

### SINGLE TOGGLE ROLLER BEARING

### 'D'TYPE JAW CRUSHERS





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# **'D'TYPE**JAW CRUSHERS

Structural durability, operating efficiency, ease of adjustment and reduced maintenance are design features built into the Pegson Telsmith 'D' Style crusher. Employing a welded construction frame, these units provide the staying power to deliver maximum tonnages through sustained crushing operations. Accessibility of components for maintenance or alteration of the discharge setting and the availability of Hydraulic adjustment and Automatic oil lubrication, make 'D' Style crushers ideal for static, portable, or fully mobile installations.

Pegson Telsmith 'D' Style Jaw Crushers have been specifically designed to provide single toggle machines for operations involving the widest possible range of rocks and ores. Igneous material of high compressive strength including granite and basalt, long considered the domain of double toggle crushers, is now being economically reduced in high volume production by fixed, portable and fully mobile 'D' Style machines.

Pegson Limited, backed by many years' experience in the specification and application of aggregate production plant will be pleased to give crusher recommendations against the characteristics or samples of customers' material.

- Split Boss Flywheel
- Protective Impact block on Jaw Stock
- Quick Hydraulic or mechanical sizing control. This system is offered as an optional extra on models 18"  $\times$  32" up to 30"  $\times$  42" and is standard equipment on models 36"  $\times$  46" up to 66"  $\times$  84"
- Heavy Duty Bearings
- Simple toggle changes
- Automatic oiling system (optional)

### **Specification**

Note 1. To obtain the capacities specified, a feeder should be used ahead of the crusher to give a continuous regulated feed; all feed should be of a size that will readily enter the crushing chamber and undersize material should be removed from the feed by the means of a grizzly or scalping screen to eliminate packing and excessive wear on the jaws.

Note 2. The power required varies with the size of the product being made, the capacity and the hardness of the rock or ore.

Note 3. No crusher, when set to a given discharge opening, will make a product all of which will pass a screen opening of the same

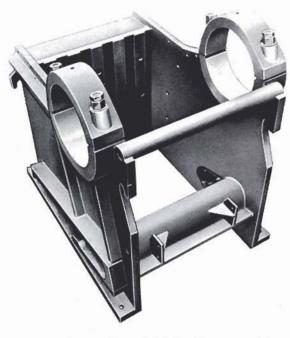
dimensions as the given discharge opening. The amount of oversize will vary with the character of the rock.

Note 4. The capacities given are in metric tonnes of 2204 lbs. They are based on crushing clean, dry limestone weighing loose about 1534 Kg. per cubic metre (2,600 lbs per cubic yard) and having a specific gravity of 2.6. Wet, sticky feeds will tend to reduce crusher capacities.

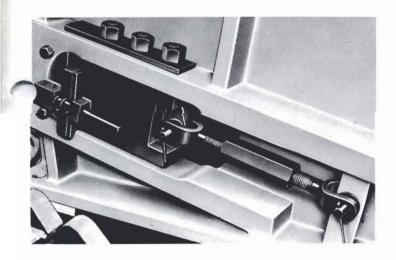
It is not usually economical to operate the crushers at a discharge opening smaller than shown in the table.

