



SANDVIK CG800i GYRATORY CRUSHER SERIES

TECHNICAL SPECIFICATION

Sandvik CG800i crushers are built to be robust, reliable and efficient. Connected to My Sandvik, they revolutionize availability and optimize uptime by giving you actionable insights into how the crusher is performing. All to give you optimal reliability and drive down operating costs.

CG800i crushers offer excellent reliability and safer & faster maintenance – up to 30% faster than competing crushers. A robustly designed one-piece main shaft and reinforced shells are made for tough use. The one-piece spherical spider bearing offers 5 times longer wear life than competing spider bushing design.

Well-designed crushing chambers built from strong materials make a fulcrum point that ensures a constant eccentric throw, guaranteeing up to 90% of feed opening. Secure, self-tightening concaves prevent liners from coming loose. Metallic contact between the upper mantle area and main shaft absorbs forces to avoid fatigue failures.

The automation system optimizes the performance of the crusher without overloading it, allowing you to get the most out of your crusher. It can also automatically adjust your crusher settings to compensate for crush-ing chamber wear – ensuring consistent product size.

The Tank Instrument Monitoring System (TIMS) provides real-time monitoring of the crusher lubrication system to ensure it functions optimally. Monitoring the Lubrication system, spider bearing grease system and overpressure system, it ensures oils are at the right flow and temperature, and triggers alarms to protect the crusher.

sandvik 365 Lifecycle Services support your new equipment throughout its entire lifecycle, helping you increase productivity by up to 10%. Get genuine parts, service solutions and extensive training that deliver lower operating costs, improved product quality and maximum productivity.



KEY FEATURES

Hydroset™ system	Provides safety and setting adjustment functions
ASRi™ coupled with Hydroset™	Automatically adapts the crusher to varying feed conditions ensuring maximum 24/7 performance
One-piece spherical spider bearing	5 times longer wear life than competing spider bushing design.
Top class availability	Secure, self-tightening concaves prevent liners from coming loose.
Connected to My Sandvik	24/7 access to data generated by your connected Sandvik crusher fleet.
High reduction, great capacity	Well-designed crushing chambers built from strong materials make a fulcrum point that ensures a constant eccentric throw, guaranteeing up to 90% of feed opening.
Increased productivity through Lifecycle Services	Sandvik 365 Lifecycle Services support your new equipment throughout its entire lifecycle, helping you increase productivity by up to 10%
Tank instrumentation monitoring system (TIMS)	Offers real-time monitoring of the crusher lubrication system

GENERAL INFORMATION

	CG810i	CG820i	CG830i	CG850i
Manufacturer	Sandvik Mining and Rock Technology			
Type	Primary Gyrotory Crusher			
Model No. / Size	CG810i / 42" x 63"	CG820i / 54" x 75"	CG830i / 60" x 89"	CG850i / 61" x 106"
Motor power, kW	315	525	660	950
Manufacturer Location	see "Subsuppliers list CG"	see "Subsuppliers list CG"	see "Subsuppliers list CG"	see "Subsuppliers list CG"
Mounting	Anchor Bolts - not supplied or designed by Sandvik			
Drive type	Direct Drive			
Shipment	FOB, Point of Manufacturing or Assembly			
Total estimated erection man-hours	Please Refer to Installation.pdf			
Torque Limiter	Yes			
"Start under load" capability	Yes			

PERFORMANCE

	CG810i	CG820i	CG830i	CG850i
Standard eccentric throw, mm	29	32	33	35
Maximum available eccentric throw, mm	37	42	45	47
Minimum available eccentric throw, mm	21	28	29	31
Open side setting, mm (application specific)	-	-	-	-
Recommended throw, mm (application specific)	-	-	-	-
Capacity, mtpd (application specific)	-	-	-	-
Gyrations per minute	164	164	148	151
Pinion shaft speed, rpm	500	500	500	500
Crusher Discharge P100 (mm) (application specific)	-	-	-	-
Crusher Discharge P80, (mm) (application specific)	-	-	-	-

