

Complete CRUSHER PLANT



HAZEMAG

1A/1B AP-PH 1214
IMPACT CRUSHER

SANDVIK

S4800 (CS440)
CONE CRUSHER

SANDVIK

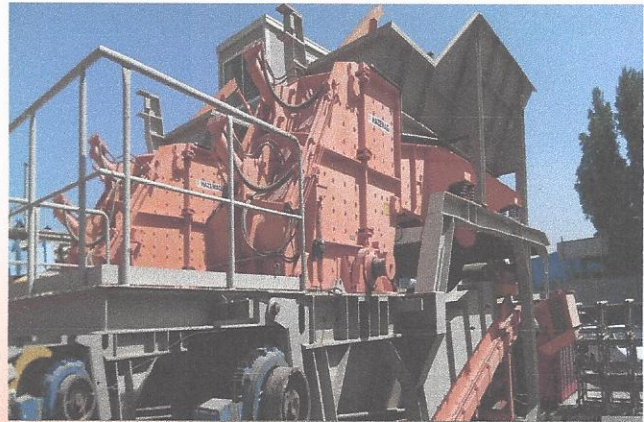
JM1513 (CJ815)
JAW CRUSHER





HAZEMAG

IMPACT CRUSHER



2 Units = 1A/1B HAZEMAG AP-PH1214 IMPACT CRUSHER

Technical Specifications:

- Feed Size:-500 mm max.
- Product Size: - 60 mm (80%)
- **Feeding Capacity: 2 x 250 TPH.**
- Feeding arrangement: By Loaders
- Power Requirement: 2 x 380 kw

Vibrating feeder, Including Screening Section:

- Feeder Width :mm 1,200
- Feeder Length :mm 4,900
- Screening Area :mm 2x600x1,200

