

# PATRIOT® CONE CRUSHER

P200 / P300 / P400 / P500HD

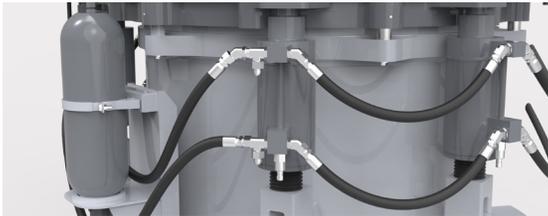
- We take your uptime very seriously and have an experienced team of passionate support agents eager to serve.
- Crushing equipment is backed by the industry's only two-year standard warranty and one-year parts warranty.
- Major components cast of high-grade steel, exceeding industry standards in structural integrity.

# PATRIOT CONE KEY ADVANTAGES



## RAISED CONE HEAD SEATING SURFACE

- Provide the ability to recondition the head seating surface up to 3 times without welding on the casting.



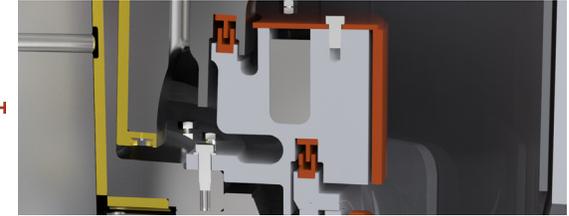
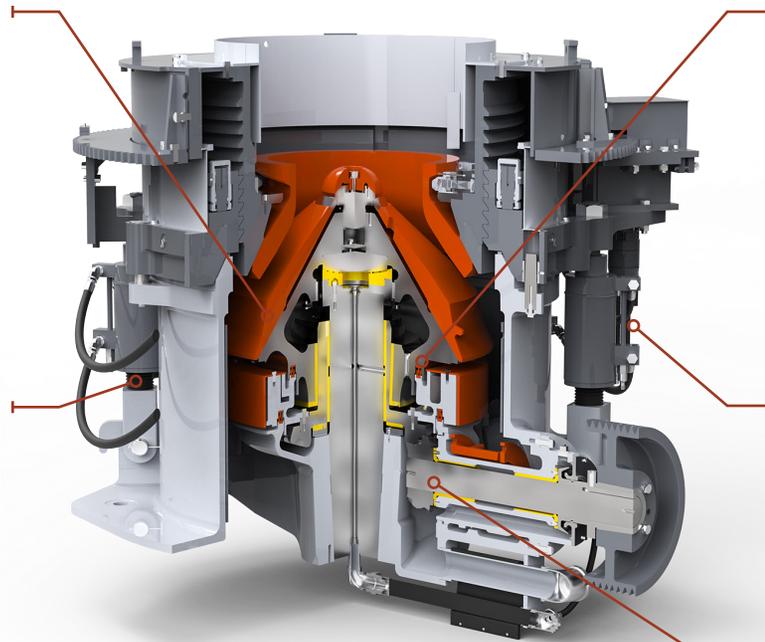
## INVERTED TRAMP RELEASE CYLINDERS

- Inverted design where hydraulic cylinder rod seal is not exposed during operation.
- Greatly reduces chances of contamination and failure.



## ROBUST ECCENTRIC AND CLAMP RING

- Takes advantage of higher strength to weight ratio ductile iron contains.
- Ductile iron has higher tensile and fatigue strength than grey iron.
- Ductile iron is less brittle and resists fracturing better than grey iron.
- Ductile iron is more impact resistant.



## URETHANE "U" AND "T" SEALS

- Easily replaceable counterweight seals.
- Reduced maintenance costs and downtime.



## TRAMP RELIEF SYSTEM W/ FEW ACCUMULATORS

- If an accumulator fails, the internal relief valve provides instantaneous relief.
- Prevents costly damage to the crushing chamber.
- Fewer accumulators mean minimized maintenance and opportunity for failure.

## HEAVY DUTY ADJUSTMENT RING & BASE FRAME

- Robustly designed adjustment ring built to withstand tough applications.
- Increased flange thickness at mounting point to base frame.
- Able to withstand tough applications.

## COUNTERCLOCKWISE COUNTER-SHAFT ROTATION

- With loss of pressure, the crusher opens.
- Reduces potential of catastrophic failure.



## SPIRAL BEVEL GEARS

- Spiral tooth gearing engages more gradually giving an efficient transfer of horsepower.
- Proven to perform at higher speeds with less noise and vibration.

