



**WEH**

## Minerals

**Trio®**  
Jaw Crushers  
CT and CHT Series







**Our range of heavy duty Trio® jaw crushers are engineered to accommodate even the hardest of materials.**



#### **Unbeatable crushing performance**

At Weir Minerals we are committed to developing innovative and high performance products that can be relied upon in even the most demanding of environments.

The primary stage of crushing is one of the most demanding jobs in the comminution circuit. This is why our jaw crushers are among the hardest working products across our entire Trio® range.

We offer some of the heaviest jaw crushers in the industry, giving them advanced mechanical capabilities. The rugged main frame delivers reliable crushing performance, and the chamber geometry optimises wear parts serviceability. Design flexibility ensures that all our jaw crushers can be easily included in our modular plants.

#### **Comprehensive solutions**

We partner with you to understand your working environment, capacity, product gradation, and project schedule to deliver customised solutions unique to your project.

Our solutions include machine model selection, operating simulation, and on-site layout drawings.

#### **Global service and support**

We are renowned for our design, engineering and manufacturing capabilities, and deliver unsurpassed service and support. Whether you order a complete system, single machine or a spare part, our skilled service teams make Weir Minerals a valued partner in the mining and aggregate industries. We're there for you every step of the way.

We also provide professional on-site training for your personnel to promote smooth, safe and efficient plant operations and maintenance.

**Simplicity of design and rugged construction have made all of our Trio® jaw crushers ideal for all primary crushing applications.**



#### **Design features**

- Heavy construction
- Long crushing chamber
- Hydraulic adjustment of Closed Side Settings (CSS)
- Heavy duty manganese or alloy jaw dies
- Bolted construction
- Hydraulic toggle relief system (CTHT series)

