



PATRIOT® CONE CRUSHER

Secondary or Tertiary Crusher For Aggregate and Mining Applications.

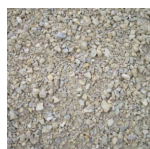
FEATURES

- » Standard lifetime warranty protects costliest components.
- » Backed by eager service team who respond quickly.
- » High-grade steel components, which exceed industry standards.
- » Committed to large inventory of parts for fast deliveries.

APPLICATIONS



Ore/Hard
Rock Mining



Quarried
Stone



River
Gravel



Recycle
Concrete





Fractured
Gravel



Cubical
products

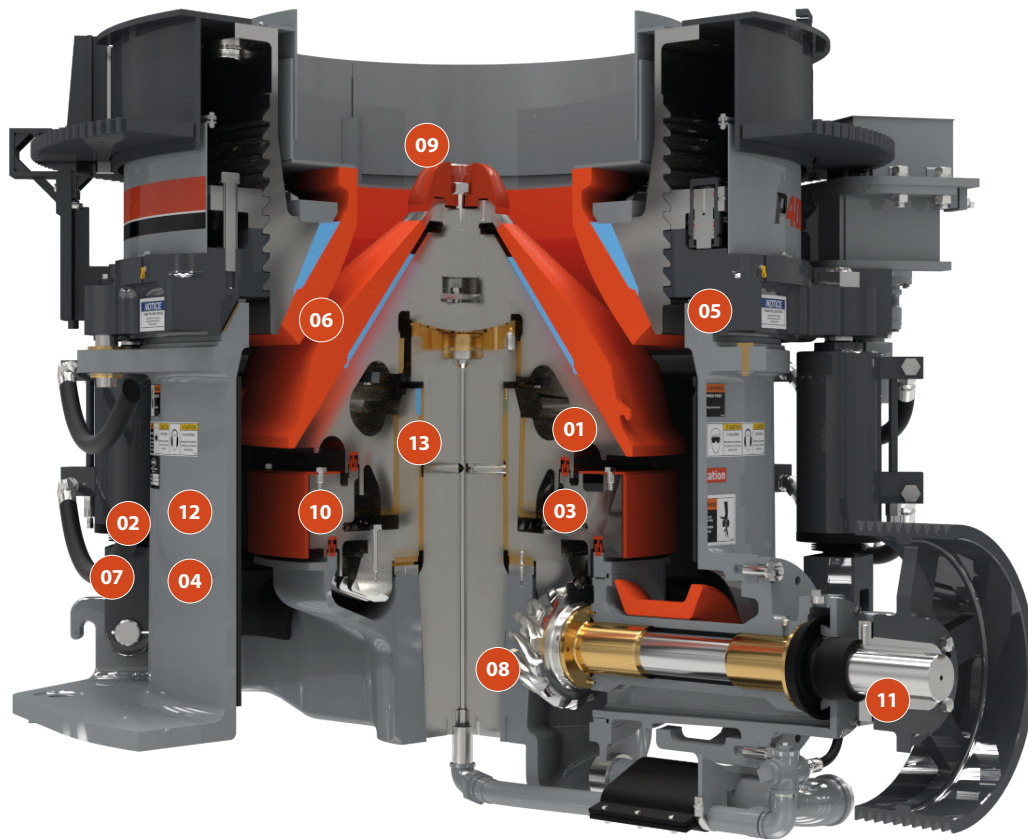


Super Pave
Products

Wheeled 
Stationary 

Rock Face to Load Out®





01/ RAISED CONE HEAD SEATING SURFACE

Machined surface can be reconditioned up to 3X without need for additional welding.

02/ INVERTED TRAMP RELIEF CYLINDERS

Reverse design ensures hydraulic seal is not exposed to contamination during operation.

03/ URETHANE "U" & "T" SEALS

Opposed to steel, this non-contact seal blocks dust better, wears slower and takes less time to replace.

