Rocksizer
Jaw Crushers
Stonesizer
Jaw Granulators
with the unique Parker upthrust toggle action

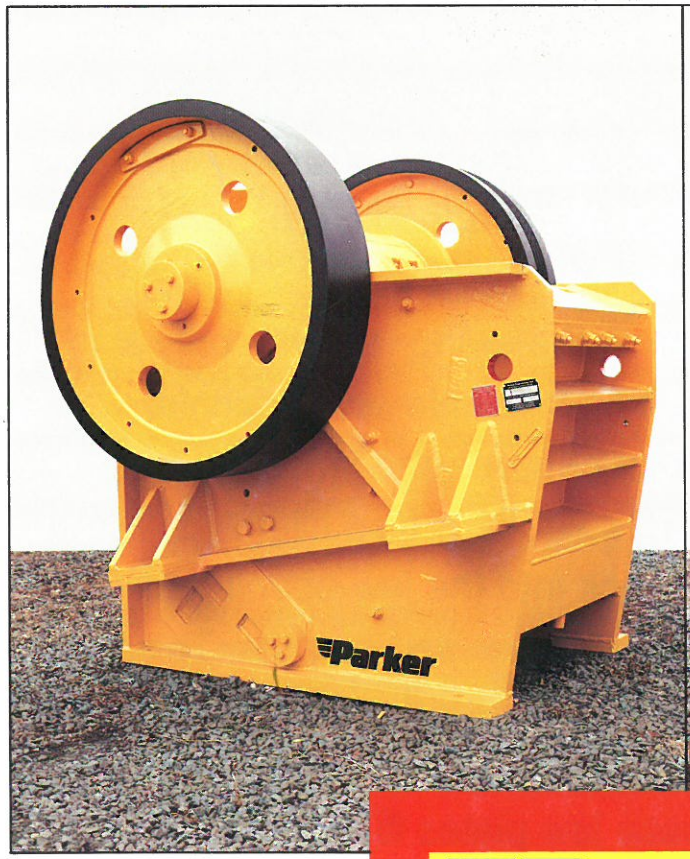
- Increased production compared with other designs of the same size
- Less manganese wear per ton crushed compared with other designs of the same size
- Improved product shape compared with other designs of jaw crushers
- More efficient utilisation of power
- Grease filled labyrinth seals prevent dust from entering into the roller bearings
- Jaw plates are reversible to maximise useful life
- Hydraulic adjustment of jaw setting on larger sizes
- Centralised lubrication on larger sizes

ROCKSIZER JAW SIZES 1000 mm x 625 mm
1000 mm x 600 mm
800 mm x 500 mm
950 mm x 300 mm
600 mm x 300 mm