GENERAL DIMENSIONS AND LOADS

	CG810i	CG820i	CG830i	CG850i
Feed opening, mm	1,067 (42")	1,372 (54")	1,525 (60")	1,550 (61")
Height				
Overall, mm	6,661	7,900	8,940	10,065
Base to spider rim top, mm	3,708	4,460	5,390	5,730
Base to spider cap top, mm	5,040	6,060	7,025	7,590
Base to Hydroset bottom, mm	1,621	1,840	2,171	2,475
From base for mainshaft removal, mm	8,536	10,468	13,115 from mounting Surface	13,415 from mounting Surface
From base for eccentric removal, mm	1,760	2,130	2,430	2,130
Width				
Maximum diagonal at supports, mm	4,270 approx.	5,165 approx.	5,808 approx.	6,812 approx.
Spider rim diameter, mm	3,840	4,760	5,560	5,940
Base, mm	3,200 x 3,300	4,000 x 4,100	4,800 x 4,800	5,200 x 5,200
From center line for pinion shaft removal, mm	3,822	4,341	5,250	5,465
Dynamic loads				
Horizontal at support base, kgf	Please Refer to GA drawing			
Moment at base in vertical plane, kg-m	Please Refer to GA drawing			

SHELLS

	CG810i	CG820i	CG830i	CG850i
Topshell				
Material	Cast Steel			
Segments	1	2	2	2
Weight, kg	25,400	59,400 total	98,000 total	105,000 total
Bottomshell				
Material	Cast Steel			
Segments	1	1	1	1
Weight, kg	23,700	45,650	68,500	93,000
Bottomshell arm liners				
Material	Manganese, Cast Steel			
Abrasion resistant	Yes			
Weight, kg	340 each arm liner x 2 / 710 each arm liner x 2 / 1100 each arm liner x 2 1450 each arm liner x 2 440 (pinionshaft arm) 960 (pinionshaft arm) / 1350 (pinionshaft arm) / 1750 (pinionshaft arm)			
Thickness, mm	60	80	70	70
Bottomshell side and hub liners				
Material	Hardox 400			
Abrasion Resistant	Yes			
Weight, kg	804 (side) / 454 (hub)	1,308 (side) / 735 (hub)	2,022 (side) / 1,132 (hub)	2,514 (side) / 1,307 (hub)
Thickness, mm	25 (side) / 25 (hub)	28 (side) / 28 (hub)	30 (side) / 30 (hub)	32 (side) / 28 (hub)

SPIDER ASSEMBLY

	CG810i	CG820i	CG830i	CG850i
Spider				
Material	Cast Steel			
Construction	One Piece - Two Arms Spider			
Weight, kg	19,320	31,000	54,100	76,400
Arm Liners				
Quantity	2			
Material	Manganese, Cast Steel			
Abrasion Resistant	Yes			
Weight, kg	1,420 x 2 = 2,840	3,010 x 2 = 6,020	3,800 x 2 = 7,600	4,340 x 2 = 8,680
Thickness, mm	80/45	100/50	80/60	80/60
Rim Liners				
Quantity	6			
Material	Manganese, Cast Steel			
Weight, kg	1,570	2,522	4,180	5,330
Thickness, mm	45	60	60	70
Spider Cap				
Material	Manganese, Cast Steel			
Weight, kg	1,920	4,355	4,730	6,810
Thickness, mm	200 (top) / 100 elsewhere	190 (top) / 130 elsewhere	220 (top) / 140 elsewhere	220 (top) / 160 elsewhere
Spider Bushing / Spherical Bearing				
Material	Tin Bronze (Bushing); Ni Cr (Inner Race); Al Bronze (Outer Race)			
Weight, kg	95 (Bushing); 403 (Inner Race); 321 (Outer Race)	121 (Bushing); 452 (Inner Race); 495 (Outer Race)	178 (Bushing); 812 (Inner Race); 787 (Outer Race)	225 (Bushing); 1,090 (Inner Race); 1,020 (Outer Race)
Thickness, mm	14	14	16	17

