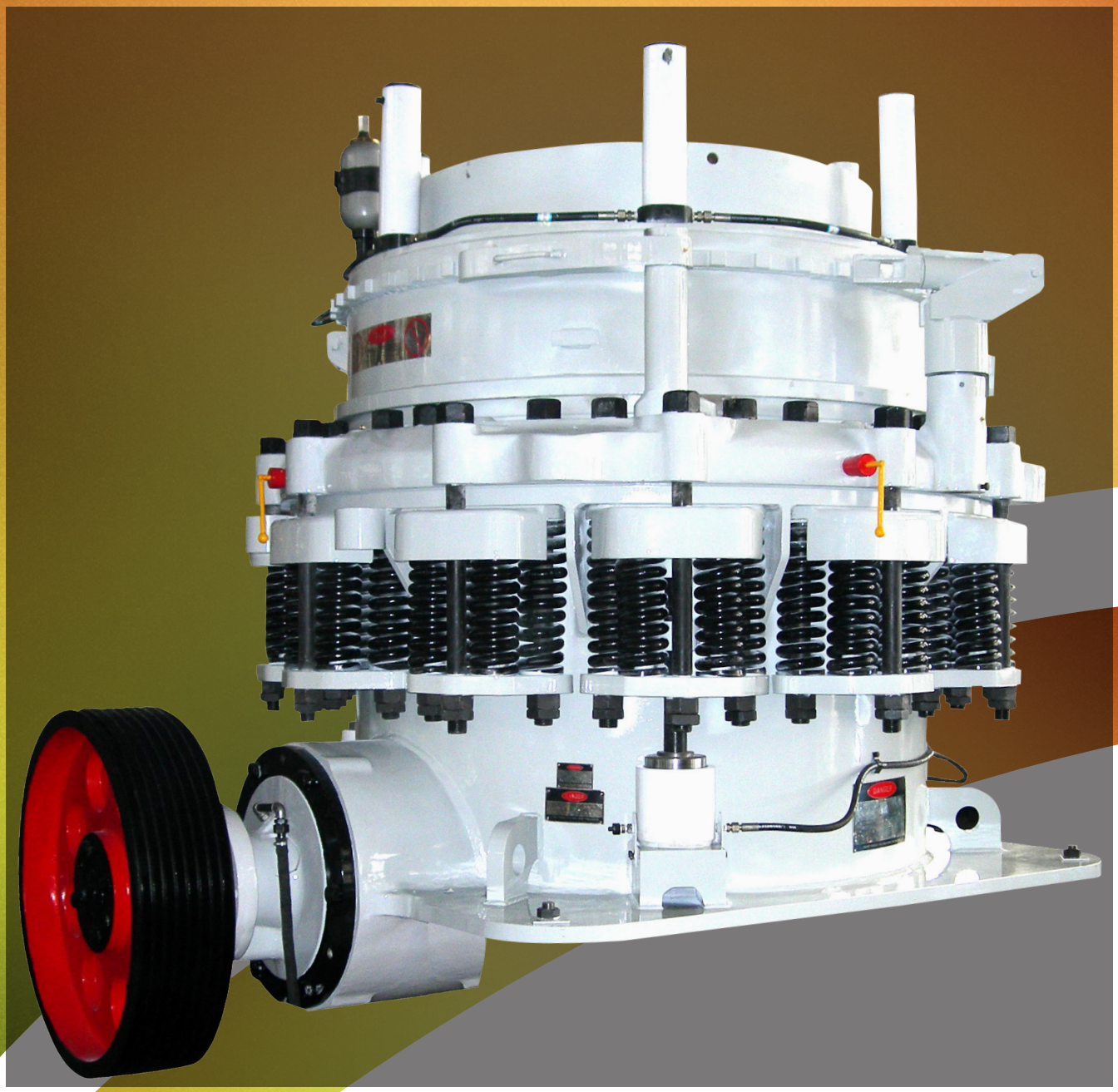
Efficient, Reliable.



Hansteel Cone Crushers

Hansteel Cone Crushers

Performance can be proven theoretically, but we prefer the facts.