Crusher Design : single rotor impact crusher

Rotor Design :QB Rotor, designed for recycling

Rotor Diameter : 1,200 mm

Rotor Width :1,340 mm

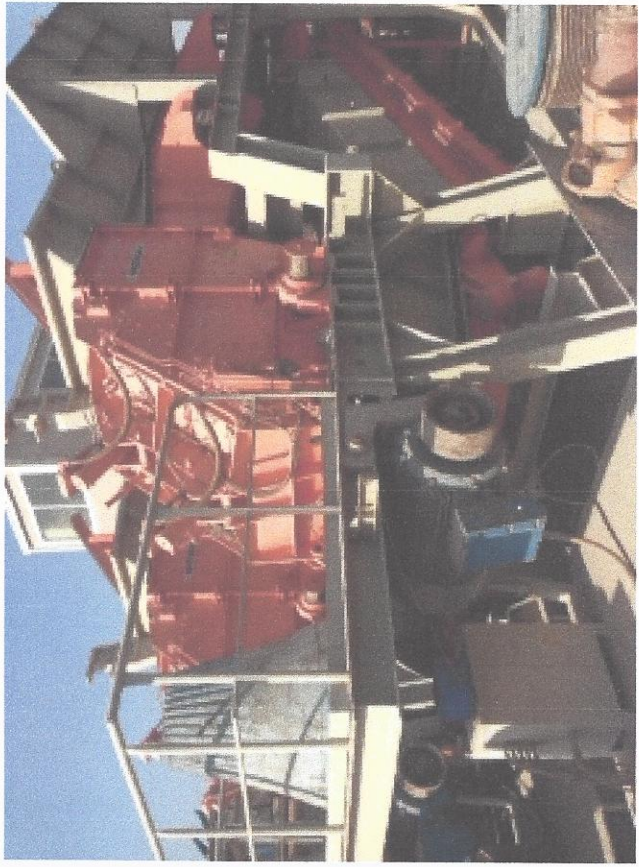
Gap setting system

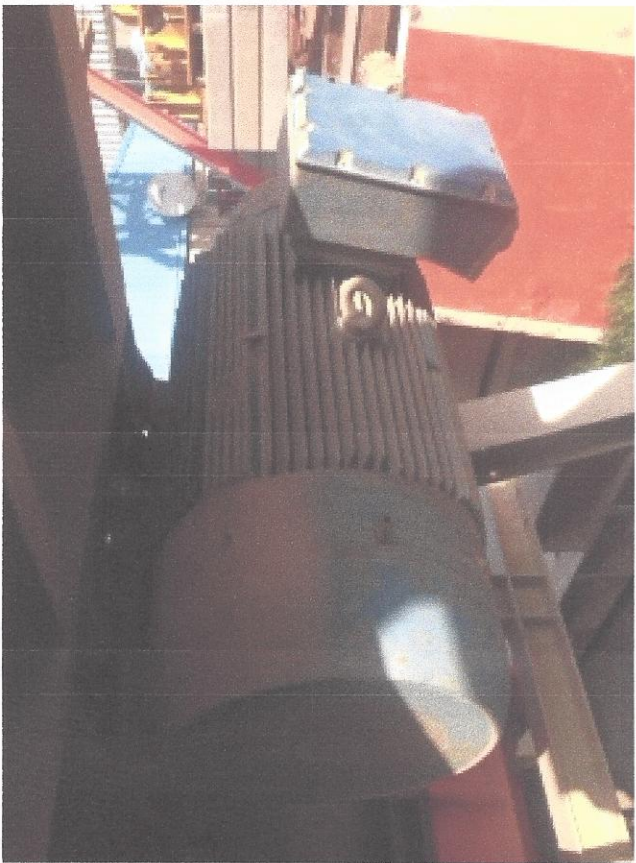
Front Apron : hydraulically

Rear Apron : hydraulically

Plant having dual feeding hopper by wheel loader.

- Having the dual primary vibro feeder & Impactor and combined single screen.
- Two no. magnetic separator to pull out steel from the concrete after crushing.
- Connecting conveyor
- Picking station
- Major Advantage : Civil work not required just level & compact the surface







2 UNITS = 1A/1B HAZEMAG AP-PH1214 IMPACT CRUSHER

TECHNICAL SPECIFICATION

S1.01.02 FEED HOPPER

Technical Data:

Feed Material	:	CDW
Capacity	:	5m ³

The Hopper is a steel structure, including support, designed for feeding with a wheel loader.

S1.02.0 2 VIBRATING FEEDER, INCLUDING SCREENING SECTION

TYPE: 1200/4900

Technical Data:

Feeder Width	:	1200 mm
Feeder Length	:	4900 mm
Screening Area	:	2x600x1200

S1.02.1 2 CHUTE FOR FINE FRACTION PLASSING THE SCREEN

S1.03.0 2 DISCHARGE BELT CONVEYOR

TYPE: 650/2600

Technical Data:

Belt Width	:	650 mm
C-C Spacing Approx	:	2600 mm

S1.04.0 2 STOCKPILE BELT CONVEYOR

TYPE: 650/10000

Technical Data:

Belt Width	:	650 mm
C-C Spacing Approx	:	10000 mm

S1.05.0 2 CRUSHER INLET HOOD/RUBBER CURTAIN/WATER SPRINKLING SYSTEM

The Crusher Inlet Hood is a welded steel plate design including a rubber curtain and water sprinkling system for dust suppression.

S1.05.1 2 CRANE

This crane consists of a crane beam and a electric hoisting unit.

S1.05.2 2 IMPACT CRUSHER

TYPE: AP-PH 1214/QB

Technical Data:

Crusher Design	:	Single Rotor Impact Crusher
Rotor Design	:	QB Rotor, designed for recycling
Rotor Diameter	:	1200 mm
Rotor Width	:	1340 mm
Gap Setting System		
Front Apron	:	Hydraulically
Rear Apron	:	Hydraulically

S1.05.3 2 V-BELT DRIVE SYSTEM**S1.05.4 2 LV MOTOR**

Technical Data:

Power of Motor	:	250 kW
Speed of Motor	:	1480 RPM
Type	:	Squirrel Cage
Design	:	B3

S1.05.5 2 CRUSHER DISCHARGE CHUTE

The Crusher Discharge Chute underneath the crusher is connected to the discharge vibrating feeder. It comprises of a rugged steel plate design with changeable wear plates.