MAINSHAFT ASSEMBLY

	CG810i	CG820i	CG830i	CG850i
Mainshaft				
Material	Forged Carbon Steel, ASTM A470			
Construction	Single Piece Forged			
Weight, kg	16,440	27,780	47,250	65,000
Overall length, mm	4,760	5,645	7,475	7,330
Diameter				
Maximum, mm	1,330	1,510	1,920	2,200
In spider bearing, mm	480	550	630	710
In eccentric bushing, mm	590	710	850	880
Mainshaft Sleeve				
Material	Carbon Steel			
Upper Diameter, mm	530	620	700	780
Lower Diameter, mm	540	630	700	820
Height, mm	959	1,010	1,195	1,410
Weight, kg	292	500	670	910

MANTLE

	CG810i	CG820i	CG830i	CG850i
Material	Manganese, Cast Steel			
Number of sections	1	1	2	2
Weight, kg	5,830	8,719	14,970	21,150
Bottom diameter, mm	1,600	1,880	2,290	2,693
Thickness, mm	Top 80 / Bottom 140	Top 115 / Bottom 160	Upper Part Bottom 110 / Lower Part Bottom 135	Upper Part Bottom 115 / Lower Part Bottom 120 / Max 155
Backing material				
Type	2-part epoxy			
Compressive strength, minimum, Mpa	110			
Weight, kg	310	560	700	950

CONCAVES

	CG810i	CG820i	CG830i	CG850i
Material	Manganese, Cast Steel			
Number of rows	3	4	4	4
Segments per row	16			
Maximum thickness, mm	Lowest Row 130	Lowest Row 135	Lowest Row 135	Lowest Row 135
Total concave weight, kg	9,062	18,165	22,641	31,605
Backing material				
Type	2-part epoxy			
Compressive strength, minimum, Mpa	110			
Weight, kg	750	1,500	1,800	2,170

ECCENTRIC ASSEMBLY

	CG810i	CG820i	CG830i	CG850i
Eccentric				
Material	Cast Steel			
Diameter, inner, mm	640	760	910	940
Diameter, outer, mm	770	920	1,100	1,160
Length, mm	1,170	1,380	1,630	1,800
Throw, mm	25, 29, 33, 37	28, 32, 37, 42	29, 33, 39, 45	31, 35, 41, 47
Weight, kg	1,484	2,527	4,285	5,792
Eccentric Bushing				
Material	Bronze			
Diameter, inner, mm	592	712	852	882
Diameter, outer, mm	640	760	910	940
Length, mm	950	1,100	1,350	1,480
Weight, kg	346	549	810	924
Eccentric Wear Plate				
Material	Bronze			
Diameter, inner, mm	700	800	1,110	1,180
Diameter, outer, mm	1,050	1,200	1,520	1,600
Thickness, mm	40	40	50	50
Weight, kg	155	220	342	351
Bevel Gear and Pinion				
Material	Steel Alloy	Carbon Steel	Carbon Steel	Carbon Steel
Number of teeth	18 (Pinion), 55 (Gear)	19 (Pinion), 58 (Bevel Gear)	19 (Pinion), 64 (Bevel Gear)	19 (Pinion), 63 (Bevel Gear)
Diametrical pitch	25	28	30	32
Hardness	53 - 56 HRC (Pinion), 264 - 306 BHN (Gear)			
Method of hardening	Quench and Temper (Gear), Carburize (Pinion)			
Face width, mm	190	220	250	280
Pressure angle, degree	20	20	20	20
AGMA durability rating, kW	TBA			
AGMA strength rating, kW	TBA			
AGMA quality	TBA			
Connection type to shaft	Shrink Fit & Keyed			

HYDROSET CYLINDER

	CG810i	CG820i	CG830i	CG850i
Piston				
Material	Cast Steel			
Diameter, inner, mm	350	140	140	140
Diameter, outer, mm	600	690	955	1,000
Weight, kg	855	1,344	2,760	2,985
Mainshaft step				
Material	Bronze			
Diameter, mm	520	580	800	840
Thickness, mm	75	69	102	117.5
Weight, kg	137	155	486	391
Step Washer				
Material	Carbon Steel			
Diameter, mm	520	580	800	840
Thickness, mm	81	81	103	109
Weight, kg	110	132	311	314
Piston Wearing Plate				
Material	Bronze			
Diameter, mm	590	684	940	994
Thickness, mm	50	60	80	80
Weight, kg	100	141	417	446