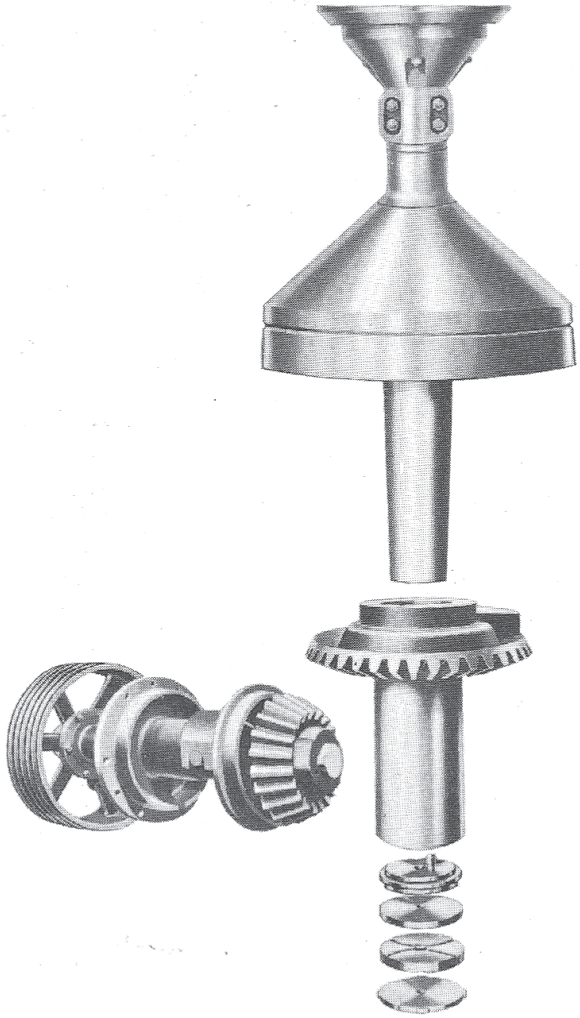
Judge for yourself!

430 Hansteel Cone Crushers in use worldwide working in the toughest working conditions.

Low Running Costs.

Reliability.

High Production Output of Quality Products.



The Facts

More Quality Product
The following factors together result in high output capacity:

- shape of the crushing chamber,
- angle of the crushing chamber,
- speed of gyration,
- full radial feed opening to prevent bridging.

Minimum Supervision
The machine is protected by the anti-overload system. The bowl liner, supported by U bolts and flexible washers, is immediately reset after overload by coil springs.

Durability Under The Most Extreme Conditions
Precise metallurgical specifications and the design of each component make Hansteel Cone Crushers resistant to the toughest working conditions.

Low Running Costs
Adjustment of the bowl by rotation gives maximum usage of wearing parts and so minimises down time. Simplicity of design ensures higher output. Greater crushing efficiency and high output reduces energy consumption per ton of output. All parts are simply and easily replaced. Machine life is generally more than 15 years, thus keeping depreciation costs to a minimum.

Flexiblity
There are twelve sizes of standard and shorthead crushers, each with four or five cavities, thus offering a wide range of crushers capable of meeting the most stringent specifications.

Easy installation
The Hansteel Cone Crusher is usually shipped ready for installation. Its compact size makes it capable of working on all types of sites and keeps transportation costs to a minimum.

The Hansteel Process

Durability
There are only three moving sections in the Hansteel Cone Crusher:

- head and mantle,
- eccentric and gear,
- countershaft and pinion,

On the lower part of the machine the thrust bearing supports the weight of the eccentric only.

The crushing force is absorbed by a large spherical bearing protected by a film of heavy duty lubricant.

Only Hansteel Cone Crushers, tested under extreme conditions and built to the highest technological specifications, are totally reliable when working under such adverse conditions.

Profitability
High profitability depends on:

- continued high productivity,
- low running costs,
- fast, easy maintenance,
- exceptional durabilty of all parts,

This can only be achieved by investing in the best equipment available.