S1.06.0 2 DISCHARGE VIBRATING FEEDER

TYPE: 1.2/2.4

The Discharge Vibrating Feeder is mounted underneath the Crusher Chute and ensures a constant discharge to the connected belt conveyor.

S1.07.0 2 DISCHARGE BELT CONVEYOR

TYPE: 1400/4700

Technical Data:

Belt Width	:	1400 mm
C-C Spacing Approx	:	4700 mm

S1.08.0 2 PRIMARY OVER BELT-MAGNET

TYPE: 95/100

Technical Data:

Magnet Width	:	950 mm
C-C Spacing Approx	:	1000 mm

The Over Belt Magnet consists of a fixed magnet, with a revolving belt conveyor with vulcanized cross-bars. The belt drive is driven by means of a hollow shaft geared motor.

S1.09.0 2 DISCHARGE BELT CONVEYOR (FEEDING TO SCREENING UNIT)

TYPE: 800/15000

TYPE: 800/19000

Technical Data:

Belt Width	:	800 mm
C-C Spacing Belt 1 Approx:		15000 mm
C-C Spacing Belt 2 Approx:		19000 mm

S1.10.0 1 DISCHARGE BELT CONVEYOR

TYPE: 800/7500

Technical Data:

Belt Width	:	800 mm
C-C Spacing Approx	:	7500 mm

S1.11.0 1 SECONDARY OVER BELT-MAGNET

TYPE: 75/100

Technical Data:

Magnet Width	:	750 mm
C-C Spacing Approx	:	1000 mm

The Over Belt Magnet consists of a fixed magnet, with a revolving Belt Conveyor with vulcanized cross-bars. The belt drive is driven by means of a hollow shaft geared motor.

S1.12.0 1 SINGLE DECK VIBRATING SCREEN

TYPE: 1600/4500

Technical Data:

Screen Width	:	1600 mm
Screen Length	:	4500 mm
Deck	:	60 mm

S1.12.1 1 SCREEN DISCHARGE CHUTE

The Screen Discharge Chute underneath the screen is connected to the Discharge Belt Conveyor.

S1.12.0 1 DISCHARGE BELT CONVEYOR

TYPE: 1000/4500

Technical Data:

Belt Width	:	1000 mm
C-C Spacing Approx	:	4500 mm

S1.14.0 1 STOCKPILE BELT CONVEYOR

TYPE: 800/20000

Technical Data:

Belt Width	:	1000 mm
C-C Spacing Approx	:	20500 mm

S1.15.0 1 PICK-OUT BELT CONVEYOR

TYPE: 650/5100

Technical Data:

Belt Width	:	650 mm
C-C Spacing Approx	:	5100
Drive	:	ADJUSTABLE (Frequency Controlled)

The Pick-Out Belt Conveyor will allow manually separation of light fractions.

S1.16.0 1 OVERSIZE RETURN BELT CONVEYOR

TYPE: 650/15000

Technical Data:

Belt Width	:	650 mm
C-C Spacing Approx	:	15000 mm
Inclination	:	22 °

Due to the inclination of the Oversize Return Belt Conveyor, a belt with chevron like actuators is used.

S1.17.0 1 SUPPORT STEEL STRUCTURE FOR THE ENTIRE PLANT

The Support Steel Structure comprises all components necessary to build-up the complete plant, including supports, platforms, walkways, handrail, ladder, etc. It is made of a rugged steel construction according to German DIN Standards.