BALANCE CYLINDER MODULE

	CG810i	CG820i	CG830i	CG850i
Nitrogen charge pressure, bar	3.5-4.3 (depends on ambient temperature)			
Relief valve setting, bar	75			
Total weight, kg (2 cylinders) dry	800	2,000	2,500	2,500

OVERPRESSURE AIR SYSTEM

	CG810i	CG820i	CG830i	CG850i
Air Blower				
Manufacturer	Becker			
Motor kW / rpm / V-ph-Hz	3 kW / 2,900 rpm / 230V-3ph-50Hz			
Air volume each, lpm	4,000 approx.			
Operating pressure, bar	0.14 approx.			
Filter				
Type	Replaceable paper filter element			
Model	Donaldson 15" ERB w/ Top-spin pre-cleaner			

PINIONSHAFT ASSEMBLY

	CG810i	CG820i	CG830i	CG850i
Bearings				
Quantity	2 total (1 of each type)			
Type	Cylindrical / Spherical roller bearing			
Diameter, inner, mm	170/170	200 / 220	240	260
Diameter, outer, mm	360/360	420 / 460	500	540
Width, mm	120	145	150	165
B10 Life	100,000			
Lubrication	Oil bath			
Type of seals				
	Radial seal ring, v-ring and o-ring	Radial seal ring and v-ring	Radial seal ring, v-ring and o-ring	Radial seal ring and v-ring
Pinionshaft				
Material, type	Carbon Steel			
Shaft length, mm	1,725	2,110	2,471	2,700
Shaft diameter, mm	190 max.	245 max.	270 max.	300 max.
Assembly Weight, kg	1,400	3,000	4,450	7,000

MAIN LUBRICATION SYSTEM

	CG810i	CG820i	CG830i	CG850i
Tank Design				
Description	Closed circuit pump with gravity return			
Capacity, liters	940	1,200	2,000	2,000
Protective instrumentation	TIMS			
Circulating Oil Specifications	ISO VG 150 (Normal climate conditions)			
Heaters, Oil	qty 4 / 2 kW each	qty 4 / 2 kW each	qty 5 / 2 kW each	qty 5 / 2 kW each
Pump				
Type	Screw Pump			
Quantity	Two operating and one standby			
Manufacturer	IMO			
Capacity, lpm / pump	110	150	250	250
Rated pressure, bar	16			
Pump motor, each, kW / rpm / V-ph-Hz	WEG, 5.5 / 1,450 / 400-3-50	WEG, 7.5 / 1,450 / 400-3-50	WEG, 11 / 1,450 / 400-3-50	WEG, 11 / 1,450 / 400-3-50
Filter				
Type	Duplex			
Quantity	4			
Size	10 micron absolute			
Manufacturer	Hydac			

OIL COOLING SYSTEM

	CG810i	CG820i	CG830i	CG850i
Type	Air/Oil Heat exchanger with fan			
Quantity	2 typical			
Motor size, kW / rpm / V-ph-Hz	2,2 kW / 960 rpm / 400 VAC / 3 ph / 50 Hz	5.5 kW / 960 rpm / 400 VAC / 3 ph / 50 Hz	5.5 kW / 725 rpm / 400 VAC / 3 ph / 50 Hz	4 kW / 725 rpm / 400 VAC / 3 ph / 50 Hz
Maximum air inlet temperature, °C	38			