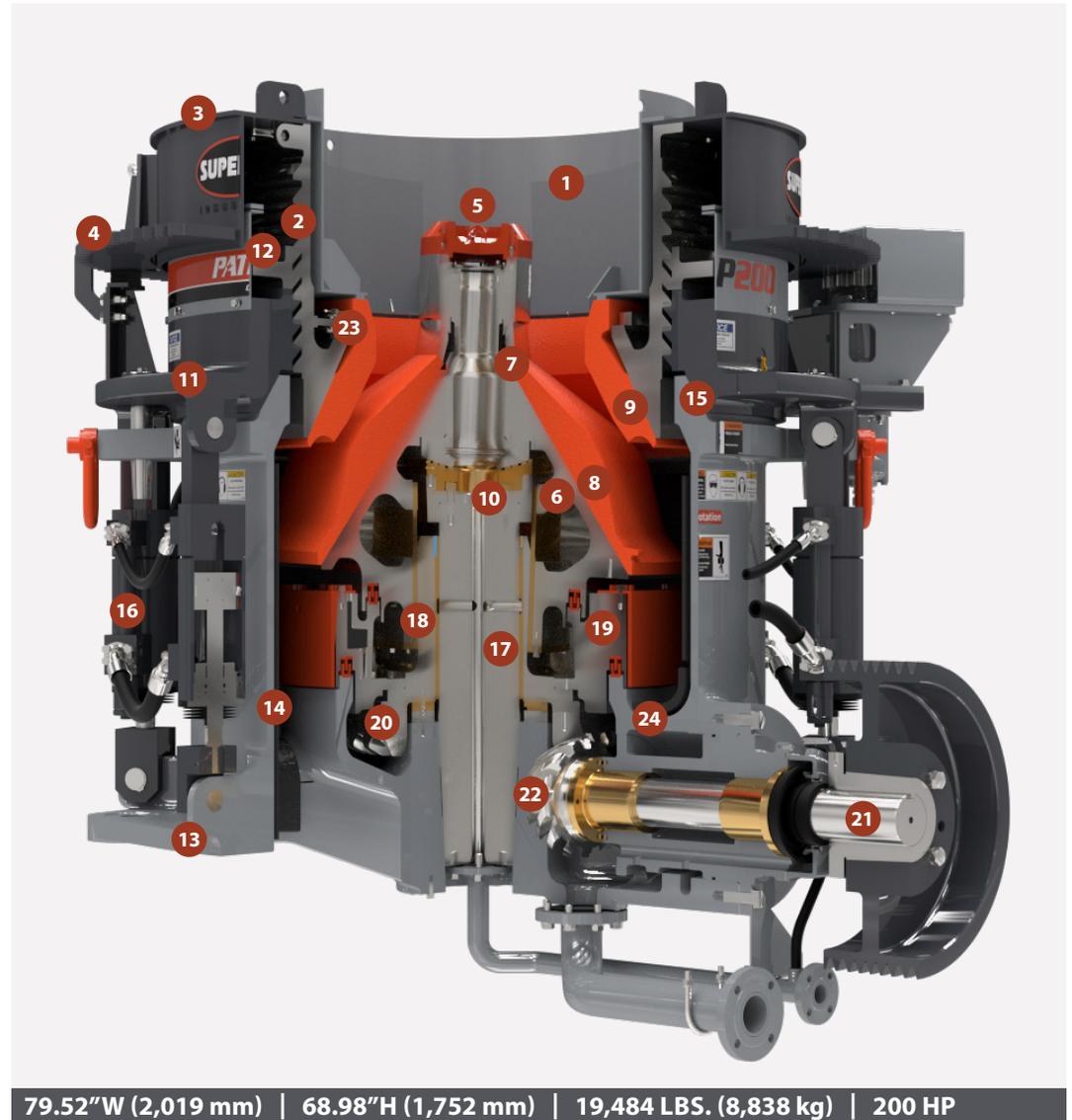
# P200 SPECIFICATIONS

## CAPACITY CHART

Setting inch (mm)	Min Capacity TPH (MTPH)	Max Capacity TPH (MTPH)
5/16" (8.0)	75 (68)	100 (91)
3/8" (10.0)	95 (86)	135 (123)
1/2" (13.0)	130 (118)	170 (154)
5/8" (16.0)	145 (132)	215 (195)
3/4" (19.0)	170 (154)	220 (200)
7/8" (22.0)	180 (163)	230 (209)
1" (25.0)	190 (172)	245 (222)
1-1/4" (32.0)	205 (186)	265 (240)
1-1/2" (38.0)	220 (200)	285 (259)
1-3/4" (45.0)	250 (227)	310 (281)
2" (51.0)	270 (245)	340 (308)

