Smart crushing, adapted to you

800i connected crushers with ACS-c 5

SANDVIK

Mechanical optimization

+

Automation intelligence

+

SAM by Sandvik

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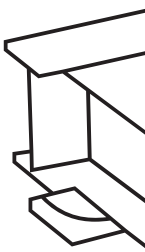
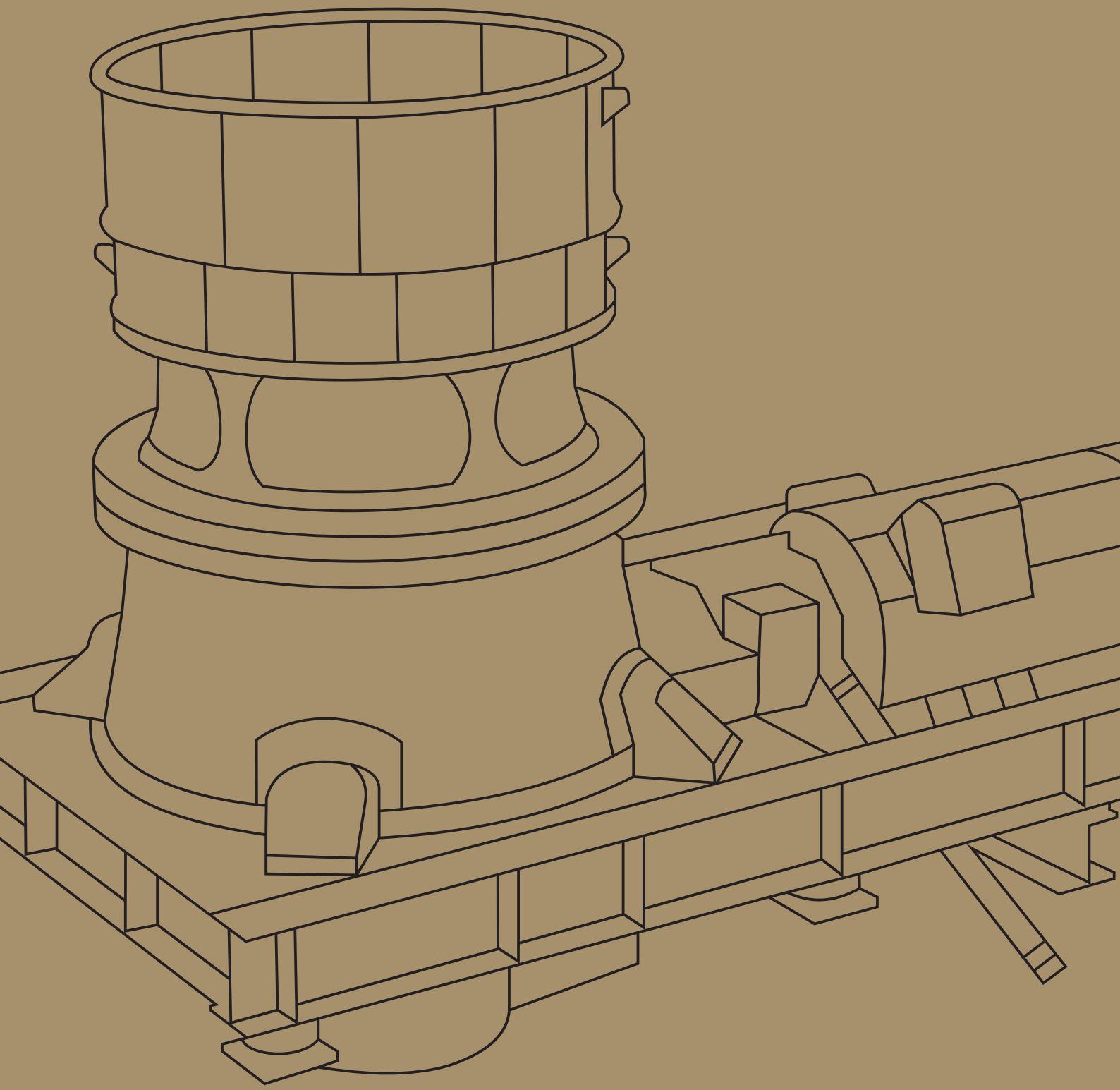
Smart crushing, adapted to you





A crusher unlike any other

Sandvik cone crushers have always stood apart. From our earliest models, Sandvik cone crushers have benefitted from a design philosophy that continually improves on the safe and uninterrupted productivity you and your operation rely on. The result is that Sandvik 800i crushers are now well-established contributors to safety, reliability and productivity at customer sites around the globe.