HYDROSET TANK SYSTEM

	CG810i	CG820i	CG830i	CG850i
Hydraulic pump capacity, lpm	35	45	52	57
Pump motor, kW / rpm / V-ph-Hz	WEG, 5.5 / 1,450 / 400-3-50	WEG, 5.5 / 1,450 / 400-3-50	WEG, 11 / 1,455 / 600-3-50	WEG, 11 / 1,455 / 600-3-50
Hydraulic oil tank capacity, liters	300	300	840	840
Heaters, Oil	1 x 2kW electrical immersion heater in thermowell	1 x 2kW electrical immersion heater in thermowell	2 x 2kW electrical immersion heater in thermowell	2 x 2kW electrical immersion heater in thermowell
Balance cylinder	Yes	Yes	Yes	Yes
Mainshaft travel, mm	240	330	350	450
Shaft position indicator	ASRi Probe	ASRi Probe	ASRi Probe	ASRi Probe
Protective devices	Sandvik ASRi & TIMS			
Pressure relief valves	yes			
Filter, fittings, valves, piping	yes			
Filter				
Quantity	1			
Size	10 micron absolute			
Manufacturer	Hydac			
Lubrication recommendations	ISO VG68	ISO VG68	ISO VG68	ISO VG68
Weight, kg	435 (dry)	435 (dry)	500 (dry)	500 (dry)

SPIDER LUBRICATION SYSTEM

	CG810i	CG820i	CG830i	CG850i
Manufacturer	Lincoln			
Description	Single pump, high/low level control			
Reservoir capacity, liters	30 (100 as option)	100	100	100
Weight, kg (including grease)	100	200	200	200
Lubricant type	Automatic GP Grease / NLGI No.0 alt. 00			
Air requirements	None, atmosphere via breather			

MAIN DRIVE MOTOR

	CG810i	CG820i	CG830i	CG850i
Manufacturer	WEG/ABB	WEG	WEG	WEG
Motor kW / rpm / V-ph-Hz	315 kW / 500 RPM / 4,160-3-50	525 kW / 500 RPM / 4,160-3-50	660 kW / 500 RPM / 4,160-3-50	950 kW / 500 RPM / 4,160-3-50
Air volume each, lpm	Squirrel-cage Induction			
Enclosure	TEFC			
Service Factor	1.00			
Full load torque, N-m (min.)	6,140	10,200	12,800	18 400
Starting torque, % of full load	200% Minimum			
Breakdown torque, % of full load	250% Minimum			

DIRECT DRIVE

	CG810i	CG820i	CG830i	CG850i
Couplings				
Manufacturer	Voith			
Size	TBA			
Type	Safeset and flexible gear coupling			
Floating Shaft				
Diameter, mm	155	160	155	205
Length, mm	(DBSE) 1,600	(DBSE) 1,680	(DBSE) 2,200	(DBSE) 2,200

CONTROLS AND INSTRUMENTATION

	CG810i	CG820i	CG830i	CG850i
Description	Sandvik ASRi & TIMS			
Switches / Transmitters	Sandvik ASRi & TIMS			
Enclosure	Sandvik ASRi & TIMS			

PAINT / SURFACE FINISH

	CG810i	CG820i	CG830i	CG850i
Primer coat	Zinc Phosphate Primer or Equivalent			
Dry film thickness, primer coat	60 µm min.			
Top coat	Alkyd Enamel, Gloss 70			
Dry film thickness, top coat	40 µm min.			
Top coat colors	Sandvik grey, Sandvik orange and Sandvik white			

OPTIONS

	CG810i	CG820i	CG830i	CG850i
Oil Cooler				
Type	Water/Oil heat exchanger, plate type			
Manufacturer	Alfa Laval			
Quantity	2			
Water flow, lpm	75 lpm @ 2 - 4 bar	75 lpm @ 2 - 4 bar	100 lpm @ 2 - 4 bar	100 lpm @ 2 - 4 bar
Maximum water temperature, °C	30			

SHIPPING AND HANDLING DATA

	CG810i	CG820i	CG830i	CG850i
Gyratory crusher, kg	128,600 kg approximate	244,000 kg approximate	380,000 kg approximate	501,100 kg approximate
Complete lubrication system, kg	3,000 dry w/o cooler	3,400 dry w/o cooler	4,200 dry w/o cooler	4,200 dry w/o cooler
Maximum shipping weight, kg	Topshell assembly - 37,300	Bottomshell w/liners - 50,300	Bottomshell w/liners - 80,500	Bottomshell w/liners - 108,000
Maximum shipping size (W x L x H) mm	Spider - Ø3,840 x 1,360 high	Spider - Ø4,760 x 1,520 high	Spider - Ø5,560 x 1,755 high	Spider - Ø5,940 x 1,920 high
Heaviest item to be handled in erection, kg	Topshell assembly - 37,300	Bottomshell - 50,300	Bottomshell - 80,500	Bottomshell - 108,000
Heaviest items to be handled in maintenance, kg	Spider assembly - 29,000	Spider assembly - 49,200	Spider assembly - 78,600	Spider assembly - 105,400