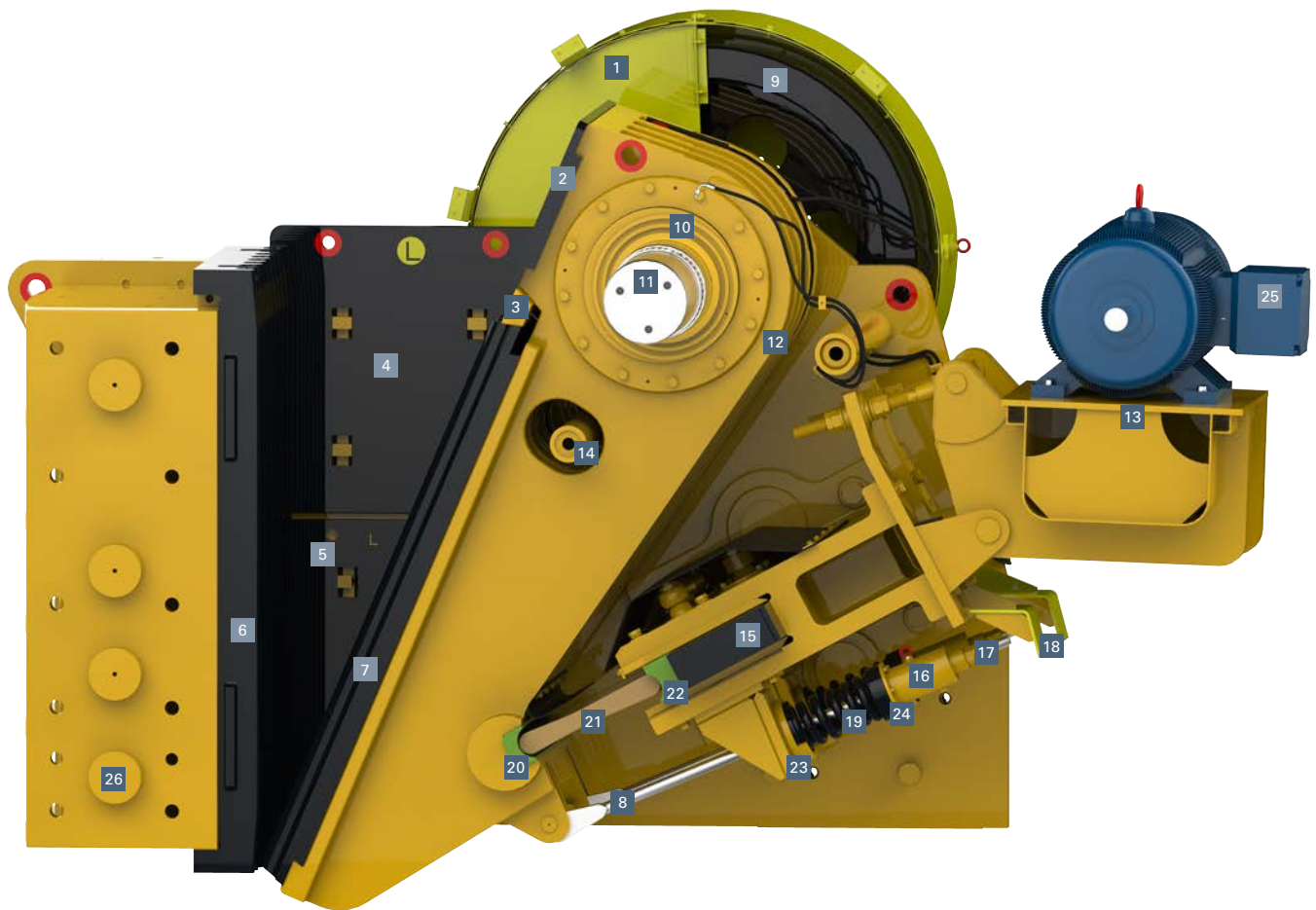
#### **Innovative and durable design**

The fixed jaw dies of our jaw crusher range incorporate a wrap-around design to protect the frame and eliminate the need for additional wedges.

Steep nip angles provide an aggressive bite at the jaw crusher opening. The maximised rotating speed and flywheel mass, together with an optimised toggle and nip angle, help to increase production and reduction performance. This allows the crusher to run smoothly and steadily, improving the productive service life of all mechanical and hydraulic components.

The crushing performance of our Trio® jaw crushers is further enhanced by an extra-large, forged steel, overhead eccentric shaft, seated in closely spaced, spherical, self-aligning roller bearings.

The modular design of our jaw crushers provides extra value by reducing transportation and installation costs, especially for underground mining projects.



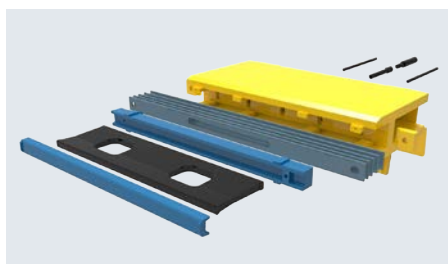
#### Trio® CT Series Jaw Crusher Product Features

- |                           |                              |                        |
|---------------------------|------------------------------|------------------------|
| 1 Flywheel safety guard   | 11 Eccentric shaft           | 21 Toggle plate        |
| 2 Pitman protection plate | 12 Pitman assembly           | 22 Upper buffer        |
| 3 Swing jaw die wedge     | 13 Pivot motor base assembly | 23 Lower spring keeper |
| 4 Upper cheek plate       | 14 Cross support             | 24 Upper spring keeper |
| 5 Lower cheek plate       | 15 Adjustment wedges         | 25 Electric motor      |
| 6 Fixed jaw die           | 16 Hydraulic cylinder        | 26 Frame pin           |
| 7 Swing jaw die           | 17 Jam nut                   |                        |
| 8 Tension rod             | 18 Guard plate               |                        |
| 9 Flywheel                | 19 Tension rod spring        |                        |
| 10 Frame bearing assembly | 20 Lower buffer              |                        |

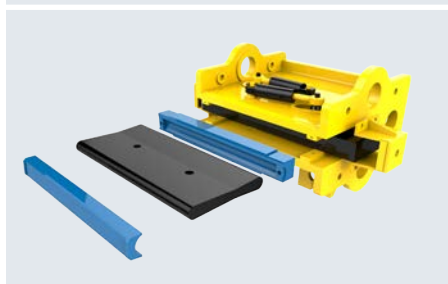
**Our Trio® jaw crushers feature a heavy-duty frame designed to deliver high value solutions, making them ideal for surface and underground primary applications.**

#### Product range

Our Trio® CT and CHT series jaw crushers are available in three different size ranges designed to deliver efficient, reliable and economical production. Supplied as either single machines, or combined with other Trio® crushers, screens, washers or conveyors, we provide customisable solutions for both portable and modular plants.



Top: Manual hydraulic adjustment system.



Bottom: Push button hydraulic adjustment system.

#### CTHT series

Our latest innovation in jaw crusher technology is the Trio® CTHT series crusher. This product features the same rugged design as our CT series jaw crusher, with the addition of a hydraulic toggle relief system (pictured below).

This innovative, built-in system is designed to protect the system from overloads caused by uncrushable material.