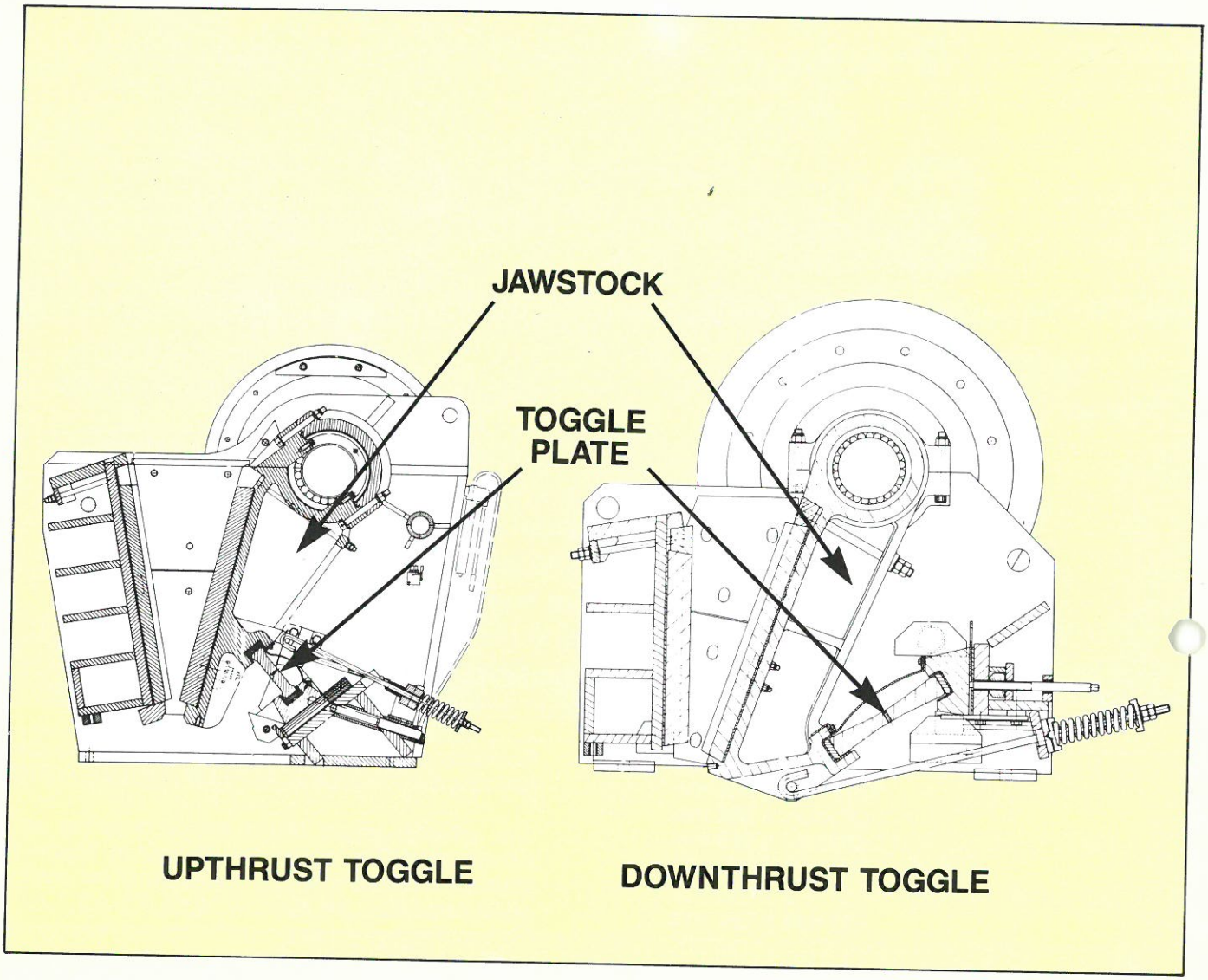
STONESIZER JAW SIZES 950 mm x 150 mm
600 mm x 150 mm

Rocksizer jaw crushers and Stonesizer jaw granulators featuring the PARKER UPTHRUST TOGGLE ACTION.

The upthrust toggle single toggle crushing action incorporates the advantages of double toggle jaw crushers and of single toggle downthrust jar crushers whilst eliminating the disadvantages of both.



Parker



Parkers well proven upthrust design involves the inclination of the toggle upwards to the jawstock, instead of downwards as is usual from other designs of single toggle crushers.

This gives a long forward stroke to the swing jaw with only a small vertical movement, resulting in an almost horizontal sharp crushing blow to the rock between the jaws with a minimum rubbing action. This stroke is also slightly downward, helping to pull the rock into the jaw opening to promote a forced feed which gives increased outputs. This action also assists with the gripping of round and/or smooth rocks. By minimising the rubbing action of the swing jaw, long useful life of manganese jaw plates is achieved compared with other designs of single toggle crusher.

FABRICATED BODY

Bodies are fabricated in workshops from good quality steel plate. The steel housings for supporting the side bearings are welded into the body and taper rings assist in locking together the side bearing assemblies. The body is machined for the bearing seatings and the face taking the groove black is milled to ensure accurate alignment with the shaft. The top caps over the side bearing seatings are easily removable to enable the jawstock and shaft assembly to be lifted out complete.

ECCENTRIC SHAFT

Machined from a heat treated nickel chrome steel forging, the shaft is finished to a high degree of accuracy to ensure the maximum possible bearing life.

ROLLER BEARINGS

Self aligning spherical roller bearings are fitted to give smooth and economical running whilst using the maximum of horsepower. These bearings are designed to withstand very heavy loads and give long life. They are protected against dust and grit by labyrinth seals which are grease sealed and fed by special lubricators.

JAWSTOCK

Strongly constructed from cast steel with deep webbing to give great strength with reasonable lightness. The face which receives the jaw is machined to give an accurate bedding and so prevent flexing in the jaw plate. The swing jaw is held in place by wedges located at the top or the bottom of the jawstock, and held firm by bolts. The groove which holds the toggle plate seating is machined to give an accurate fit to the seating and precise alignment with the groove block, the bearings and the shaft. End plates are fitted to the toggle groove to prevent the toggle plate working out sideways.