Designed with you in mind

800i crushers deliver high performance you can count on. A combination of simple yet robust mechanical design with powerful user-friendly automation technology, the upgraded 800i with new ACS-c 5 is designed around the needs of the people who work with it. It is delivered as a complete, unified package to ensure everything works together seamlessly from installation onwards.

CH890i
SANDVIK

800i connected crushers with ACS-c 5

Clarified responsibility with role-based interaction

Operator

- The automation system guides the operator through alarms and recommended actions, streamlining the decision-making process during alerts and minimizing the impact of potential issues
- This guidance helps operators achieve their targets without the concern of losing shifts due to downtime
- Easy access to manuals facilitates quick self-help, empowering operators to address issues independently and efficiently

Maintenance

- The maintenance personnel have access to an improved historical and operational data log, providing a comprehensive overview of the crusher's performance
- The inclusion of 90-day historical logs allows for in-depth analysis and tracking of the equipment's performance over an extended period
- Advanced tools aid in defining, improving, and updating maintenance schedules, contributing to more effective and proactive maintenance practices

Process/reliability engineer

- The new automation system offers engineers more opportunities to monitor, analyze, and optimize the crusher's performance
- The ability to create crusher programs and fine-tune system limits allows for a more customized and optimized operation
- Performance optimization through insights on feed conditions, load cycles, pressure distribution and uncrushable objects
- Proactive warnings generated by the system help prevent unplanned maintenance downtime, enabling service engineers to address issues before they escalate

In summary, the Sandvik 800i cone crushers, with the ACS-c 5 automation & connectivity system, provide a holistic solution that not only enhances operational efficiency and performance but also facilitates the work of operators, maintenance personnel, and engineers by offering guidance, access to valuable data, and tools for proactive maintenance and optimization.

Smarter crushing that gets the job done

Sandvik 800i connected crushers provide high crushing force at maximum throw, a wide range of crushing chamber choices, and smart automation that facilitates real-time setting regulation during full load. They are designed from the ground up to maximize peak crushing performance at all times.

Reliability that ensures availability

The best crusher is the one you can count on. The 800i connected crushers were conceived with maximum mechanical and technological reliability in mind. And have evolved with further automation advantages that simplify service and troubleshooting, improve safety, and optimize performance while minimizing downtime.

- **Robust unibody design with few moving parts**
- **ACS-c 5 monitored and controlled:**
  - **Setting regulation that optimizes the performance of the crusher without overloading, for maximum productivity**
  - **Lubrication control**
  - **Dump valve control**
- **SAM Connected, our ever evolving digital service**
- **Top-down maintenance and simplified access for easier and safer service**
- Electric dump valve system provides instant release of main shaft in event of uncrushable objects for all crusher models
- Constant liner performance (CLP)
- Direct-drive for high power with less loss of energy due to belt slippage
- Small footprint, low dynamic load makes it possible to install on steel structures
- Hydrocone® design allows for continuous monitoring of the pressure and the known crushing force inside the chamber
- Non-welded wear bottom shell liners, plastic-free fasteners for fast, simple replacement
- Spider protection kit for extra protection of the arm liners (not CS versions)
- Bottom shell arm liners kits prevent processed material from rebounding inwards and damaging the dust collar, and HX900 bars for increasing the life of the arm liner itself

Powerful automation without the complication

ACS-c 5 is our most powerful automation system to date. It's also our simplest to understand and operate.

By integrating the familiarity of our popular ASRi system with the advanced capabilities of our industry leading automation & connectivity system, 800i crushers are now even easier and more intuitive to use.

