| • CH870 | • CH890 |
| • H8000 | • CH895 |
| • H8800 |         |

# MAYOR COMPONENTS EVOLUTION

## INDIVIDUAL COMPONENTS OR OVERHAUL KITS

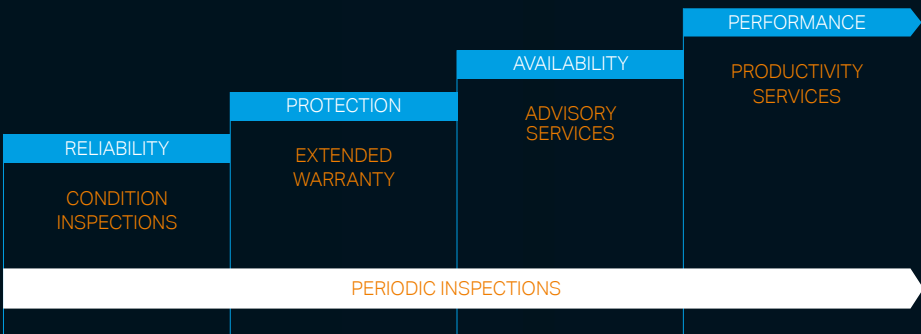
Our major components just got stronger. That spells more reliability, higher availability and a low risk of critical failure. Purchased individually or through our competitively priced overhaul kits, it's an easy way to renew your crusher fleet. Simply renew the backward-compatible component upgrades to help you improve productivity.



\* The CH870i bottom shell is compatible with both the old and new over-pressure system. The new system requires the dust collar upgrade kit (optional)

# SANDVIK SERVICES

With Sandvik Services, we support your new equipment throughout its entire lifecycle, helping you increase productivity by up to 10%. Get genuine parts, service solutions, extensive training and a wide range of wear and crushing chamber solutions that deliver lower operating costs, improved product quality and maximum productivity.



When you can predict your productivity, you predict profitability. Sandvik Services is about optimizing performance every hour, 365 days a year. Our highly trained, expert engineers ensure you get the right parts and service to ensure safe operation, low operating costs and long service life.

Service from us isn't just quick and convenient. It optimizes uptime and gives you an increase in process efficiency and equipment reliability you can count on. Literally.

## FOUR WAYS SANDVIK SERVICES IMPROVES YOUR PRODUCTIVITY

1. Experts offer dedicated knowledge and experience in OEM equipment and the applications surrounding it
2. Proven and globally established optimization procedures use thousands of applications as a benchmark to find you the most efficient solutions
3. Customized training sessions and frequent on-site support foster the transfer of knowledge to staff and develop skills
4. Clear guidance leads you toward higher reliability, availability and productivity, ensuring lower operating costs



## ZERO UNPLANNED STOPS

After China Molybdenum Co. Ltd. signed a Productivity Services Agreement, they have experienced zero unplanned stops and a significant rise in productivity.

"Before the agreement, capacity was 9,000 tons/day. Now it's 15,000 tons."

CHINA MOLYBDENUM CO. LTD.