## FEATURES

- |                        |                            |                   |
|------------------------|----------------------------|-------------------|
| 1/ Hopper Assembly     | 9/ Bowl Liner              | 17/ Main Shaft    |
| 2/ Bowl                | 10/ Socket Liner           | 18/ Eccentric     |
| 3/ Adjustment Cap      | 11/ Adjustment Ring        | 19/ Counterweight |
| 4/ Drive Ring          | 12/ Clamping Cylinder      | 20/ Gear          |
| 5/ Feed Plate Assembly | 13/ Main Frame             | 21/ Countershaft  |
| 6/ Head Assembly       | 14/ Main Frame Liner       | 22/ Pinion        |
| 7/ Torch Ring          | 15/ Main Frame Seat Liner  | 23/ Wedge         |
| 8/ Mantle              | 16/ Tramp Release Cylinder | 24/ Arm Guard     |



79.52"W (2,019 mm) | 68.98"H (1,752 mm) | 19,484 LBS. (8,838 kg) | 200 HP

\*All capacities are based on a bulk density of 100 lbs. per cu. ft. and a work index of 13.

Superior Industries

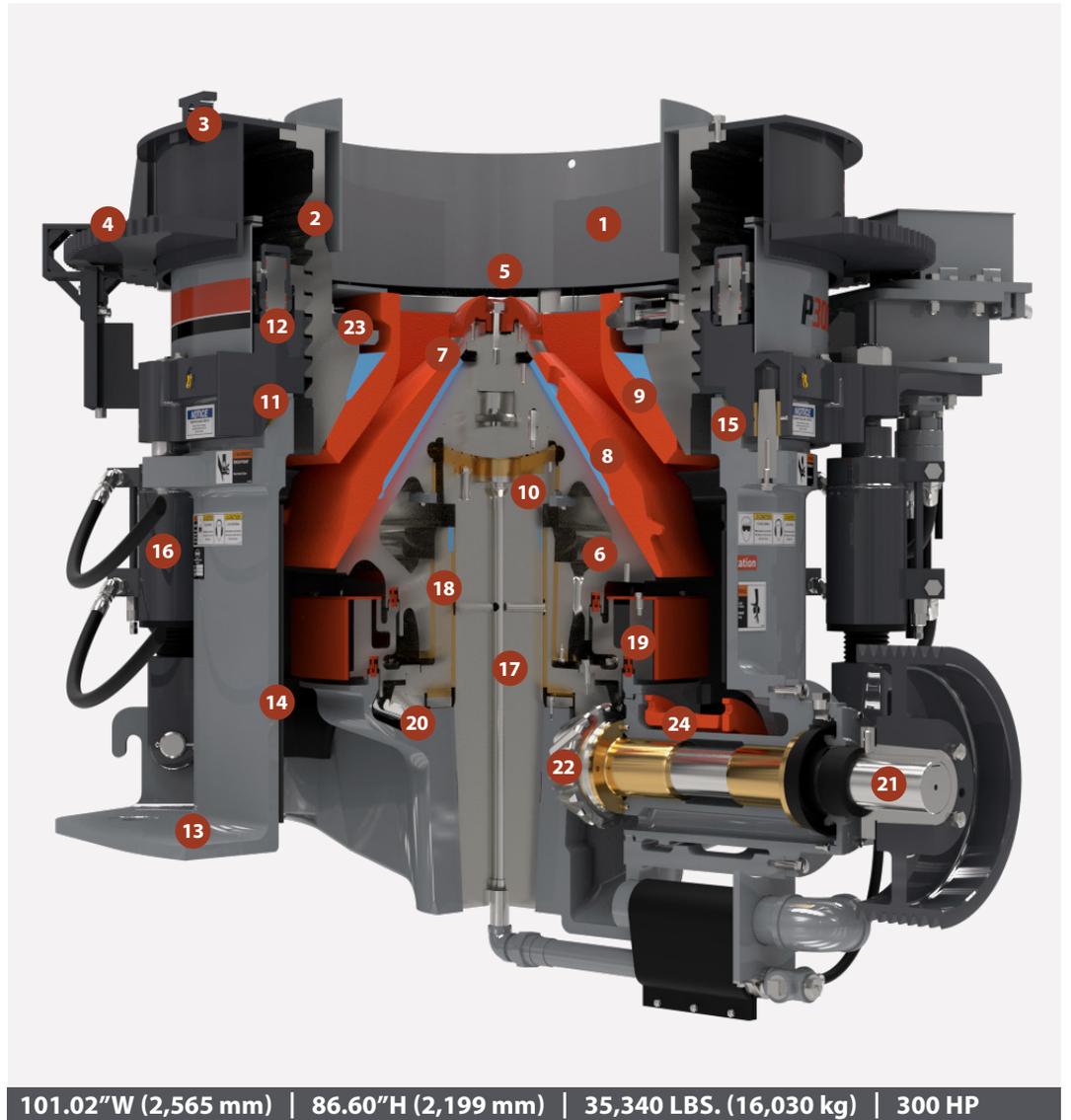
# P300 SPECIFICATIONS

## CAPACITY CHART

Setting inch (mm)	Min Capacity TPH (MTPH)	Max Capacity TPH (MTPH)
3/8" (10.0)	135 (123)	180 (163)
1/2" (13.0)	160 (145)	220 (200)
5/8" (16.0)	190 (172)	260 (236)
3/4" (19.0)	210 (191)	300 (272)