GUARANTEE

	CG810i	CG820i	CG830i	CG850i
Minimum operating design life	25 years / Warranty as per proposal			

AUTOMATIC SETTING REGULATION - INTELLIGENT (ASRiT[™])

The ASRi – or Automatic Setting Regulation Intelligent – system optimizes the performance of the crusher without overloading it, allowing you to get the most out of your crusher.

The ASRi constantly monitors the Hydroset pressure, motor power draw and the position of the main shaft, and adapts the crusher's settings in real time to match feed curve variations and variations in the hardness of the process material. The design allows you to adjust the CSS within a wide range to promote capacity, product size – or both.

The ASRi system also offers a simple push-button, metal-to-metal calibration, which can be done within seconds, even from the control room. Instead of having to do it manually, the system will automatically adjust your crusher settings to compensate for crushing chamber wear – ensuring consistent product size.

Frequent calibration is required for the system to keep good track of the A-dimension. This is particularly important when you are operating the crusher in an auto-CSS mode.

MONITORING FUNCTIONS

Power draw (kW or hp)
Hydroset hydraulic pressure (MPa or psi)
Main shaft position
Calculated CSS (based on main shaft position)
Lubrication oil temperature
Liner wear
Historical data log

REGULATION FUNCTIONS (CRUSHING PROGRAMS)

Auto-load	The ASRi aims to maintain the maximum or desired load. The crusher adapts the settings in real time to match feed curve variations and/or variations in feed material hardness
Auto-CSS	The ASRi aims to maintain the desired CSS
20 customized programs can be stored	

SAFETY FUNCTIONS

Protects the crusher from overload by automatically regulating the crusher based on preset operational values
Remote push button setting calibration (metal-to-metal)
Alarm severity levels: A, B or C
Alarm log

OTHER FUNCTIONS

Automatic liner wear compensation
Push button setting calibration (metal-to-metal)

OPERATOR'S PANEL

	Wall mounted	Panel mounted (option)
Dimensions (LxHxD)	358x290x70 mm	350x290x88 mm
Weight	6.5 kg	5.6 kg
Operational temperature	-20°C to +50°C	-20°C to +50°C
Protection class	IP65 (front)	IP65 (front) IP30 (rear)
Power supply	18-32 VDC	18-32 VDC

ELECTRICAL HARDWARE

Hydroset drive unit
Power measurement unit
Power supply unit
Cable kit

SOFTWARE PACKAGE (OPTIONAL)

- OPC Server
- Enables a seamless integration with control systems such as SCADA and DCS
 - Allows total access to all the parameters in the ASRi
 - Possibility to make ASRi adjustments remotely during operation

- WINi
- Simultaneously control up to 9 different ASRi 2.x systems from a PC via an Ethernet network
 - Control the ASRi remotely using the same graphical user interface

- ASRi Reporter
- Export ASRi data to a PC for analysis and storage

- Operating system compability:
- Windows 7, Windows Vista, Windows XP, Windows 2000

TANK INSTRUMENTATION MONITORING SYSTEM (TIMS)

The system monitors the instruments and safety devices in the tank unit for correct operation - via the plant's control system - of the various ancillary systems.

MONITORING FUNCTIONS

Main crusher lubrication circuit	Oil temperature Oil flow Oil pressure Differential pressure across filter Oil tank temperature
Over-pressure air system air	
Grease level	
Grease temperature	

SAFETY FUNCTIONS

Alarm severity levels: A, B or C
Alarm log

OPERATIONAL FUNCTIONS

Oil heaters
Main lubrication oil pumps VFD controlled
Spherical Spider bearing grease
Pump
Air/Oil coolers VFD controlled
Signal permitting operation of the crusher drive motor