The hydraulic toggle used in our Trio® CTHT crusher is designed to be a reliable and safe relief system, without unnecessary complexity.





#### CT1030-CT3054 models

With the footprint of a compact crusher, our Trio® CT1030 - CT3054 jaw crushers are suitable for crushing a range of processing materials including asphalt, limestone and iron ore. The machines feature a low carbon steel, welded main frame. The rib-reinforced end plates are thermally stress-relieved to deliver an extra-heavy duty main frame. The discharge setting adjustment benefits from a push-button hydraulic cylinder and manual shim. With an economical running cost and easy operation, our Trio® CT1030 - CT3054 jaw crushers are ideal for small to medium size quarrying or mining applications. (CT3054 pictured below).



#### CT3254 - CT6080 models

With large feed openings and eccentric throw, our Trio® CT3254 - CT6080 jaw crushers are suitable for crushing large size materials in bulk quantities, including tough ores, concrete recycling and river stones. In their bolted or welded construction, the machines feature a low carbon steel, welded main frame together with a rugged eccentric shaft, high strength steel side plates, and cast front walls. The discharge setting adjustments are hydraulically actuated with a power control unit. Hydraulic nuts, with an adjustment lever, are designed to provide an operator-friendly adjustment interface. (CT4254 pictured below).



#### Jaw Crushers Heavy Duty Main Frame

- 1 Cast steel front wall
- 2 Structural steel side wall plate
- 3 Pitman saddle
- 4 Cross support
- 5 Cast steel rear wall
- 6 Structural steel side wall plate
- 7 Main frame dowel pins
- 8 Main frame bolts
- 9 Main frame locking nuts





### Results driven

When operators of a gold ore project in Mexico needed a complete crushing solution they relied on our versatile and cost effective Trio® wheel portable plants.

Our customised, turn-key solution featured a powerful Trio® jaw crusher wheel plant to complete the primary crushing functions, as well as other Trio® equipment for screening and secondary crushing applications.

On-site the plant was successfully wheeled into place and, due to the long term nature of the project, all tyres and wheels were removed for preservation.

### Equipment

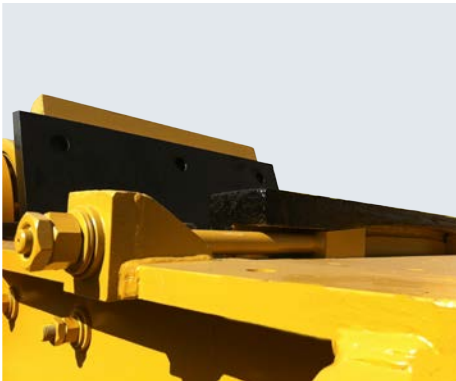
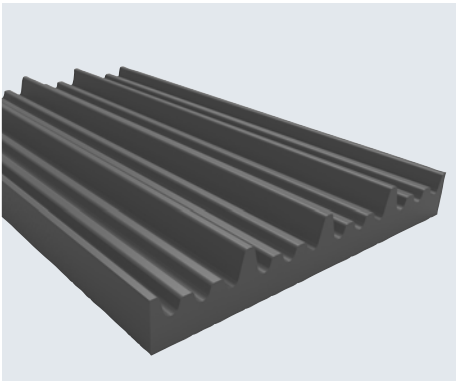
- CT3254 jaw crusher
- Two TIO 8202 inclined screens
- TC66 standard cone crusher
- Two 6202TTH horizontal screens
- Two TC51 shorthead cone crushers
- 16 conveyors

### Capacity

750mtph



**Our Trio® CT and CTHT series jaw crushers are easy to maintain, and are designed to deliver minimised downtime and maximised performance.**



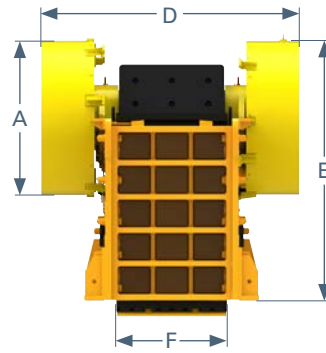
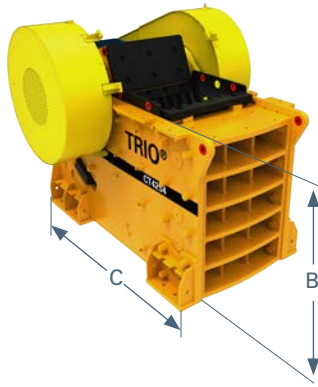
Top Left: Jaw die options vary by model.