7/8" (22.0)	230 (209)	335 (304)
1" (25.0)	245 (222)	365 (331)
1-1/4" (32.0)	265 (240)	400 (363)
1-1/2" (38.0)	320 (290)	445 (404)
1-3/4" (45.0)	365 (331)	500 (454)
2" (51.0)	400 (363)	540 (490)

## FEATURES

- |                        |                            |                            |
|------------------------|----------------------------|----------------------------|
| 1/ Hopper Assembly     | 9/ Bowl Liner              | 17/ Main Shaft             |
| 2/ Bowl                | 10/ Socket Liner           | 18/ Eccentric              |
| 3/ Adjustment Cap      | 11/ Adjustment Ring        | 19/ Counterweight          |
| 4/ Drive Ring          | 12/ Clamping Cylinder      | 20/ Gear                   |
| 5/ Feed Plate Assembly | 13/ Main Frame             | 21/ Countershaft           |
| 6/ Head Assembly       | 14/ Main Frame Liner       | 22/ Pinion                 |
| 7/ Torch Ring          | 15/ Main Frame Seat Liner  | 23/ Wedge                  |
| 8/ Mantle              | 16/ Tramp Release Cylinder | 24/ Countershaft Box Guard |



101.02"W (2,565 mm) | 86.60"H (2,199 mm) | 35,340 LBS. (16,030 kg) | 300 HP

\*All capacities are based on a bulk density of 100 lbs. per cu. ft. and a work index of 13.