The Hansteel process ofers:

- optimum wear of the crushing members due to the rotation of the bow liner, up to 80% of wear parts are used for production

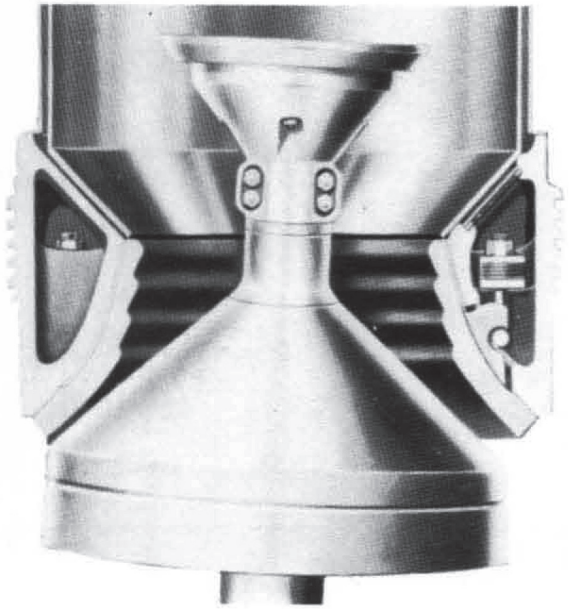
- first class construction with high performance alloys

- hydraulic assistance makes resetting fast and accurate

The Crushing Chamber

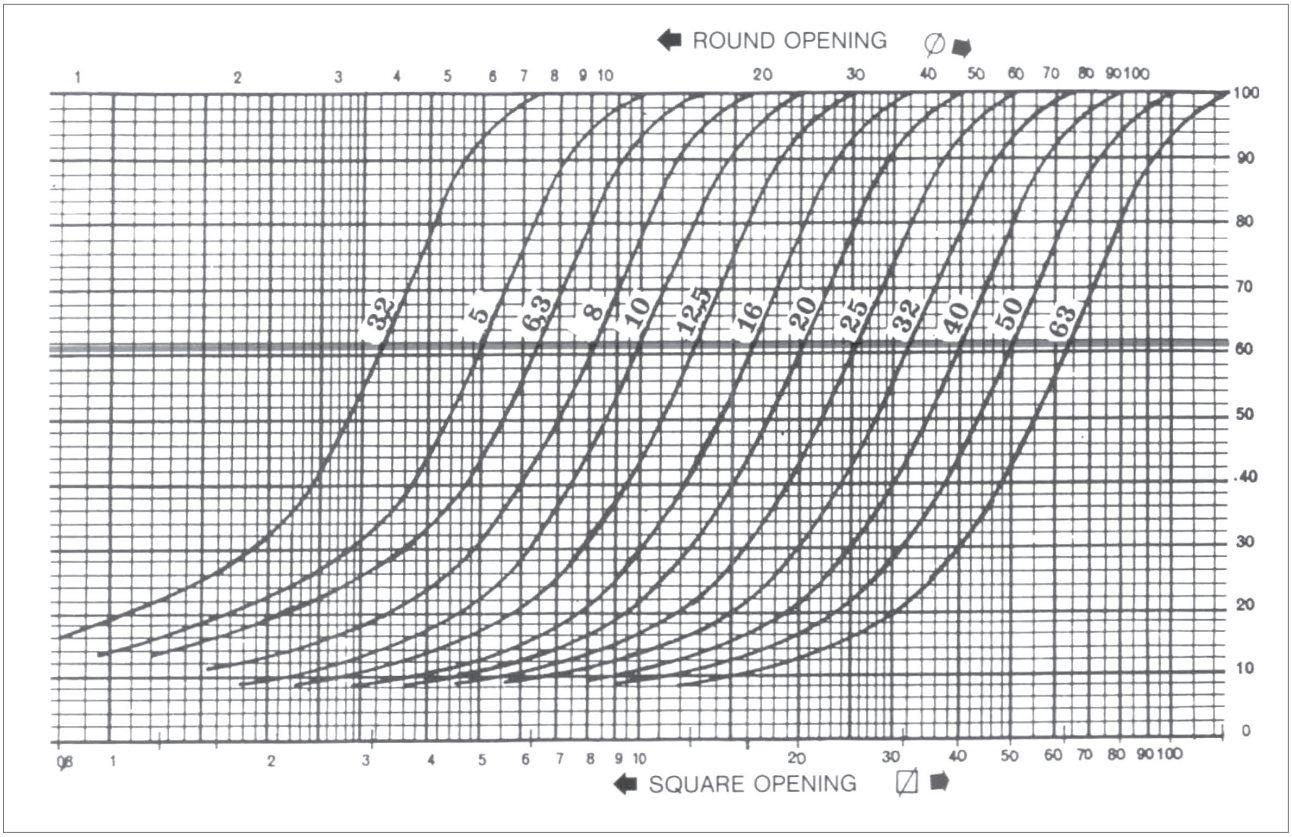
The main difference between the standard and shorthead Hansteel Cone Crushers is the shape of the crushing chamber and in the location of the feed distributor.