PLC CABINET

Manufacturer	Siemens (standard) other PLC (optional)
Communication interface	Siemens (standard) other PLC (optional) Standard: Hard-wired communication Optional: Profinet, Profibus, Ethernet/IP, Modbus RTU, ControlNet, DeviceNet, Modbus TCP

OPERATOR'S PANEL

Dimensions (LxHxD)	350x290x88 mm
Weight	5,6 Kg
Operational temperature	-20°C to +50°C
Protection class	IP65 (front) IP30 (rear)
Power supply	18-32 VDC

MANUALS

Operator's manual	CG810, CG820, CG830, CG850, ASRi	Any language
Installation manual	CG810, CG820, CG830, CG850, ASRi	Any language
Installation manual appendix	CG810, CG820, CG830, CG850, ASRi	Any language
Maintenance manual	CG810, CG820, CG830, CG850, ASRi	Any language
Spare parts catalogue	CG810, CG820, CG830, CG850, ASRi	English only

CRUSHING CHAMBERS

	CG810i	CG820i	CG830i	CG850i
Mantle design	1 piece with metallic contact		2 pieces with metallic contact	
Concave design	Secure attachment methods with bolts and projections			
Nr of concave rows	3 rows		4 rows	
Nr of concave per row		16		
Alloys for mantles and concaves	M1 & M2			
Mantle and concave backing material	Plastic compound (Korrobond)			

MAX FEED SIZE – NOMINAL CAPACITY CG800I CRUSHERS

MODEL	FEED OPENING		RECOMMENDED MAX FEED SIZE (SQUARE HOLE)		MAX SIZE ON ONE INDIVIDUAL BLOCK (T x W x L)
	mm	inch	F100	F95	
CG810i	1,067	42"	930 mm	855 mm	620 x 930 x 1,560 mm
CG820i	1,372	54"	1,200 mm	1,100 mm	800 x 1,200 x 2,000 mm
CG830i	1,525	60"	1,330 mm	1,220 mm	890 x 1,330 x 2,225 mm
CG850i	1,549	61"	1,350 mm	1,240 mm	900x 1,350 x 2,250 mm