# THE NEW SANDVIK 800i CRUSHER FLEET



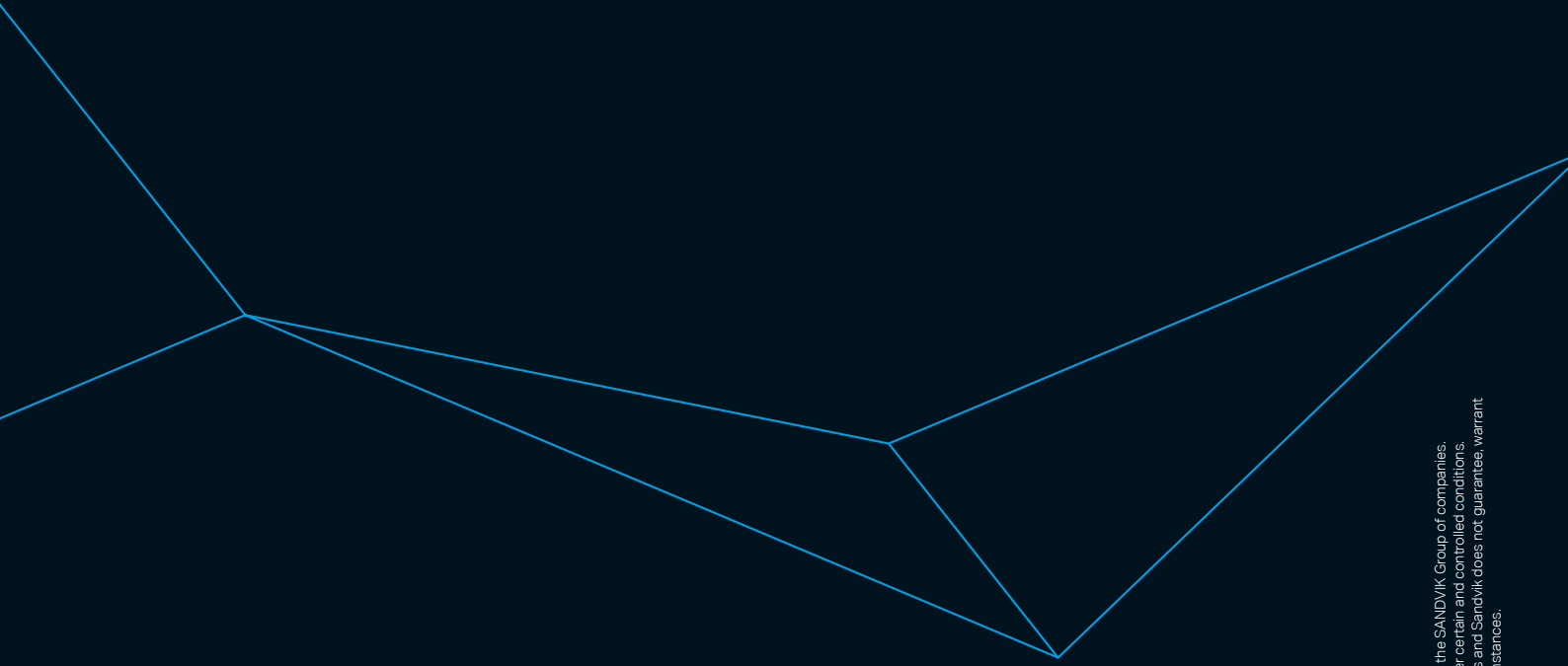
SPECIFICATION	CH830i	CH840i	CS840i	CH860i
Nominal capacity - mtph (stph)	61-283	103-427	212-659	250-910 (275-1,003)
Max. feed size - mm (in)	211 (1.7-7.3)	250 (≤ 8.5)	431	315 (12.4)
Motor power - kW (hp)	250 (335)	330 (442)	330 (442)	500 (670)
Closed side setting (CSS) range - mm (in)	4-41 (0.2-1.5)	10-48 (0.2-1.7)	22-70	13-51 (0.5-2.0)
Eccentric throw range - mm (in)	24-52	28-52	24-48	30-70 (1.2-2.8)
Mantles (inner liners)	A, B, EF, FlexiFeed B	A, B, FlexiFeed B	A, B, S	A, B, FF
Concaves (outer liners)	C, EC, EF, F, M	C, EC, F, M, MC	EC, C	EC, C, MC, M
Weight - kg (lb)	12,734 (27,500)	20,278	25,794	50,530 (111,400)
Automation	Included as standard	Included as standard	Included as standard	Included as standard
Connectivity	Included as standard	Included as standard	Included as standard	Included as standard
System for lubrication control	Included as standard	Included as standard	Included as standard	Included as standard
Advanced dump valve	Included as standard	Included as standard	Included as standard	Included as standard
Lubrication tank	Included as standard	Included as standard	Included as standard	Included as standard
Offline lubrication filtration unit	Included as standard	Included as standard	Included as standard	Included as standard



SPECIFICATION	CH865i	CH870i	CH890i	CH895i
Nominal capacity - mtph (stph)	155-517 (171-570)	208-1,283 (229-1,414)	275-1,837 (303-2,025)	258-1,077 (284-1,187)
Max. feed size - mm (in)	123 (4.8)	350 (13.8)	428 (16.9)	127 (5)
Motor power - kW (hp)	500 (670)	600 (805)	750 (1,000)	750 (1,000)
Closed side setting (CSS) range - mm (in)	10-44 (0.4-1.7)	10-70 (0.4-2.8)	13-70 (0.5-2.8)	10-70 (0.4-2.8)
Eccentric throw range - mm (in)	30-70 (1.2-2.8)	32-80 (1.3-3.1)	24-70 (0.9-2.8)	24-70 (0.9-2.8)
Mantles (inner liners)	A, B, EF, OB	A, B, EF, OB, FF	A, B, HC, EF, FF	EF, OB, HC
Concaves (outer liners)	F, EF, HR	EC, C, MC, M, MF, F, EF, HR	EC, C, MC, M, MF, F	EFX, EF, EEF, HR
Weight - kg (lb)	49,750 (109,680)	67,000 (147,700)	97,000 (213,800)	96,000 (212,000)
Automation	Included as standard	Included as standard	Included as standard	Included as standard
Connectivity	Included as standard	Included as standard	Included as standard	Included as standard
System for lubrication control	Included as standard	Included as standard	Included as standard	Included as standard
Advanced dump valve	Included as standard	Included as standard	Included as standard	Included as standard
Lubrication tank	Included as standard	Included as standard	Included as standard	Included as standard
Offline lubrication filtration unit	Included as standard	Included as standard	Included as standard	Included as standard

Sandvik offers a wide range of standard, premium and customized crushing chamber solutions based on your needs. They deliver consistently high availability and reliability. We work closely with you to find the best solution for your needs – in performance and safety, and application and material feed properties. Our PlantDesigner software or Rock Processing Guide helps you estimate new operating conditions and select the right crushing chamber profile. Contact your local Sandvik rep for more information.





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