One system for complete crusher control

— Process and equipment focus, all in one user interface
— One modular system for monitoring and controlling all crusher sub-systems
— All sensors in collaboration for protection, predictions and maintenance planning

Crusher reliability with proven automatic setting regulation

— Based on ASRi system algorithm, continuously improved since 2002
— Intuitive and easy recognition for operators with previous ASRi experience
— Simplifies training and operation

Clarified responsibility with role-based interaction

— Predefined and configurable user levels
— Permissions based on responsibility

Increased availability with optimized alarm management

— Alarm classes based on severity-of-consequence and time response needed
— Postponed equipment shut-down and bypass options in case of non-critical alarms

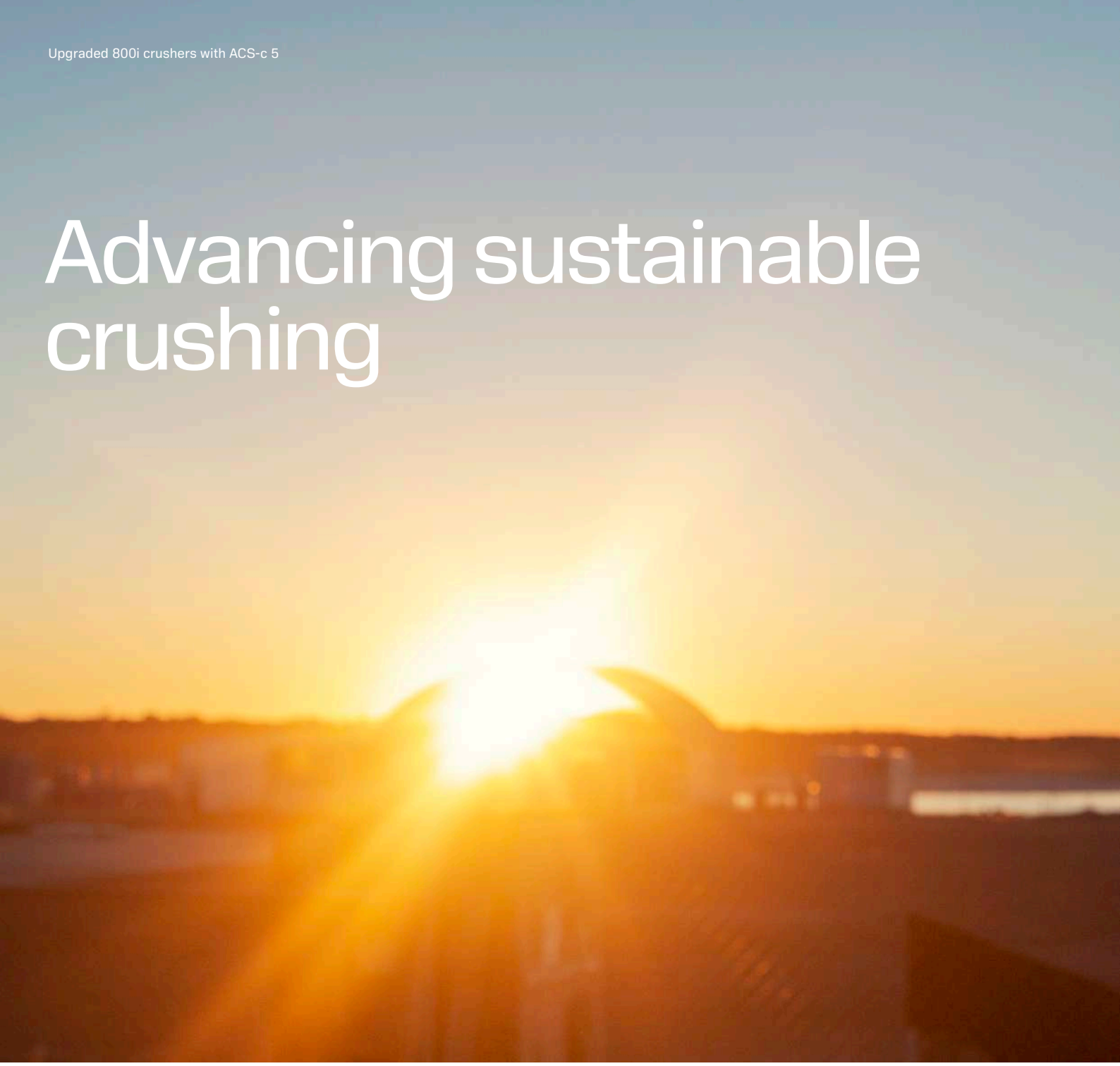
Full supervision and remote control with seamless integration to plant