Standard
Crushed product
0/16 to 0/80 mm,
16 to 900 tph.



Shorthead
Crushed product
0/3 to 0/25 mm,
5 to 500 tph.

Granulometric Scale



Average product curves for aggregate product, open circuit

These average curves may vary according to the feed method, the cavity, density, feed size, moisture content and friability of the material.

Actual graphs can only be produced by testing.

The range of Hansteel Cone Crushers

TYPE		STANDARD				
		EQ 2'	EQ 3'	EQ 4'	EQ 4' 1/4	EQ 5' 1/2
CRUSHER						
Weight	kg	4.600	10.600	16.800	21.000	44.600
Heaviest Component	kg	1.270	2.630	4.650	5.210	12.000
Driven Pulley						
Pulley	mm	533	762	915	915	915
Width	mm	137	227	300	372	510
Countershaft Speed	rpm	575	580	485	485	485
MOTOR						
Speed 1.500rpm						
Power	kW	30	75	90	132	200
MOTOR PULLEY						
Pulley	mm	210	305	306	306	306
Width	mm	148	240	300	359	359
V Belts						
Number		5	6	8	10	10
Section	mm	22 x 14	32 x 19	32 x 19	32 x 19	32 x 19
Belt Length	m	4,163	5,023	6,863	6,863	6,863

These indicative figures and specifications are subject to change without notice.

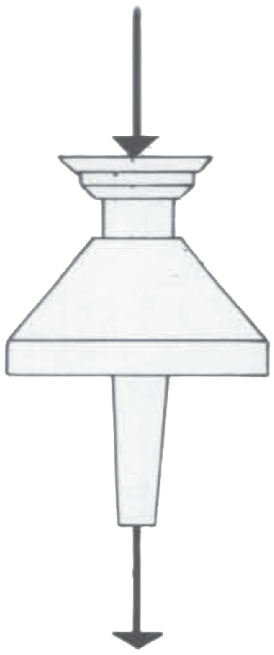
TYPE		SHORTHEAD				
		EQ 2’	EQ 3’	EQ 4’	EQ 4’ 1/4	EQ 5’ 1/2
CRUSHER						
Weight	kg	4.900	10.900	19.000	21.500	45.250
Heaviest Component	kg	1.270	2.630	5.210	5.210	12.000
Driven Pulley						
Pulley	mm	533	762	915	915	915
Width	mm	137	227	205	372	510
Countershaft Speed	rpm	575	580	515	485	485
MOTOR						
Speed 1.500rpm						
Power	kW	30	75	110	132	200
MOTOR PULLEY						
Pulley	mm	210	305	315	306	306
Width	mm	148	240	205	359	359
V Belts						
Number		5	6	8	10	10
Section	mm	22 x 14	32 x 19	SPC	32 x 19	32 x 19
Belt Length	m	4,163	5,023	6,300	6,863	6,863