04/ MAINFRAME INSPECTION PORTS (P200, P500, P600)

Simplify access to mainframe for inspections.

05/ REPLACEABLE SEAT LINERS

Bronze liners protect mainframe and adjustment ring from wear.

06/ UNIVERSAL CRUSHING CHAMBER

Other than minor wear parts, design requires no major changeouts when transitioning from secondary and tertiary applications.

07/ TRAMP RELIEF SYSTEM

Designed with fewer accumulators for less maintenance and failure points. Automatic pressure relief valve adds additional protection.

08/ SPIRAL TOOTH GEARING

Proven to perform at higher speeds while causing less vibration and noise.

09/ HIGH PIVOT POINT GEOMETRY

Movement of feedplate creates a more active feed opening, drawing more material into cavity with fewer plugs.

10/ ENCLOSED COUNTERWEIGHT

Protects against the flow of material, which allows crusher to maintain balance. Guard provides additional wear protection.

11/ COUNTERCLOCKWISE COUNTERSHAFT

If loss of clamping pressure, this unique rotation causes crusher to open rather than turn down, tighten and cause significant damage.

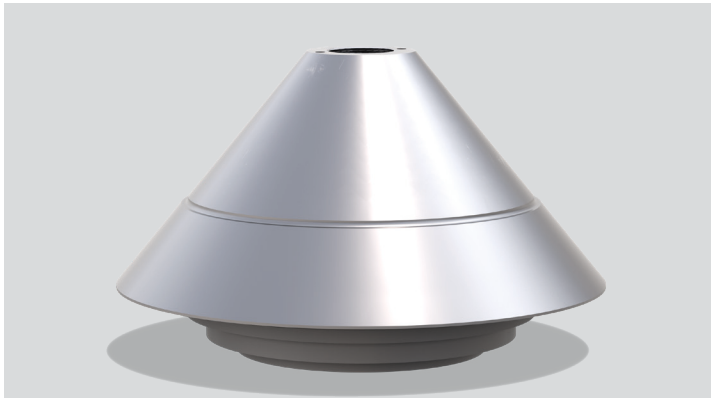
12/ ONE PIECE CAST MAINFRAME

Removes any welding for highest possible strength and durability.

13/ ECCENTRIC & CLAMP RING

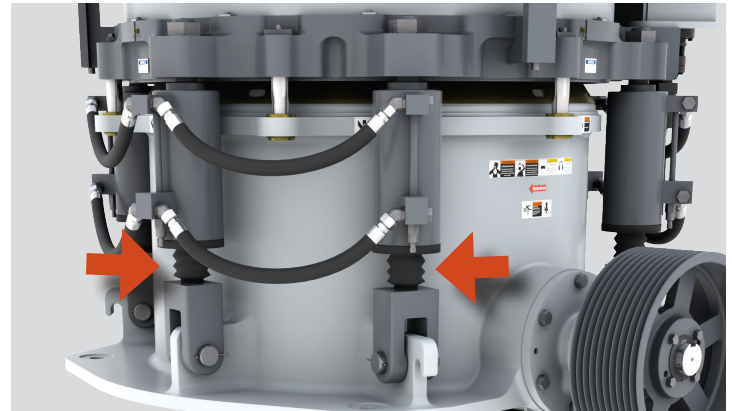
Manufactured with ductile iron which has higher tensile and fatigue strength, resists fracturing and is more impact resistant.