— Prepared for the most common communication protocols
— More than 500 signals available for supervision
— Remote control of all commands needed for operation
— Communication monitoring for secured and safe control
— Plant system clock synchronization

Tools to simplify troubleshooting and optimization

— Alarms with recommended actions to reduce downtime
— Instructions with search feature
— Alarm and event logs to find connections and recurring problems
— Historical trends for analyzing data
— Unlimited logging of calibrations and daily operational data
— Easy-access to your digital manuals

Advancing sustainable crushing



Sustainable operation is an industry-wide priority requiring better efficiency from more production areas.

Upgraded 800i crushers target installed inefficiency in operating mines, as well as in greenfields. For example, in flowsheets including 3-stage crushing and conventional grinding, assisting SAG/AG circuits with pebble crushing, and optimizing particle size distribution for lump ores and heap leach applications. The 800i crushers are also suitable in HGPR circuits. They crush more and deliver finer particle sizes to the downstream processes.

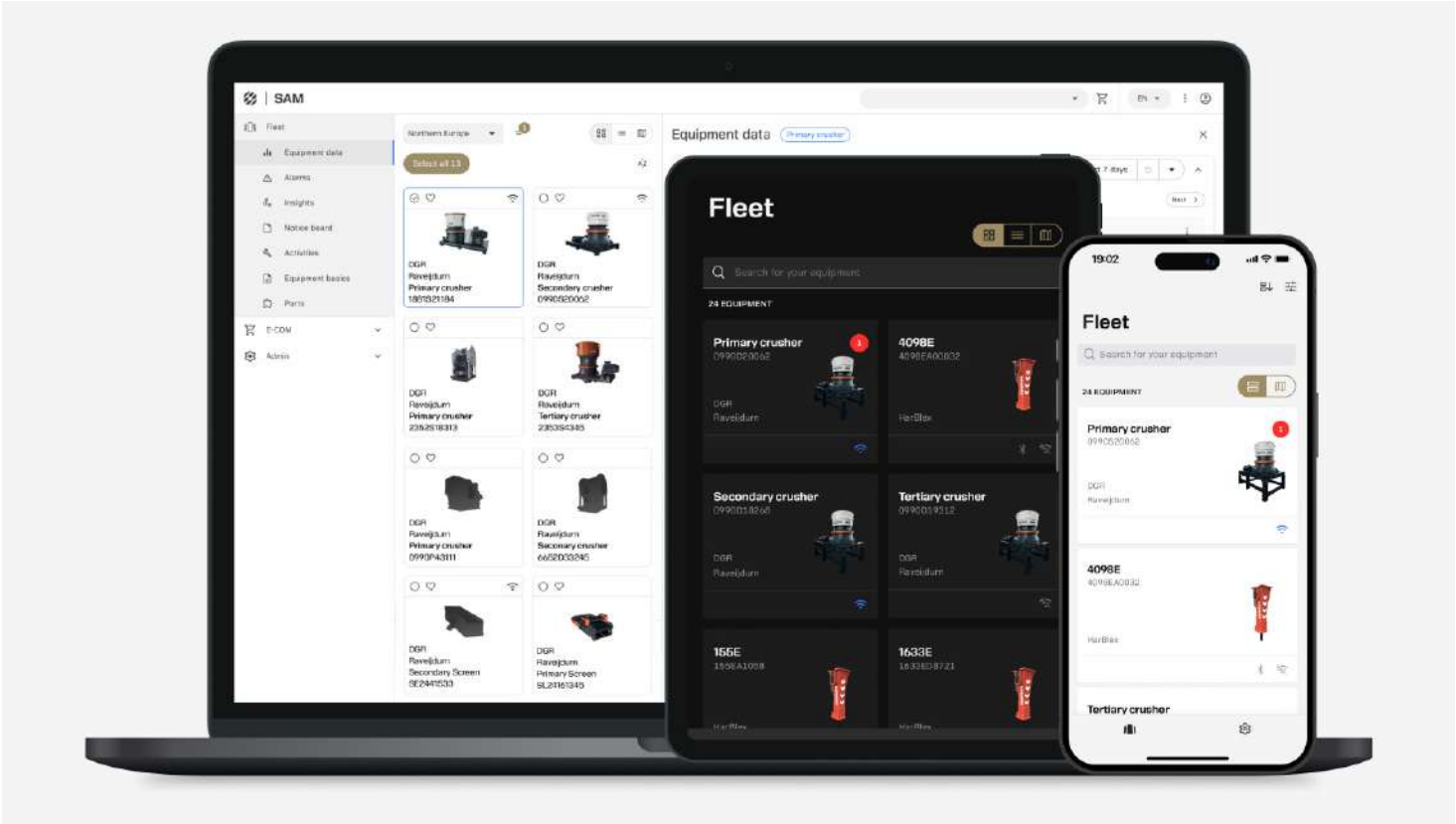
Sustainability support also includes:

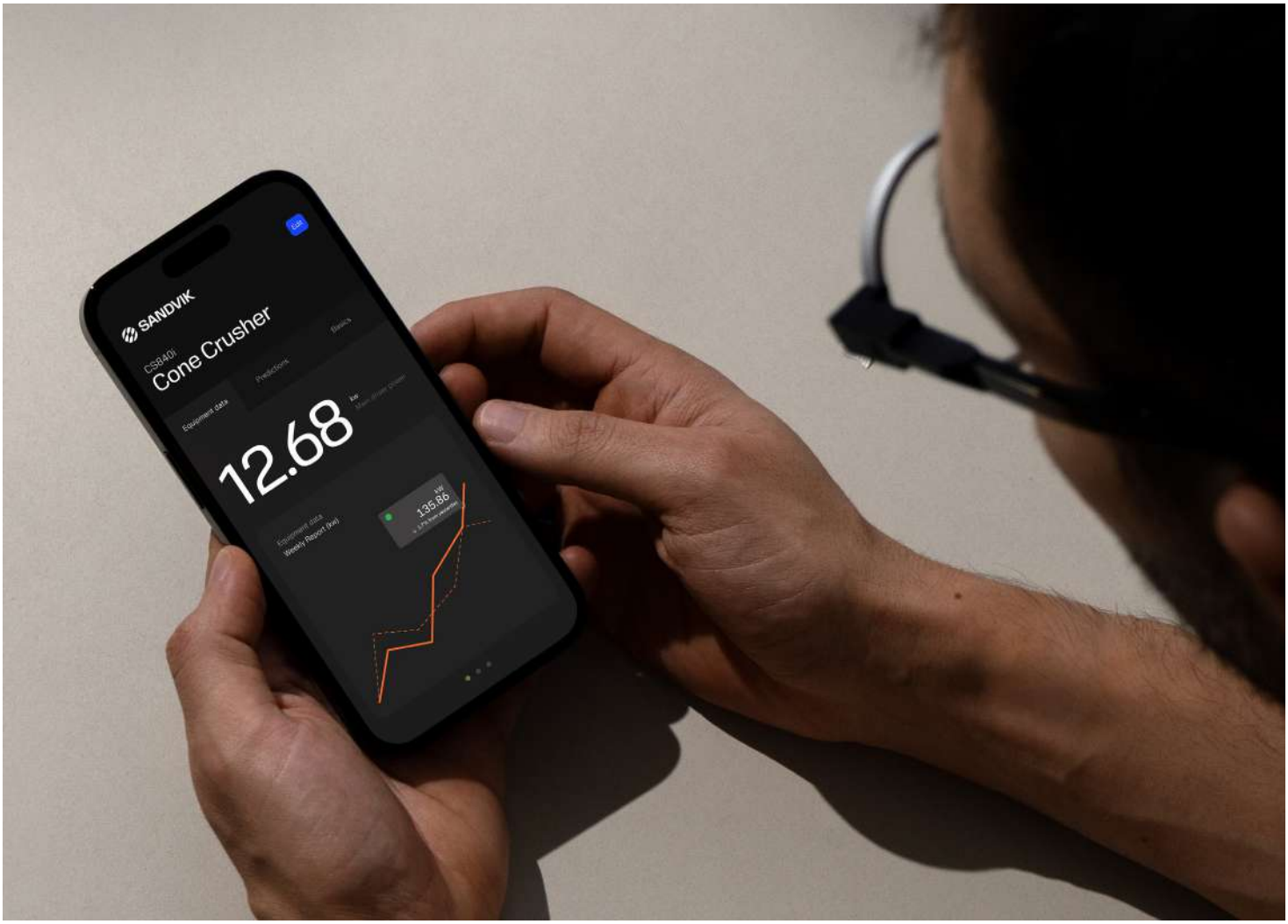
- Optimized material and sizes for downstream processes for an optimal use of energy
- Offline oil filters for all models to minimize the need for oil changes and waste
- Activation of connectivity to SAM ACS-c gateway digital service enables remote service and support, reducing emissions related to travel for onsite equipment maintenance or repair
- Use of rubber dampers decreases dynamic loads to sustaining structures, optimizing civil works and the need for massive concrete foundations