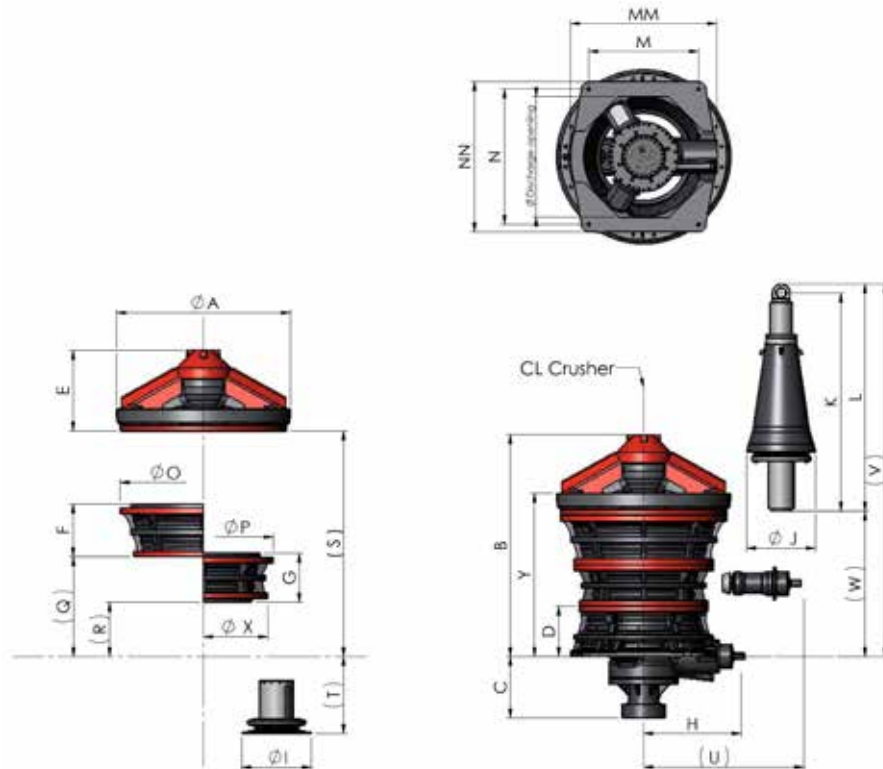
NOMINAL CAPACITIES - INCLUDING NORMAL AMOUNT OF FINES

MODEL	ECC THROW	OSS	CAPACITY RANGE
CG810i	25 mm	115-177 mm	1,000-1,800 MTPH
	29 mm	115-190 mm	1,200-2,100 MTPH
	33 mm	115-190 mm	1,500-2,400 MTPH
	37 mm	127-190 mm	1,800-2,700 MTPH
CG820i	28 mm	127-190 mm	1,800-2,700 MTPH
	32 mm	127-203 mm	2,000-3,100 MTPH
	37 mm	140-215 mm	2,300-3,600 MTPH
	42 mm	140-228 mm	2,500-4,000 MTPH
CG830i	29 mm	153-203 mm	2,700-4,000 MTPH
	33 mm	153-215 mm	3,100-4,700 MTPH
	39 mm	165-228 mm	3,700-5,500 MTPH
	45 mm	165-241 mm	4,000-6,000 MTPH
CG850i	31 mm	153-228 mm	3,500-5,300 MTPH
	35 mm	166-241 mm	4,000-6,000 MTPH
	41 mm	178-254 mm	4,700-7,000 MTPH
	47 mm	178-254 mm	5,000-7,500 MTPH

Bulk Density is assumed 1.6 t/m³ or Compact Density 2.65 t/m³.

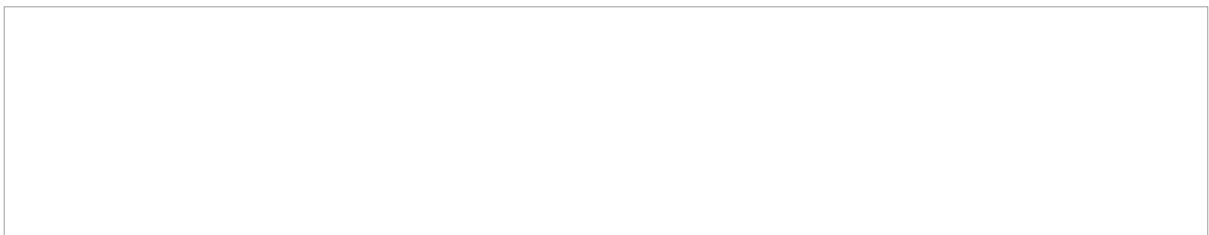
Note that the above capacities can vary widely depending on the feed distribution.

DIMENSIONS



	CG810i	CG820i	CG830i	CG850i
A	3,840	4,760	5,560	5,940
B	5,040	6,060	7,025	7,590
C	1,621,	1,840	2,172	2,475
D	1,250	1,370	1,750	1,850
E	1,882	2,200	2,425	2,760
F	*	1,445	1,540	1,610
G	2,088	1,345	1,670	1,760
H	2,260	2,820	3,246	3,500
I	1,600	1,900	2,300	2,380
J	1,600	1,880	2,290	2,615
K	5,127	6,013	7,294	7,887
L	5,218	6,258	7,472	8,232
M	2,600	3,000	3,900	4,400
MM	3,200	4,000	4,800	5,200
N	3,000	3,700	3,600	4,600
NN	3,300	4,100	4,300	5,200
O	*	4,560	5,290	5,540
P	3,650	3,820	4,640	4,840
Q	*	2,865	3,390	3,580
R	1,400	1,620	1,750	1,950
S	4,925	5,395	6,115	6,697
T	1,760	2,130	2,430	2,660
U	3,530	4,341	5,250	5,465
V	8,536	10,468	12,312	13,442
W	3,318	4,210	4,840	5,210
X	2,830	3,520	4,130	4,620
Y	3,708	4,460	5,390	5,730
Discharge opening (Diameter in mm)	2,800	3,280	3,900	4,300





Sandvik Mining and Rock Technology reserves the right to make changes to the information on this data sheet without prior notification to users. Please contact a Sandvik representative for clarification on specifications and options.