Open circuit performance

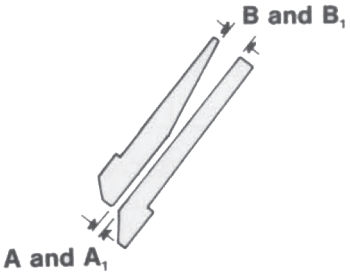
OPEN CIRCUIT					STANDARD		
Size	Cavity	Minimum recommended setting A	Aperture at minimum Setting A		Minimum recommended setting A	Aperture at minimum Setting A	
			Closed B	Open B		Closed B	Open B
2' SH 610mm	Fine	6	56	71	19	64	80
	Coarse	8	78	93	38	103	114
	Extra-Coarse	11	100	111	38	118	128
3' SH 914mm	Fine	10	103	115	43	125	140
	Coarse	13	124	143	37	148	165
	Extra-Coarse	19	180	196	37	198	211
4' ST 1219mm	Fine	12	130	144	61	173	187
	Medium	15	157	176	63	215	230
	Coarse	19	182	204	80	250	265
	Extra-Coarse	21	216	237	56	251	273
4' 1/4 ST 1295mm	Fine	13	131	150	62	180	199
	Medium	20	205	224	62	253	272
	Coarse	22	229	253	50	258	280
	Extra-Coarse	25	242	270	68	290	310
5' 1/2 ST 1676mm	Fine	19	196	208	78	238	250
	Medium	22	219	241	92	289	311
	Coarse	25	251	276	76	302	327
	Extra-Coarse	38	343	368	82	387	412

OPEN CIRCUIT					SHORTHEAD		
Size	Cavity	Minimum recommended setting A	Aperture at minimum Setting A		Minimum recommended setting A	Aperture at minimum Setting A	
			Closed B	Open B		Closed B	Open B
2' SH 610mm	Fine	6	27	40	13	34	47
	Coarse	8	38	50	13	45	56
3' SH 914mm	Fine	3	12	40	31	40	65
	Medium	5	33	60	25	42	71
	Coarse	6	50	76	25	69	91
	Extra-Coarse	8	65	90	20	77	102
4' ST 1219mm	Fine	5	28	60	47	70	102
	Medium	6	39	67	47	68	100
	Coarse	9	71	100	39	98	127
	Extra-Coarse	13	112	144	39	138	170
4' 1/4 ST 1295mm	Fine	5	28	63	59	82	117
	Medium	6	42	72	59	79	109
	Coarse	9	74	106	53	118	150
	Extra-Coarse	13	103	135	46	136	174
5' 1/2 ST 1676mm	Fine	6	36	71	54	84	119
	Medium	8	57	87	54	102	132
	Coarse	12	100	131	44	124	155
	Extra-Coarse	16	150	184	44	178	212

PRODUCTION TPH AT RESPECTIVE SETTINGS									
6,3	10	12,5	16	20	25	32	40	50	63
16	19 19	22 22 22	27 27 27	33 33 36	 45 50	 54 63			
	36	45 50	54 65	65 85 90	75 105 115	90 125 135	 160		
		85	105 105	130 130 140 140	160 160 175 190	180 190 215 220	 225 245 260	 270 300	
		100	125	150 150	180 180 200 215	200 210 230 250	225 245 280 290	 280 320 330	 370
				215	250 270 280	290 330 340	320 370 400 420	345 410 450 470	 580 610

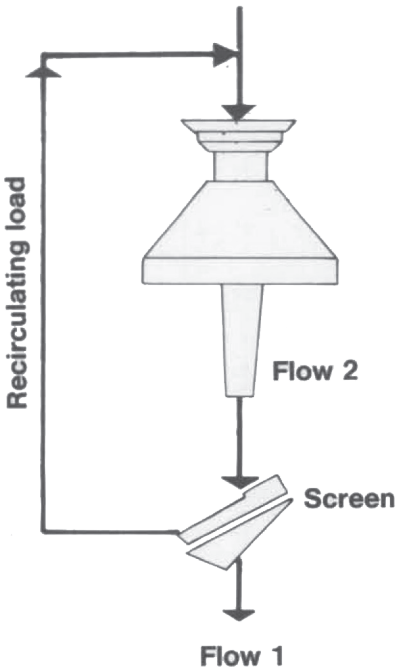


PRODUCTION TPH AT RESPECTIVE SETTINGS								
3	5	6	8	10	13	16	19	25
	15 15	18 18	22 22	25 25	35 35			
25	35 35	40 42 47	52 55 60 70	62 65 75 85	75 80 92 105	 95 110 125	 120 145	
	55	65 65	80 85	95 100 110	115 120 135 145	130 140 155 165	 170 180	 205
	60	72 72	90 95	105 110 120	125 130 150 160	145 150 170 180	 190 200	 210 225
		105	135 145	160 170	190 200 210	210 225 235 255	 240 255 275	 280 300