HIGHLIGHTS



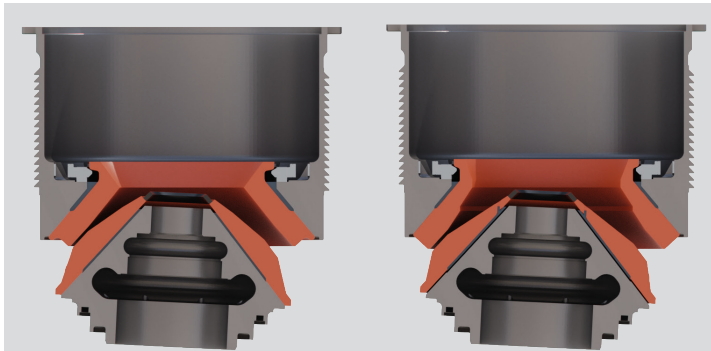
01/ RAISED CONE HEAD SEATING SURFACE

- » Allows reconditioning of head seating surface



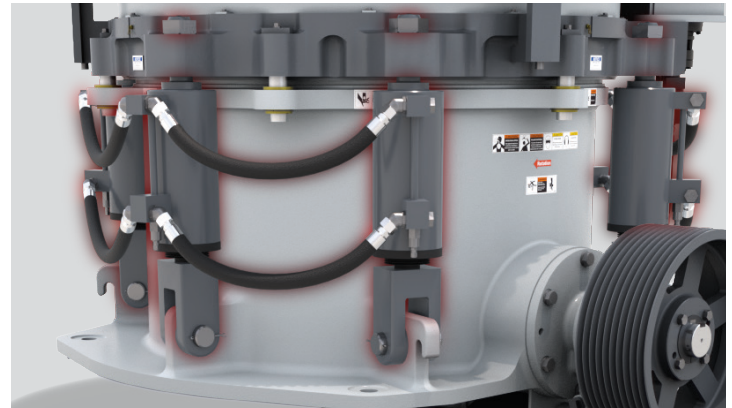
02/ INVERTED TRAMP RELIEF CYLINDERS

- » Reverse design ensures hydraulic seal is not exposed to contamination during operation