The bottom of the jawstock is drilled and tapped to take an eye bolt, so that the jawstock can be drawn forward by a hook and screw to permit easy changing of toggle plate and groove block. The bore of the jawstock which receives the roller bearing is machined to a high finish to ensure maximum possible wearing life.

MANGANESE STEEL WEARING PARTS

The jaw plates can be reversed end to end to give maximum wearing life. Because of the upthrust toggle action, the life of these jaws is much longer than that obtained from the conventional downthrust act.

Lifting eyes are supplied to make removal easy.

Side wearing plates are interchangeable side to side so that the maximum amount of wearing life can be achieved. They are bolted into position for ease of removal.

TOGGLE PLATE AND SEATING

The ends of the toggle plate are machined to a segment of a circle so that it has a rolling action on its seating. This minimises rubbing and reduces wear.

The seatings are made of hardened carbon steel strip and are easy to replace.

Both the toggle plate and the seating are sealed against the entry of dust to extend their useful life.

FLYWHEELS

The large diameter flywheels are interchangeable side for side. One has a flat surface, the other is grooved for vee belt drive to suit any requirements.

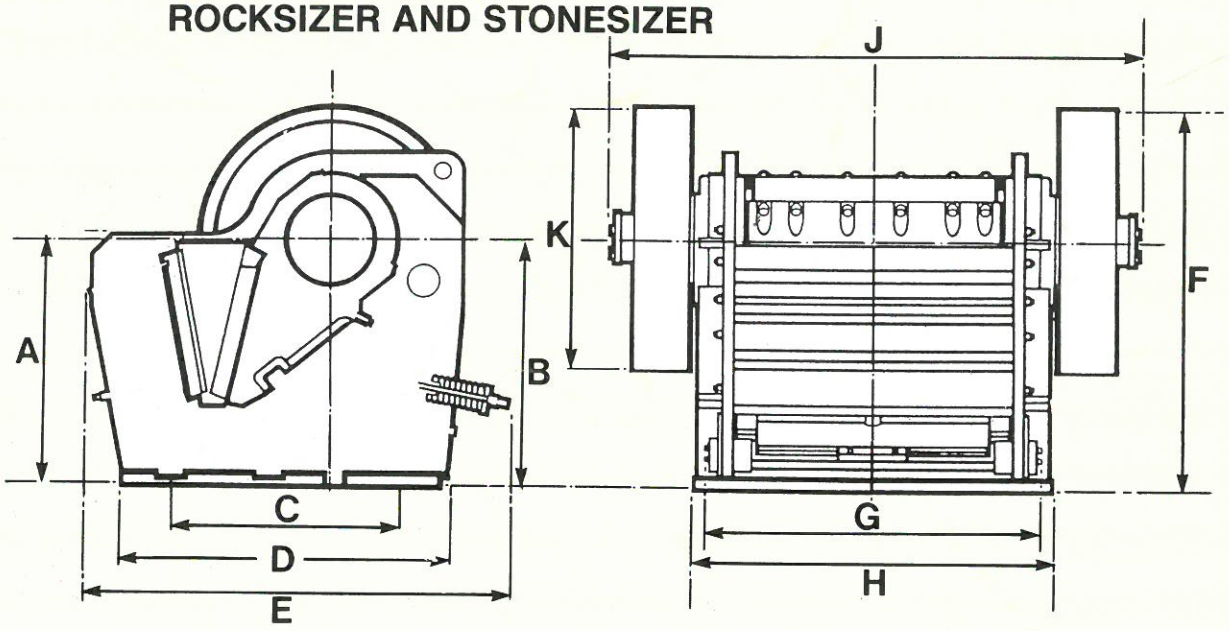
GROOVE BLOCK

The groove block has machined groove to take the toggle plate seating. The back of the groove block is machined to give a flat seating against the shim plates which are used for jaw setting. Groove black wedges hold the assembly firm. The rear of the machine is of an open design to give easy access to the toggle plate and groove block, and to permit rapid change of the jaw setting.

CHANGING JAW SETTINGS

Adjustments to the jaw settings are carried out by adding or removing shim plates of varying thickness behind the groove block. A hydraulic ram with hand operated pump facilitates movement of the groove block.