Size of Feed Opening (Note 1)	450 x 810	500 x 900	630 x 1000	750 x 1050	900 x 1150	1100 x 1200	1270 x 1550	1670 x 2130	
	18" x 32"	20" x 36"	25" x 40"	30" x 42"	36" x 46"	44" x 48"	50" x 60"	66" x 84"	
Net weight of Crusher approx. Weight crated approx.	Kgs lbs 9,570 21,100 9,643 21,260	Kgs lbs 12,220 27,100 12,370 27,300	Kgs lbs 16,080 35,500 16,240 35,850	Kgs lbs 24,080 53,250 24,250 53,650	Kgs lbs 36,466 76,000 37,925 83,600	Kgs lbs 50,454 111,000 51,000 112,200	Kgs lbs 75,909 167,000 76,818 169,000		
Cubic contents, crated	cu.mts. cu.ft.	cu.mts. cu.ft.	cu.mts. cu.ft.	cu.mts. cu.ft.	cu.mts. cu.ft.	cu.mts. cu.ft.	cu.mts. cu.ft.	cu.mts. cu.ft.	
	7·3 258	14-15 500	16-26 575	25-36 900	31-15 1,100	45-75 1,616	59-45 2,100	0·1415 5,000	
Kilowatts	45	75	90	110	132	170	220	335	
Horsepower (Note 2)	60	100	125	150	175	220	300	450	
Drive Pulley Diameter Face R.P.M.	mm ins	mm ins	mm ins	mm ins	mm ins	mm ins	mm ins	mm ins	
	1232 48½	1219 48	1372 54	1524 60	1676 66	1829 72	1981 78	2133 84	
	318 12½	375 14 <sup>3</sup> / <sub>2</sub>	375 143	375 14 <del>1</del>	406 16	432 17	432 17	609 24	
	275	265	260	255	230	220	225	200	

### Main Frame; 450 x 810 , 500 x 900, 630 x 1000, 750 x 1050, 900 x 1150



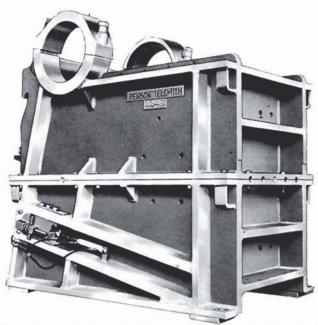
The main frame is an all-steel fabrication comprising thick side plates, reinforced in the load zones, and a heavily ribbed front wall. Accurately machined steel blanks welded into side plates form the bearing housing. The toggle beam (not shown) is not an integral part of the main frame but extends across the rear of the crusher and through slots in the side plates. This configuration has the effect of transferring all loads to the side walls which are adequately ribbed to accept them.



### **Screw Type Turnbuckle Adjustment**

Shims inserted in slots between the toggle beam and backing block determine the discharge setting. The toggle beam is locked in position by bolts on the outside of the crusher and a shim retainer is fitted to locate the shims. Screw type turn-buckles accessible from outside of the machine, are fitted as standard equipment, making adjustment to discharge setting easily accomplished quickly by one man. The jawstock and toggle move as a unit without time-wasting adjustment of the tension spring.

### Main Frame; 1100 x 1200, 1270 x 1550, 1670 x 2130



The frame design of these machines embodies horizonta joints for ease of handling and transportation.

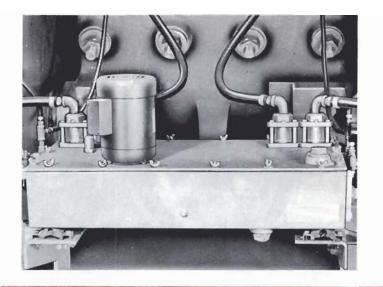
The welded main frame is constructed of the strongest available steel and is in two sections, with the exception of the 66" x 84" model which is in three sections.

There is no unnecessary ribbing to add any extra weight or bulk. Massive and solid construction of the single wall, steel weldment enables the crushers to withstand the toughest punishment. Having a single toggle beam arrangement, virtually it is a backless machine giving ease of accessibility for maintenance of components.



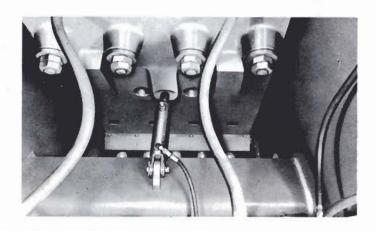
### **Jaw Stock Assembly**

A tough heat treated steel casting accommodates the swing jaw and is fitted with a replaceable manganese steel head-block to protect against the impact of feed material contoured jaw dies increase tonnage and produce a more cubical product.



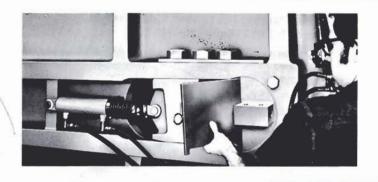
## Optional Automatic Oiling System

The optional automatic oiling system can be mounted on crusher frame as a complete pre-packed unit; and can be provided in place of grease lubrication. Oiling system automatically recirculates and filters oil, assuring a constant oil supply to bearings at all times. Oil changes are required only twice yearly. System includes pressure and temperature alarm.