Top Right: Tension wedges for fixed jaw dies.

Bottom Left: Advanced cheek plate bolted system with bevelled head mounting bolts.

#### Simple wear parts replacement

- Easy access threaded side tensioning wedges for fixed jaw dies
- An advanced cheek plate bolted system reduces the amount of time spent changing wear parts
- Reversible jaw dies provide extended wear life
- Fixed jaw dies incorporate a wrap-around design to protect the frame and to eliminate the need for additional wedges



### CT Series Product Range

MODEL	A mm	B mm	C mm	D mm	E mm	F mm
CT1030	1,160	770	1,912	1,790	1,500	835
CT1040	1,160	770	1,964	2,040	1,500	1,085
CT1048	1,160	770	1,984	2,310	1,325	1,285
CT1252	1,170	860	2,117	2,600	1,570	1,385
CT2036	1,310	1,258	2,280	2,020	2,100	990
CT2436	1,630	1,545	2,596	1,910	2,550	990
CT2645	1,310	1,465	2,485	2,380	2,200	1,194
CT3042	1,720	1,895	3,073	2,295	2,900	1,155
NCT3042	1,285	1,715	2,557	2,290	2,350	1,130
CT3054	1,540	1,640	2,781	2,700	2,560	1,436
CT3254	1,760	1,670	3,034	2,850	2,660	1,436
CT3648	1,810	1,902	3,753	2,890	3,065	1,310
CT4254	1,900	2,254	4,102	3,230	3,290	1,482
CT4763	2,120	2,715	4,585	3,675	3,880	1,730
CT6080	2,960	3,132	6,335	4,170	4,800	2,150

### CT Series Typical Physical Properties

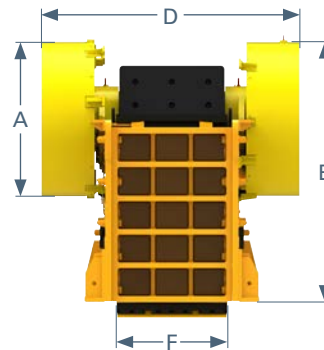
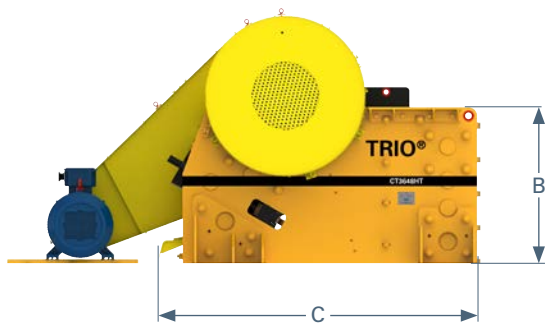
MODEL	FEED OPENING	WEIGHT		CSS		CAPACITY		SPEED	FEED SIZE		POWER	
	mm x mm	kg	lbs	mm	in	mtph	stph	rpm	mm	in	kw	hp
CT1030	250x750	6,000	13,228	25-90	1-3.6	23-60	25-65	300	210	8.4	30	40
CT1040	250x1,000	6,911	15,236	25-90	1-3.6	30-79	30-85	300	210	8.4	37	50
CT1048	250x1,200	8,258	18,206	25-90	1-3.6	35-95	40-105	300	210	8.4	55	75
CT1252	320x1,300	10,800	23,810	25-90	1-3.6	50-130	55-140	265	250	10	55	75
CT2036	500x900	11,700	25,794	50-125	2-5	80-220	85-240	250	400	16	55	75
CT2436	600x900	14,800	32,628	75-190	3-7.6	120-350	130-385	250	500	20	75	100
CT2645	660x1,140	18,000	39,683	75-180	3-7.2	155-500	170-600	280	530	21.2	90	125
CT3042	750x1,060	24,900	54,895	75-180	3-7.2	200-500	220-550	250	630	25.2	110	150
NCT3042	750x1,060	20,321	44,800	75-200	3-8	150-500	165-550	270	630	25.2	110	150
CT3054	750x1,350	24,100	53,131	75-200	3-8	240-570	265-625	260	600	24	132	175
CT3254	800x1,370	28,913	63,742	75-180	3-7.2	240-570	265-625	250	650	26	132	175
CT3648	900x1,200	43,321	95,506	100-250	4-10	300-850	330-935	225	750	30	160	200
CT4254	1,060x1,370	58,152	128,203	125-250	5-10	400-900	440-990	220	900	36	200	300
CT4763	1,200x1,600	81,620	179,941	150-300	6-12	520-1,180	570-1,300	200	1,020	40.8	250	350
CT6080	1,500x2,000	148,000	326,284	175-310	7-12.4	675-1,575	740-1,730	200	1,300	52	400	500

**NOTE:** Results may vary depending on hardness of materials, feed material gradation, moisture content, friability, RPM required power installed, and application. Please consult Weir Minerals for specific capacity for your application.