Put more of your data to work for you

800i crushers can be connected to our cloud based digital service — SAM by Sandvik, our ever-evolving digital service designed to support operational excellence in crushing and screening plants.

SAM offers ongoing real-time and aggregated data-based insights. Get an on-the-go overview of fleet and part status. Document maintenance and identify risks to reduce costs. Access online support and troubleshooting, search and procure consumables or parts, and create a central collaborative access point for all documentation and data. SAM is the digital assistant that makes working with your 800i series crusher even more of a pleasure.





SAM

Track and improve operations
Track EQ operation such as utilization, load cycles and calibrations, and get information, insights and recommended action to increase efficiency and up time.

Remote support
Offsite support and troubleshooting based on access to real time and aggregated production-generated data. Saves travel time and costs while supporting sustainability and minimizing unnecessary downtime.

Improved data access on all platforms
SAM provides high resolution data dating 12 months back, accessible to permitted users via tablet, phone or computer.

CH860i
SANDVIK
SANDVIK
11.0
345
4.9
0.2
Load cycles
Uncrushable
Distribution
Power
Pressure

Choose the 800i that's right for you

Specifications

	CH830i	CH840i	CH860i
Nominal capacity* mtph (stph)	61–283	103–427	250–910 (275–1,003)
Max. feed size mm (in)	211 (1.7–7.3)	250 (≤ 8,5)	315 (12.4)
Motor power kW (hp)	250 (335)	330 (442)	500 (670)
Closed side setting (CSS) range mm (in)	5–41 (0.2–1.5)	10–48 (0.2–1.7)	13–51 (0.5–2.0)
Eccentric throw range mm (in)	24–52	28–52	30–70 (1.2–2.8)
Mantles (inner liners)	A, B, EF, FlexiFeed B	A, B, FlexiFeed B	A, B, FF
Concaves (outer liners)	EC, C, EF, F, M	EC, C, MC, M, MF, F	EC, C, MC, M
Weight kg (lb)	12,734 (27,500)	20,728 (45,697)	39,710 (87,546)

* HC only used with HR.

** HR concave is only available through aftermarket. Capacity is dependent on the crushing chamber, the eccentric throw, the crusher's setting and the feed material's bulk density, crushability, size analysis, moisture content, etc. Details are subject to change, please see technical specifications for latest information.

CH865i	CH870i	CH890i	CH895i	CS840i
155–517 (171–570)	208–1,283 (229–1,414)	366–1,837 (403–2,025)	258–1,077 (284–1,187)	212–659
123 (4.8)	350 (13.8)	428 (16.9)	127 (5)	431
500 (670)	600 (805)	750 (1,000)	750 (1,000)	330 (442)
10–44 (0.4–1.7)	10–70 (0.4–2.8)	16–70(0.6–2.8)	10–70 (0.4–2.8)	22–70
30–70 (1.2–2.8)	32–80 (1.3–3.1)	24–70 (0.9–2.8)	24–70 (0.9–2.8)	24–48
A, B, EF, OB	A, B, EF, OB, FF	A, B, HC, EF, FF	EF, OB, HC*	A, B, S
MF, F, EF, HR*	EC, C, MC, M, MF, F, EF, HR	EC, C, MC, M, MF, F	EFX, EF, EEF, HR**	EC, C
38,930 (85,826)	67,000 (147,700)	97,031 (213,917)	96,483 (212,709)	25,794 (56,866)

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