S118.0 1 ELECTRIC EQUIPMENT

CUSTOMER HAS TO SUPPLY A SINGLE LV INPUT CONNECTION FOR EACH MCC.

The Electrical Equipment comprises of all necessary equipment to run the entire plant. All equipment is according to the relevant DIN, VDE and IEC Standards. This includes:

- LV Motors Complete
- MCC (Motor Control Cabinet) for all motor, including:
 - PLC (DCS)
 - Contractors
 - Fuses
 - Main Switch
 - Illumination
- Safety Key System for Crusher
- Field Wiring, including:
 - Motor Cable
 - Control Cable
 - Signal Cable
 - Fitting
 - Mounting

S1.19.0 1 HYDRAULIC EQUIPMENT

This comprises of the complete hydraulic equipment, which is necessary for operation and maintenance of the crusher.

SPARE PARTS FOR HAZEMAG PLANT

NO.	CODE	DESCRIPTION	QTY
1	BB06	Blow Bars – Type QB 1214, F40-3	8
2	BB01	Clamping Wedge Set, Item 6	6
3	BB02	Wear Plate, Item 26	6
4	BB02	Wear Plate, Item 30	6
5	BB03	Wear Plate, Item 34	6
6	BB04	Inlet Beam, Item 37	7
7	BB05	Impact Plate, Item 47	5

SANDVIK**COMPLETE SANDVIK PLANT**Combination of **JAW & CONE CRUSHER** includes the

No.	EQUIPMENT NAME	TYPE	POWER	SERIAL NO.	PART NO.	WEIGHT (kg)
1	Jaw Crusher	JM 1513:3 (CJ 815)	200 kw	670305	-	34700
2	Cone Crusher	S 4800 (CS 440)	220 kw	670368	-	19300
3	Pan Feeder	PFU-10/23	2.4 kw	2881	7110052-09	947
4				2882		947
5	Vibro Feeder	PFU-16/23	4.5 kw	2880	7110337-00	2770
6				-		-
7	Grizzly Feeder	HGF-16522G	30 kw	637	-	9700
8	Magnetic Separator	SMO 32.125.110	4 kw	6233.1	-	-
9				6233.2	-	-
NO	CONVEYORS		BELT WIDTH (MM)	LENGTH (M)		POWER
1	Conveyor - 1		1200	7		7.5
2	Conveyor - 2		1200	40		45
3	Conveyor - 3		1200	40		45
4	Conveyor - 4		1200	25		22
5	Conveyor - 5		1200	25		30
6	Conveyor - 6		1200	15		15
NO	MISCELLANEOUS					QTY (LOT)
1	All Conveyor					1
2	All Steel Structure for Jaw Crusher, Cone Crusher, Feeders, Grizzly, Hoppers, Magnetic Separator, etc.					1
3	Primary Hopper Plates					1
4	Base Frame					1
5	Feed Chute					1
6	Discharge Chutes					1
7	Motor Base Frame					1
8	Conveyor Trough					1
9	Conveyor Supporting Structures					1
10	Hydraulic Unit					1
11	Anchor Plate with Bolts for Civil Foundation					1
12	All Supporting Structure for Electrical, Hydraulic, Mechanical Items					1
NO	ELECTRICAL				QUANTITY	
1	Plug and Play Control Panel in Porta Cabin				1 No.	
2	Cables				Complete Set	
3	Switch				Complete Set	
4	Local Panel				Complete Set	
5	Push Button				Complete Set	
6	All Motors				Complete Set	
7	Cable Fittings				Complete Set	

SANDVIK

Former name: S4800 (CS440)

The hydraulically adjusted Sandvik Cone Crushers are characterized by robust design and high performance. The combination of Constant Liner Performance, CLP crushing chambers and high motor power give these crushers very high capacity.