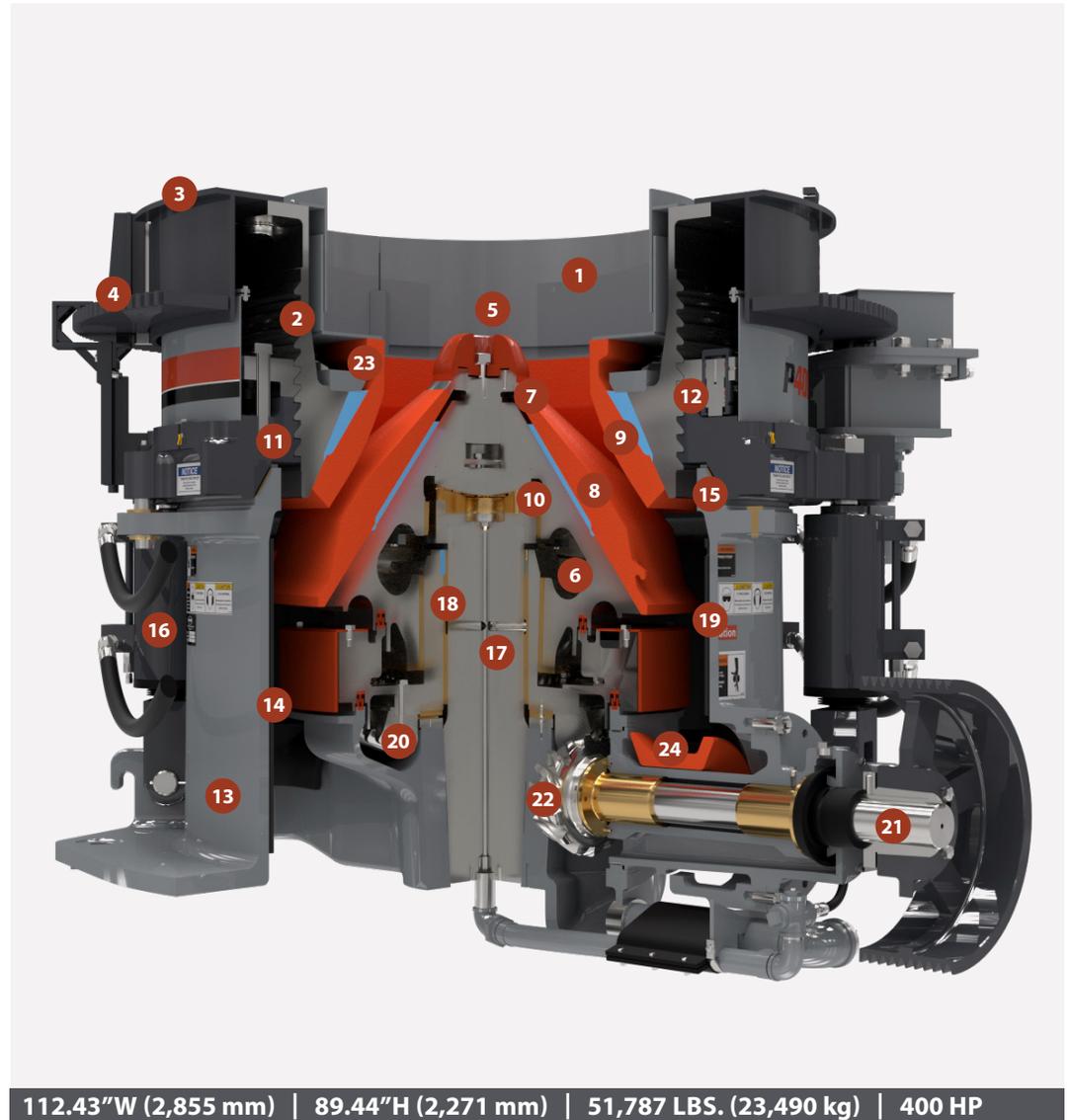
# P400 SPECIFICATIONS

## CAPACITY CHART

Setting inch (mm)	Min Capacity TPH (MTPH)	Max Capacity TPH (MTPH)
3/8" (10.0)	140 (127)	200 (181)
1/2" (13.0)	195 (177)	250 (227)
5/8" (16.0)	235 (213)	300 (272)
3/4" (19.0)	265 (240)	340 (308)
7/8" (22.0)	290 (263)	375 (340)
1" (25.0)	310 (281)	415 (377)
1-1/4" (32.0)	340 (309)	465 (422)
1-1/2" (38.0)	375 (340)	525 (476)
1-3/4" (45.0)	430 (390)	580 (526)
2" (51.0)	480 (436)	640 (581)

## FEATURES

- |                        |                            |                            |
|------------------------|----------------------------|----------------------------|
| 1/ Hopper Assembly     | 9/ Bowl Liner              | 17/ Main Shaft             |
| 2/ Bowl                | 10/ Socket Liner           | 18/ Eccentric              |
| 3/ Adjustment Cap      | 11/ Adjustment Ring        | 19/ Counterweight          |
| 4/ Drive Ring          | 12/ Clamping Cylinder      | 20/ Gear                   |
| 5/ Feed Plate Assembly | 13/ Main Frame             | 21/ Countershaft           |
| 6/ Head Assembly       | 14/ Main Frame Liner       | 22/ Pinion                 |
| 7/ Torch Ring          | 15/ Main Frame Seat Liner  | 23/ Wedge                  |
| 8/ Mantle              | 16/ Tramp Release Cylinder | 24/ Countershaft Box Guard |



112.43"W (2,855 mm) | 89.44"H (2,271 mm) | 51,787 LBS. (23,490 kg) | 400 HP

\*All capacities are based on a bulk density of 100 lbs. per cu. ft. and a work index of 13.