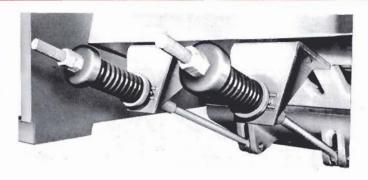
### Swing Jaw with optional Hydraulic Ram or Adjustable Mechanical Jaw Prop

Rear of swing jaw with hydraulic ram (optional) is easy to reach, easy to work. The ram holds swing jaw forward for replacing toggle and is disconnected when the machine operates.



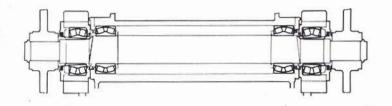
### Hydraulic Adjustment

One man quick adjusting system is a fast method of hydraulically changing jaw settings completely from the outside. Swing jaw settings are determined by the number of shims inserted in the slot between the toggle beam and frame. This can be accomplished by one man in minutes, and does not necessitate any time-wasting adjustment of tension springs.



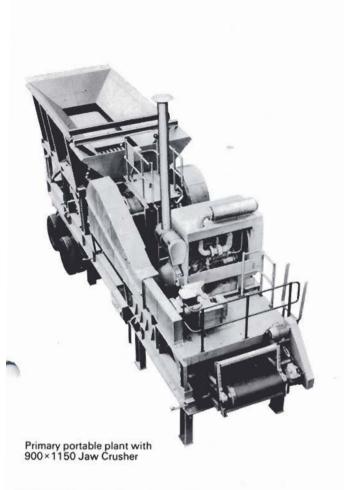
#### Easy Toggle Removal

The toggle can be removed from the rear of the crusher with the swing jaw held in the forward position. The swing jaw can be held forward either mechanically or hydraulically separate from the adjustment system.



#### Four-Bearing Arrangement

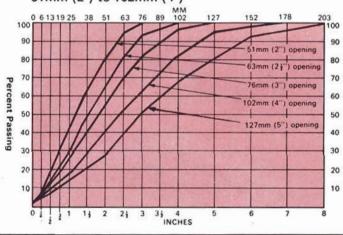
The eccentric shaft, being a high quality steel forging machined and accurately ground, is supported by heavy duty double-row self-aligning spherical roller bearings on both the jawstock and main frame. The bearings are adequately sealed against loss of lubrication and the ingress of dirt and are located in cartridge type mountings which permit the removal of the entire jawstock and shaft assembly as a unit.



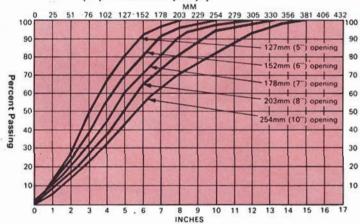


### **Screen Analysis of Product**

Percent Passing For Closed Side Setting Of 51mm (2") to 102mm (4")

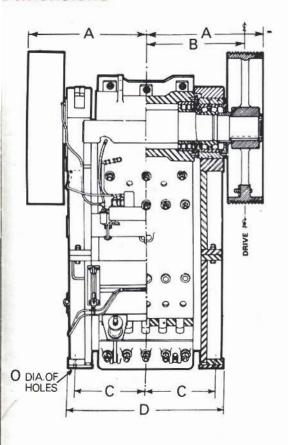


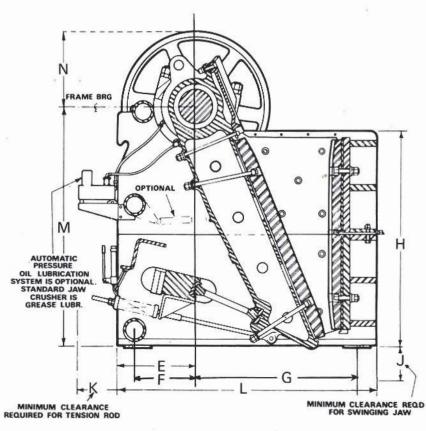
### Percent Passing For Closed Side Setting Of 127mm (5") to 254mm (10") )