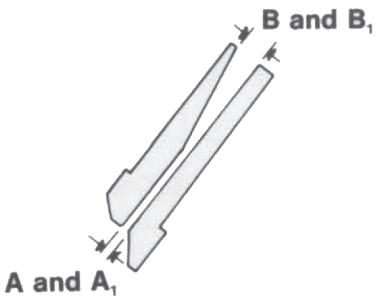


Closed circuit performance

CLOSED CIRCUIT					SHORTHEAD		
Size	Cavity	Minimum recommended setting A	Aperture at minimum Setting A		Minimum recommended setting A	Aperture at minimum Setting A	
			Closed B	Open B		Closed B	Open B
2' SH 610mm	Fine Coarse	5 5	27 38	40 50	13 13	34 45	47 56
3' SH 914mm	Fine Medium Coarse Extra-Coarse	3 5 6 8	12 33 50 65	40 60 76 90	31 25 25 20	40 42 69 77	65 71 91 102
4' ST 1219mm	Fine Medium Coarse Extra-Coarse	5 6 9 13	28 39 71 112	60 67 100 144	47 47 39 39	70 68 98 138	102 100 127 170
4' 1/4 ST 1295mm	Fine Medium Coarse Extra-Coarse	5 6 9 13	28 42 74 103	63 72 106 135	59 59 53 46	82 79 118 136	117 109 150 174
5' 1/2 ST 1676mm	Fine Medium Coarse Extra-Coarse	6 8 12 16	36 57 100 150	71 87 131 184	54 54 44 44	84 102 124 178	119 132 155 212



Under certain conditions the Hansteel Cone Crushers can be operated in closed circuit. We will be pleased to study any specifc application you may have.



PRODUCTION TPH BASED IN CLOSED CIRCUIT OPERATION													
5		6,3		10		12,5		16		20		25	
Recommended setting for closed circuit													
5		6		8		10		13		16		19	
1	**2**	**1**	**2**	**1**	**2**	**1**	**2**	**1**	**2**	**1**	**2**	**1**	**2**
10 10	18 18	12 12	20 20	19 19	24 24	22 22	27 27	30 30	38 38				
23 23	38 38	24 28 31	44 46 52	45 47 51 60	57 60 66 77	54 57 66 75	68 71 82 93	64 68 78 90	82 88 100 115	81 93 107	104 120 137	108 131	132 159
36	60	43 43	72 72	68 73	88 93	84 88 97	104 110 120	98 103 115 125	126 132 148 160	111 120 133 140	143 154 170 180	153 165	187 205
40	66	48 48	80 80	78 82	100 105	92 97 105	115 120 132	107 110 128 137	137 143 165 176	125 128 145 155	160 165 187 200	171 180	209 220
		75	115	115 125	150 160	141 150	176 187	163 172 180	209 220 231	180 193 201 219	231 247 258 280	216 230 248	264 280 302

NB: these figures are for materials with a density of 1.6. Feed size, material hardness and moisture content of feed all affect capacity.

Best results are obtained if the material to be processed and the specification of the final product are considered in selecting the setting.

Column 1 gives tph finished product (screen undersized).
Column 2 gives tph passing through the crusher.

These indicative figures and specifications are subject to change without notice.

Hansteel Industries Co. Ltd.
Rm. 819-821
Tongye Building,
32 Tieling Rd.
Shanghai China 200092
T: +86-21-65022290
E: john@hansteel.net
F: +86-21-65793287

Hansteel Industries Australia Pty. Ltd.

P O Box 65,
Stoneville
Western Australia 6081
T: +61 (0) 8 9295 5548
E: pmarriott@hansteel.com.au
F: +61 (0) 8 9295 5547