Superior Industries

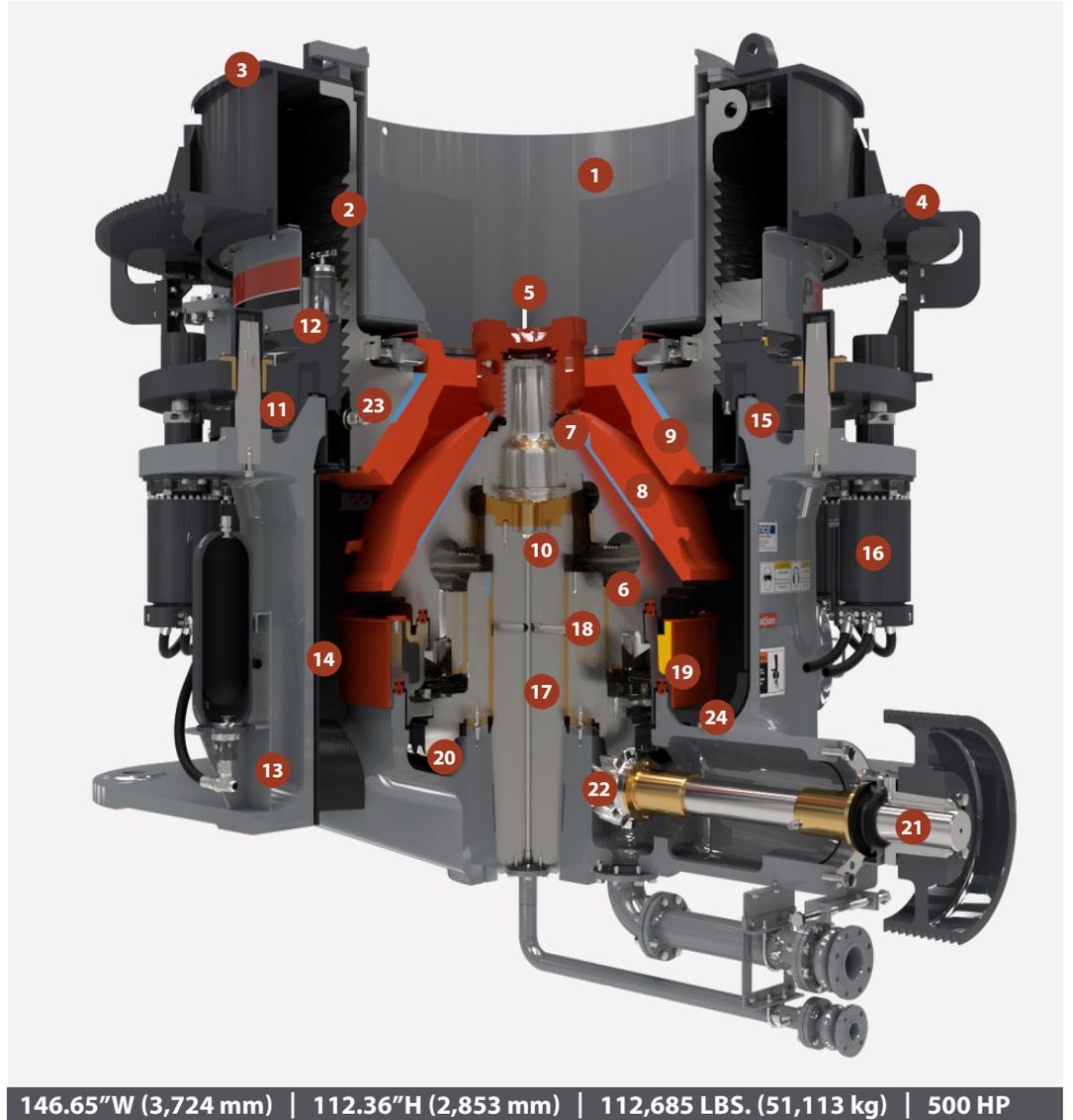
# P500HD SPECIFICATIONS

## CAPACITY CHART\*

Setting inch (mm)	Min Capacity TPH (MTPH)	Max Capacity TPH (MTPH)
3/8" (10.0)	215 (195)	300 (272)
1/2" (13.0)	280 (254)	355 (322)
5/8" (16.0)	340 (308)	420 (381)
3/4" (19.0)	390 (354)	480 (436)
7/8" (22.0)	415 (377)	520 (472)
1" (25.0)	450 (408)	560 (508)
1-1/4" (32.0)	500 (454)	610 (553)
1-1/2" (38.0)	560 (508)	675 (612)
1-3/4" (45.0)	640 (581)	805 (730)
2" (51.0)	690 (626)	820 (744)