Key specifications

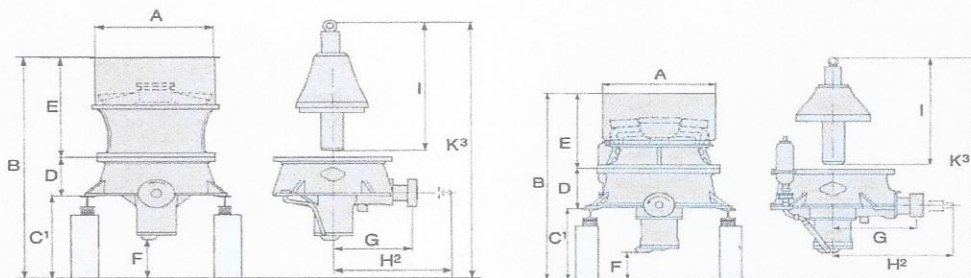
Total weight	19300 kg (42500 lbs)
Max permitted power	220 kW (295 hp)
Capacity	195-600 tph (215-660 stph)
CSS range	25-54 mm (1-2 1/8 in)
Max feed size	300-450 mm (12-18 in)



Features and values

- High performance - lowest total cost.
- Excellent versatility.
- Full control of the process.
- Easy to handle and maintain.
- Reliable.

Dimensions, mm



Note: Reference line (not floor level) giving minimal dimensions for removal of: 1. Hydroset cylinder, 2. Pinion shaft, 3. Main shaft

Dim.	CS420	CS430	CS440	CS660	CH420	CH430	CH440	CH660	CH870	CH880
A	Ø 1285	Ø 1635	Ø 2000	Ø 2800	Ø 1078	Ø 1360	Ø 1540	Ø 2104	Ø 2450	Ø 2660
B	2902	3485	4075	5100	2560	2992	3410	4215	5475	6456
C ¹	1020	1125	1300	1600	1020	1125	1300	1600	2200	2870
D	540	655	745	860	540	655	745	860	1228	1186
E	1342	1705	2030	2640	1000	1212	1365	1755	2045	2400
F	400	422	452	631	400	422	452	631	998	1151
G	843	1061	1280	1497	843	1061	1280	1497	1824	2073
H ²	1270	1705	1900	2156	1270	1705	1900	2156	2850	3100
I	1703	2050	2420	2895	1425	1688	1985	2344	3095	3545
K ³	3600	4250	4930	5355	3000	3570	4000	4835	6600	7770

Dimensions are intended only as a guide for preliminary planning of the installation and should not be used for the construction of foundations, etc.



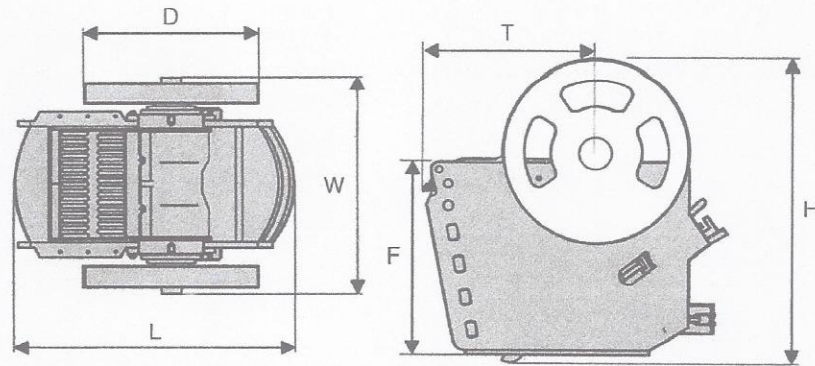
JAW CRUSHER JM1513



Every Sandvik jaw crusher is a product of know-how and experience optimized by Finite Element Analysis (FEA). Each model is tested virtually for stress, strain, shock, deformation, thermal loading, vibration and noise under a wide range of load conditions. The result is exceptional reliability.