ROCKSIZER AND STONESIZER



DIMENSIONS

Size of mouth	600 x 150	950 x 150	600 x 300	800 x 500	'950 x 300	1000 x 600 1000 x 625
Dimension	mm	mm	mm	mm	mm	mm
A	825	840	1005	1444	1015	1700
B	885	895	1010	1465	1030	1630
C	788	890	820	1372	980	1626
D	1050	1200	1040	1640	1400	1840
E	1425	1550	1550	2080	1750	2550
F	1345	1400	1470	2075	1550	2310
G	888	1200	840	1120	1200	1360
H	1000	1320	950	1220	1320	1475
J	1520	2000	1520	1900	2000	2220
K	920	1012	920	1320	1012	1360

DATA

SIZE OF MOUTH		MAXIMUM SIZE OF FEED		MAXIMUM JAW SETTING CLOSED POSITION		MINIMUM RECOMMENDED JAW SETTING		POWER REQUIRE— MENT		FLYWHEEL SIZE (DIA. X FACE)		VEE ROPES FITTED	APPROXIMATE WEIGHT		
MM	INS	MM	INS	MM	INS	MM	INS	KW	R.P.M.	MM	INS		TONNES	LB	KILOS
600 x 150	24 x 6	125	5	40	1.5	20	0.75	30	300 320	920 x 178	36.2 x 7	4 SPC	3.6	7920	3,600
600 x 300	24 x 12	280	11	75	3	30	1.2	30	320	920 x 178	36.2 x 7	4 SPC	4.2	9240	4,200
800 x 500	31 x 20	455	18	125	5	50	2	55	300 320	1320 x 250	51.9 x 9.8	4 SPC	10.3	22660	10,260
950 x 150	38 x 6	125	5	40	1.5	20	0.75	45	300 320	1012 x 230	39.8 x 9	6 SPC	5.6	12320	5,600
950 x 300	38 x 12	280	11	75	3	30	1.2	45	300 320	1012 x 230	39.8 x 9	4 SPC	6.7	14740	6,685
1000 x 625	40 x 25	600	24	150	6	75	3	110	250	1362 x 250	53.6 x 9.8	8 SPC	16.7	36740	16,660
1000 x 600	40 x 24	575	23	125	5	65	2.5	110	250	1362 x 250	53.6 x 9.8	8 SPC	16.7	36740	16600

APPROXIMATE HOURLY CAPACITIES AT 100% CRUSH

SIZE OF MOUTH		20MM (¾") SETTING			25MM (1") SETTING			30MM (1¼") SETTING			40MM (1½") SETTING			50MM (2") SETTING			65MM (2½") SETTING			75MM (3") SETTING			100MM (4") SETTING			125MM (5") SETTING			150MM (6") SETTING		
MM	INS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS	TONNES	M^3	SHORT TONS
600 x 150		14 18	8 11	15 20	18 22	11 14	20 24	22 26	14 17	24 29	25 30	16 19	28 33																		
600 x 300								22 30	14 19	24 33	25 35	16 22	28 39	30 45	19 28	33 50	35 55	22 34	39 60	40 65	25 40	44 72									
800 x 500														40 55	25 34	44 60	50 65	31 40	55 72	60 80	37 50	66 55	75 100	47 63	83 110	90 120	56 75	99 132			
950 x 150		20 27	12 17	22 30	25 33	15 20	28 36	29 39	18 23	32 43	33 45	20 31	36 50																		
950 x 300								35 45	22 31	39 50	40 55	25 34	44 60	50 65	31 40	55 72	60 80	37 50	66 88	70 90	44 56	77 99									
1000 x 625																				85 105	53 65	99 115	100 135	62 84	110 149	125 160	78 100	138 176	140 190	87 118	154 210

Capacities quoted in the foregoing chart are intended as a guideline only, and are based on a clean dry graded feed material (weighing 1600kg/m^3 (100lb/ft^3) and a S.G. of 2.7 average.) which will readily enter the crusher feed opening without obstruction.
Actual capacities can vary considerably from those given by ± 25% due to the following application and operational factors.
1. MATERIAL — Friability & Toughness
2. FEED CONDITIONS — Grading of feed size (compliance with Euro STD), Presence of clay or sticky material, Moisture content.
3. INSTALLATION — Method of Feeding, Removal of undersize.
Operation at settings outside those stated should be referred to the works.

BROWN

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