## FEATURES

- |                        |                            |                            |
|------------------------|----------------------------|----------------------------|
| 1/ Hopper Assembly     | 9/ Bowl Liner              | 17/ Main Shaft             |
| 2/ Bowl                | 10/ Socket Liner           | 18/ Eccentric              |
| 3/ Adjustment Cap      | 11/ Adjustment Ring        | 19/ Counterweight          |
| 4/ Drive Ring          | 12/ Clamping Cylinder      | 20/ Gear                   |
| 5/ Feed Plate Assembly | 13/ Main Frame             | 21/ Countershaft           |
| 6/ Head Assembly       | 14/ Main Frame Liner       | 22/ Pinion                 |
| 7/ Torch Ring          | 15/ Main Frame Seat Liner  | 23/ Wedge                  |
| 8/ Mantle              | 16/ Tramp Release Cylinder | 24/ Countershaft Box Guard |



146.65"W (3,724 mm) | 112.36"H (2,853 mm) | 112,685 LBS. (51,113 kg) | 500 HP

\*All capacities are based on a bulk density of 100 lbs. per cu. ft. and a work index of 13.

# WORLD-CLASS SERVICE AND SUPPORT

- Strive for a 2 hour response time from service agents.
- US-based support staff limits wait time for North American customers.
- Commitment to getting crusher operating as expected.
- Investment in smart, hard-working and industry experienced service team.
- Direct line to technical support group, 24-hours a day at **+1 (320) 589-7485**.



## QUICK DELIVERED PARTS

- Large inventory increases parts availability and reduces wait time.
- Centrally-located warehouse for quick deliveries in North America.
- Critical third party parts are inspected for integrity.
- High quality factory parts are backed by fitup assurance.
- 1-Year Parts Warranty:
  - ↳ Covers new parts against defects in material or workmanship.
  - ↳ Excludes normal wear and tear.



## WARRANTY

- We offer the industry's only 2-year product and 1-year parts' warranties, confirming our commitment to you.



# CONE CRUSHER PRODUCT DISTRIBUTION

(PERCENT PASSING) FOR A GIVEN CLOSED SIDE SETTING - AVERAGE FEED MATERIAL (12-14wi)

Product Size inch (mm)	3/8" (10 mm)	1/2" (13 mm)	5/8" (16 mm)	3/4" (19 mm)	7/8" (22 mm)	1" (25 mm)	1-1/4" (31 mm)	1-1/2" (38 mm)	2" (50 mm)
5" (125.0)									
4" (100.0)									100.0
3" (75.0)								100.0	96.0
2-1/2" (63.0)							100.0	97.0	89.0
2" (50.0)						100.0	98.0	90.0	71.0
1-3/4" (45.0)					100.0	99.0	95.0	83.0	60.0
1-1/2" (38.0)				100.0	99.0	96.0	88.0	72.0	49.0
1-1/4" (31.0)			100.0	99.0	96.0	90.0	74.0	55.0	39.0
1" (25.0)		100.0	99.0	95.0	86.0	76.0	56.0	41.0	30.0
7/8" (22.0)	100.0	99.0	96.0	89.0	78.0	66.0	46.0	35.0	26.0
3/4" (19.0)	99.0	96.0	90.0	79.0	68.0	57.0	38.0	30.0	22.0
5/8" (16.0)	97.0	91.0	80.0	69.0	56.0	46.0	31.0	25.0	18.0
1/2" (13.0)	92.0	81.0	69.0	57.0	45.0	36.0	26.0	20.0	15.0
3/8" (10.0)	81.0	66.0	54.0	45.0	34.0	28.0	20.0	15.0	11.5
1/4" (6.0)	58.0	45.0	36.0	30.0	24.0	19.0	14.0	11.0	8.0
4M (5.0)	45.0	35.0	28.0	23.0	18.0	15.0	11.0	9.0	6.0
6M (3.0)	33.0	26.0	21.0	17.0	13.0	11.0	8.0	6.0	4.0
8M (2.0)	26.0	20.0	16.0	13.0	10.0	8.0	5.0	4.0	2.0

Values will vary depending on feed distribution, cavity level, feed gradation, crushing chamber, moisture, and material density.



[WWW.SUPERIOR-IND.COM](http://WWW.SUPERIOR-IND.COM)