### CTHT Series Product Range

MODEL	A mm	B mm	C mm	D mm	E mm	F mm
CTHT2036	1,310	1,258	2,474	2,020	2,100	990
CTHT2436	1,630	1,510	2,651	1,910	2,550	990
CTHT2645	1,310	1,465	2,768	2,380	2,200	1,194
CTHT3042	1,720	1,895	3,110	2,295	2,900	1,155
CTHT3054	1,540	1,640	2,800	2,700	2,560	1,436
CTHT3254	1,760	1,670	3,150	2,850	2,660	1,436
CTHT3648	1,810	1,902	3,714	2,890	3,065	1,310
CTHT4254	1,900	2,254	4,284	3,230	3,290	1,482
CTHT4763	2,120	2,715	4,615	3,675	3,880	1,730
CTHT6080	2,960	3,132	6,435	4,170	4,800	2,150

### CTHT Series Typical Physical Properties

MODEL	FEED OPENING	WEIGHT		CSS		CAPACITY		SPEED	FEED SIZE		POWER	
	mm x mm	kg	lbs	mm	in	mtph	stph	rpm	mm	in	kw	hp
CTHT2036	500x900	11,973	26,396	50-112	2-4.5	80-210	90-230	250	400	16	55	75
CTHT2436	600x900	14,721	32,454	70-190	3-7.6	110-350	120-385	250	500	20	75	100
CTHT2645	660x1,140	18,319	40,386	115-220	4.5-8.8	155-500	170-550	280	530	21.2	90	125
CTHT3042	750x1,060	25,200	55,556	75-180	3-7.2	200-500	220-550	250	630	25.2	110	150
CTHT3054	750x1,350	25,100	55,336	75-200	3-8	240-570	265-625	260	600	24	132	175
CTHT3254	800x1,370	30,200	66,580	75-180	3-7.2	240-570	265-625	250	650	26	132	175
CTHT3648	900x1,200	46,309	102,094	100-250	4-10	300-850	330-935	225	750	30	160	200
CTHT4254	1,060x1,370	61,102	134,707	125-250	5-10	400-900	440-990	220	900	36	200	300
CTHT4763	1,200x1,600	84,120	185,453	150-300	6-12	520-1,180	570-1,300	200	1,020	40.8	250	350
CTHT6080	1,500x2,000	152,000	335,102	175-310	7-12.4	675-1,575	740-1,730	200	1,300	52	400	500

**NOTE:** Results may vary depending on hardness of materials, feed material gradation, moisture content, friability, RPM required power installed, and application. Please consult Weir Minerals for specific capacity for your application.