Model	Former name	Capacity t/h	Feed opening mm (inch)	CSS range mm (inch)	Max permitted power kW (hp)	Total weight kg (lbs)
CJ411	JM1108	150-565	1045 x 840 (41 x 33)	100-225 (3-9)	110 (150)	21700 (47800)
CJ412	JM1208	165-790	1200 x 830 (47 x 33)	100-275 (3-11)	132 (200)	26600 (58600)
CJ612	JM1211	300-805	1200 x 1100 (47 x 43)	125-275 (5-11)	160 (250)	36600 (80700)
CJ613	JM1312	330-960	1300 x 1130 (51 x 45)	125-300 (5-12)	160 (250)	41500 (91500)
CJ615	JM1511	385-1185	1500 x 1070 (59 x 42)	125-300 (5-12)	200 (275)	53000 (116800)
CJ815	JM1513	480-1160	1500 x 1300 (59 x 51)	150-300 (6-12)	200 (275)	64500 (142200)

SANDVIK



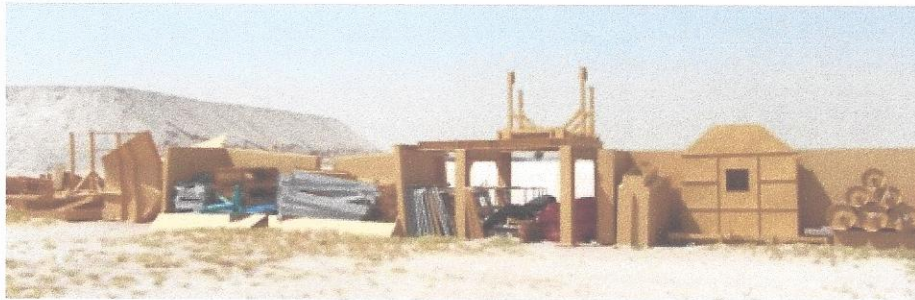
		Crusher model								
		CJ408	CJ409	CJ411	CJ412	CJ612	CJ613	CJ615	CJ815	CJ211
Feed opening	mm	800x550	895x660	1045x840	1200x830	1200x1100	1300x1130	1500x1070	1500x1300	1100x700
	in	32x22	35x28	41x33	47x33	47x43	51x45	59x42	59x51	43x27
L = Max length	m	2.37	2.55	2.99	3.23	3.61	3.76	4.11	4.50	2.39
	in	93	101	118	127	142	148	161	177	94
W = Max width	m	1.76	1.88	2.09	2.57	2.35	2.47	3.00	2.90	2.45
	in	69	74	82	101	92	97	118	108	96
H = Max height	m	2.03	2.38	2.82	2.95	3.51	3.85	3.33	4.19	2.17
	in	80	94	111	116	138	152	131	165	86
D	m	1.40	1.60	1.86	1.86	1.86	2.17	1.76	2.17	1.23
	in	55	63	74	74	74	86	70	86	48
F	m	1.33	1.58	1.88	1.93	2.50	2.68	2.39	3.05	1.54
	in	53	62	74	76	98	105	94	120	61
T	m	1.37	1.48	1.77	1.74	2.03	2.30	2.25	2.65	1.53
	in	54	58	70	67	79	91	89	104	60
Shipping volume	m ³	10	13	20	23	32	38	48	58	14.1
	ft ³	343	447	704	810	1127	1329	1690	2042	498
CSS min-max	mm	50-175	50-175	75-225	75-275	125-275	125-300	125-300	150-300	40-200
	in	2-7	2-7	3-9	3-11	5-11	5-12	5-12	6-12	1.6-7.9
Total weight	kg	9900	14100	21700	26600	36600	41500	53000	64500	14600
	lbs	21800	31100	47800	58600	80700	91500	116800	142200	32200
Motor power	kW	55	75	110	132	160	160	200	200	90
	hp	75	100	150	200	250	250	275	275	125
Crusher speed	rpm	300	270	240	240	210	225	200	200	270













TECHNOLOGICAL FLOW