			CAPAC	ITY (Notes 1 & 4)						
	450×810 18"×32"	500×900 20*×36*	630×1000 25*×40*	750×1050. 30*×42*	900×1150 36*×46*	1100×1200 44*×48*	1270×1550 50*×60*	1670×2130 66*×84*		
Discharge Opening Closed	metric tonnes/hr	metric tonnes/hr	metric tonnes/hr	metric tonnes/hr	metric tonnes/hr	metric tonnes/hr	metric tonnes/hr	metric tonnes/hr		
51mm 2"	40-55	41-77				-				
63mm 24"	45-60	53-96	-	-	The same of the sa	-		SHOW THE PARTY		
76mm 3*	55-75	64-114	100-164		-			-		
89mm 34"	65-85	73-133	114-190	127-199	The second second	-	7 -	-		
102mm 4"	75-100	81-150	127-203	145-217	182-272		-			
127mm 5"	90-130	105-182	154-245	173-258	217-326	272-406	-	- "		
152mm 6*	-	127-217	181-291	199-299	254-381	302-453	381-567			
178mm 7*	-	150-254	203-340	236-345	291-433	332-499	417-632	590-86		
203mm 8*	+ 4 4	-	236-390	272-437	TO THE PARTY OF	368-554	458-691	633-958		
216mm 84"	-		The state of the s	40000	350-528	390-579		678-10		
229mm 9"	-	2	2		The second second	423-605	536-758	923-108		
254mm 10"	The state of	120120	-		390-589	433-650	545-817	785-117		
279mm 11"	100 -	-	-		- 11.5	469-705	587-886	848-127		
305mm 12*	-	-	-		MINE A PRINT	506-758	643-952	928-139		
330mm 13"						-	705-1231	1017-152		
355mm 14*	-	-	-	2	THE RESERVE OF	THE THE	817-1333	1124-167		
381mm 15"	-	1512 101	-		-	Dr	863-1455	1249-187		
400mm 16"	-	-	-		-			1410-210		

### **Dimensions**





CRUSHER	A mm in:	mi	В	ins	mm	ins	mm	D	mm	ins	Carlotte and	Fins	mm	G	mm	H	mm	J ins	mm	40.0	mm	ins	mm	M ins	mm	ins	mm	oins
450×810 18*×32*	966 38	8	107	31 3	590	23 %	1296	51	610	24	520	20%	1020	40%	1239	481	152	6	457	18	1718	671	1404	55‡	616	241	42	11
500×900 20"×36"	1099 43	# 8	83	341	635	25	1372	54	470	184	394	15	1257	491	1289	501	279	11	457	18	1803	71	1441	562	610	24	38	14
630×1000 25"×40"	1165 45	ž 8	89	35	711	28	1556	61#	533	21	457	18	1448	57	1422	56	305	12	660	26	2057	81	1584	621	676	261	44	13
750×1050 30"×42"	1245 49	10	54	41 ‡	753	291	1683	66‡	762	30	673	261	1740	681	1676	66	381	15	610	24	2591	102	1943	761	750	29 1	44	12
900×1150 36"×46"	1355 53	ž 11	60	45 8	813	32	1805	71	870	34‡	780	30#	1988	74%	2108	83	438	17‡	686	27	2946	116	2407	941	840	33	48	14
1100×1200 44″×48″	1448 57	11	94	47	870	34‡	1918	75‡	965	38	800	31 4	2070	81 +	2629	1034	406	16	508	20	3200	126	2921	115	914	36	44	12
1270×1550 50"×60"	1905 75	15	37 (	60 ±	1040	41	2286	90	1120	441	865	34	2325	91 ‡	2975	117%	510	20	510	20	3700	1454	3285	129	1296	51	60	21
1670×2130 66"×84"	2346 92	18	80	74	1365	531	3048	1194	1321	52	991	39	2952	116#	4937	178‡	330	13	330	13	4533	181 ±	4605	1941	1067	42	89	34