CT and CHT Jaw Crusher Discharge Gradations (hard, average)																										
PRODUCT SIZE (mm/in)	SPECIFIED CLOSED SIDE SETTING																									
	38 mm/ 1.5 in	51 mm/ 2 in	64 mm/ 2.5 in	76 mm/ 3.0 in	89 mm/ 3.5 in	102 mm/ 4.0 in	114 mm/ 4.5 in	127 mm/ 5 in	152 mm/ 6 in	178 mm/ 7 in	203 mm/ 8 in	229 mm/ 9 in	254 mm/ 10 in													
	hard avg	hard avg	hard avg	hard avg	hard avg	hard avg	hard avg	hard avg	hard avg	hard avg	hard avg	hard avg	hard avg													
483/19													100													
457/18												100	99													
406/16											100	98	96													
381/15											99	97	95													
356/14										100	98	96	92													
330/13										99	96	93	89 100													
305/12									100	97	95	90 100	84 96													
279/11									99	96	91 100	85 97	78 91													
254/10								100	97	93 100	87 98	79 91	70 85													
229/9							100	98	95 100	88 97	80 92	70 85	60 77													
203/8						100	98 100	96 100	90 97	81 92	70 85	60 77	52 70													
179/7					100	98 100	96 98	92 97	82 92	70 85	58 76	50 68	45 60													
152/6				100	97 100	95 98	90 95	84 93	70 85	57 74	48 65	43 57	39 49													
127/5			100	97 100	93 98	87 96	79 90	70 85	55 72	46 62	40 52	36 47	33 39													
114/4.5			98	95 98	88 94	80 89	70 85	60 75	48 62	42 53	37 45	33 39	30 35													
102/4		100	96 100	90 97	81 92	70 85	60 75	52 70	43 56	37 45	33 40	29 34	27 29													
89/3.5		98	92 98	82 92	70 85	58 73	50 65	45 58	38 48	33 40	29 33	26 28	24 26													
76/3	100	95 100	84 93	70 85	57 72	48 62	43 55	39 49	33 38	28 32	25 27	23 24	21 22													
64/2.5	97 100	87 98	70 85	55 72	46 60	40 53	34 45	33 40	28 34	24 24	22 23	20 20	19 18													
51/2	90 98	70 85	52 67	43 56	37 47	33 41	29 37	27 34	23 29	20 20	19 18	17 17	16 14													
44/1.75	82 89	58 76	45 58	38 49	33 40	29 36	26 32	24 30	21 26	19 18	17 16	15 14	14 13													
38/1.5	70 85	48 64	39 49	33 42	28 37	25 33	23 29	21 27	19 23	17 16	15 14	14 13	13 12													
32/1.25	55 70	40 55	33 43	28 36	24 33	22 30	20 25	19 24	16 19	14 14	13 13	12 12	11 11													
25/1	43 56	33 44	27 36	23 30	20 28	19 26	17 22	16 20	14 17	12 12	11 12	10 11	10 10													
19/0.75	33 42	25 34	21 29	19 25	17 22	15 20	14 17	13 16	11 13	10 11	9 10	9 9	8 8													
13/0.5	23 33	19 25	16 23	14 19	12 17	11 14	10 13	10 12	9 10	8 8	7 8	7 7	6 6													
6/0.25	14 20	11 15	10 13	9 12	8 11	7 10	7 8	6 7	6 6	5 5	5 4	5 4	4 3													

CT and CHT Jaw Crusher Capacity Chart

MODEL	CLOSED SIDE SETTING													
	38 mm/ 1.5 in	51 mm/ 2 in	64 mm/ 2.5 in	76 mm/ 3.0 in	89 mm/ 3.5 in	102 mm/ 4.0 in	114 mm/ 4.5 in	127 mm/ 5 in	152 mm/ 6 in	178 mm/ 7 in	203 mm/ 8 in	229 mm/ 9 in	254 mm/ 10 in	
CT1030	23-36	34-41	44-53	51-60	53-65	-	-	-	-	-	-	-	-	
CT1040	30-44	41-50	53-65	62-73	65-79	-	-	-	-	-	-	-	-	
CT1048	35-53	50-60	64-78	74-88	78-95	-	-	-	-	-	-	-	-	
CT1252	54-68	64-77	82-100	95-113	100-122	109-136	118-154	-	-	-	-	-	-	
CT2036	-	80-92	92-110	110-120	115-135	120-155	145-180	175-220	-	-	-	-	-	
CT2436	-	-	-	110-120	115-135	120-155	145-180	175-220	210-280	-	-	-	-	
CT2645	-	-	-	115-155	150-190	185-225	202-242	234-284	240-330	-	-	-	-	
CT3042	-	-	-	109-145	127-163	190-235	172-240	204-270	285-340	-	-	-	-	
NCT3042	-	-	-	109-145	127-163	190-235	172-240	204-270	285-340	-	-	-	-	
CT3054	-	-	-	-	-	200-260	240-300	280-345	320-415	390-480	470-570	-	-	
CT3254	-	-	-	-	-	200-260	240-300	280-345	320-415	390-480	470-570	-	-	
CT3648	-	-	-	-	-	190-250	225-270	245-315	310-365	350-435	410-495	-	-	
CT4254	-	-	-	-	-	255-300	280-340	320-385	360-455	430-520	495-585	545-650	610-710	
CT4763	-	-	-	-	-	-	-	365-435	410-485	475-545	535-620	600-680	665-755	
CT6080	-	-	-	-	-	-	-	-	-	545-630	620-710	680-775	755-855	

**NOTE:** All throughput capacities are indicated in metric tons per hour. Capacities are based on material of average competence with a bulk density of 1.6 metric tons per cubic meter. Capacities indicated are neither minimum or maximum capacities. Capacities will vary with feed size, material flow characteristics and material fragmentation characteristics. Proper performance at lowest operating cost is achieved when undersized material is removed prior to crushing.









## Minerals

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