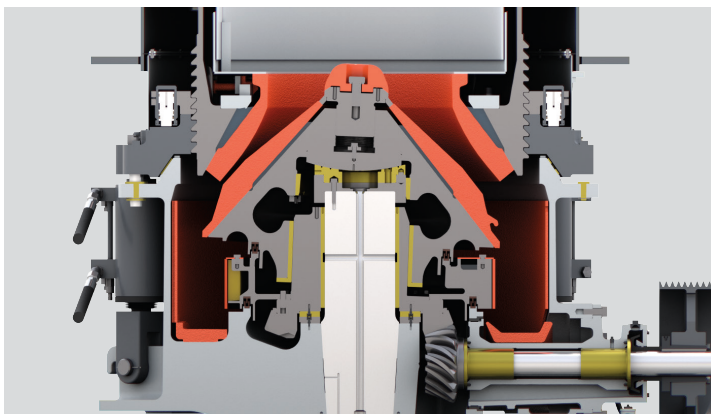
06/ UNIVERSAL CRUSHING CHAMBER

- » Application flexibility from secondary to tertiary



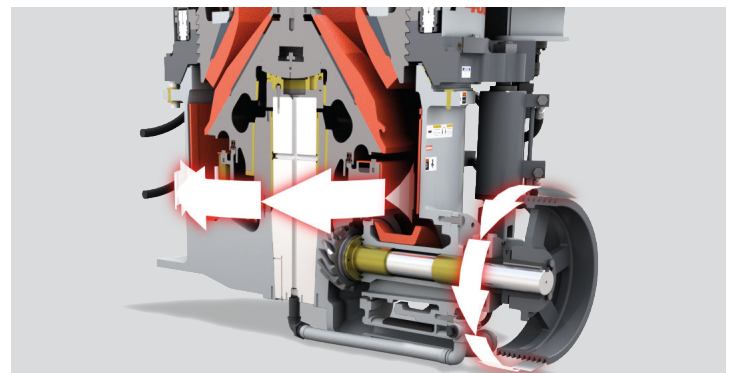
07/ TRAMP RELIEF SYSTEM

- » Reduce maintenance and points of failure with fewer accumulators



09/ HIGH PIVOT POINT GEOMETRY

- » Greater volumetric head displacement



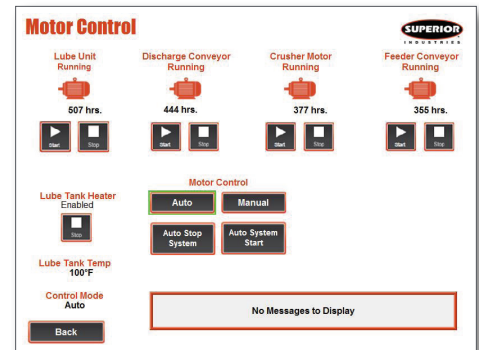
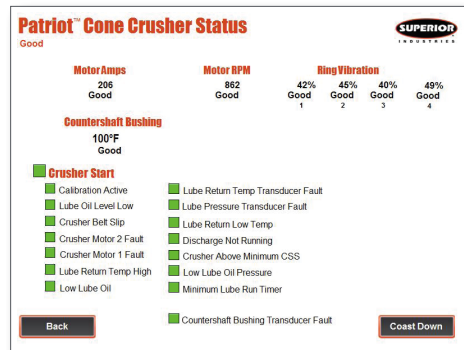
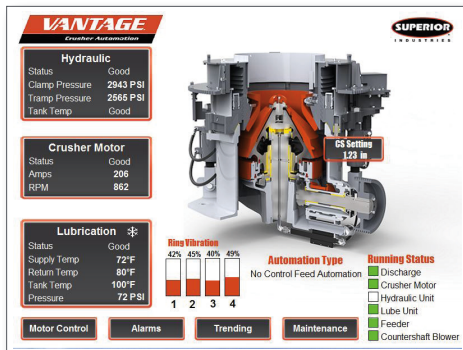
11/ COUNTERCLOCKWISE COUNTERSHAFT

- » Prevents catastrophic damage



- » One button auto-start or auto-stop motor control
- » Startup and shutdown system in correct sequence every time
- » No lengthy training, learn operation in minutes due to simple screen layout
- » Automatically maintain optimum production conditions
- » Alarms alert operators for conditions that need to be addressed
- » All critical data listed on operators page
- » Pre-assembled wiring for plug-and-play installation
- » In-House design means fast support and custom programs
- » Auto Level, power or adjust feature to maximize the crusher efficiency
- » Wintermode maintains lube temperature while crusher is not running

ASK YOUR SALES REPRESENTATIVE FOR AN IN-DEPTH PRESENTATION TO EXPERIENCE ALL THE CAPABILITIES OF VANTAGE® AUTOMATION.



CAPABILITIES

TRACK TO IMPROVE EFFICIENCY

- » Amperage draw
- » Closed side setting
- » Countershaft RPM
- » Lube system health
- » Hydraulics health
- » Historic alarms

ALARMS FOR HARMFUL CONDITIONS

- » Lube temp, pressure and level
- » Eccentric bushing temp
- » Hydraulic temp and level
- » Tramp and clamp pressures
- » Ring bounce
- » Bowl float
- » Over amperage

PRECISE CONTROL

- » Auto feed control
 - » Auto level control
 - » Auto power control
 - » Auto setting control
- » Lube heaters
- » Lube pump
- » Hydraulic pump
- » Oil cooler
- » Drive motor
- » Feeder

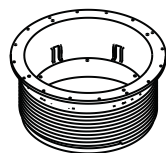
PATRIOT® CONE CRUSHER LIFETIME WARRANTY

LIMITED LIFETIME WARRANTY FOR MAJOR CRUSHER COMPONENTS

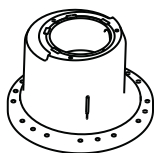
MAJOR COMPONENTS COVERED



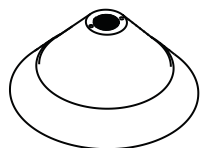
1. Adjustment Ring



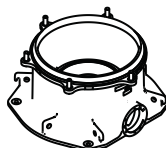
2. Bowl



3. Eccentric



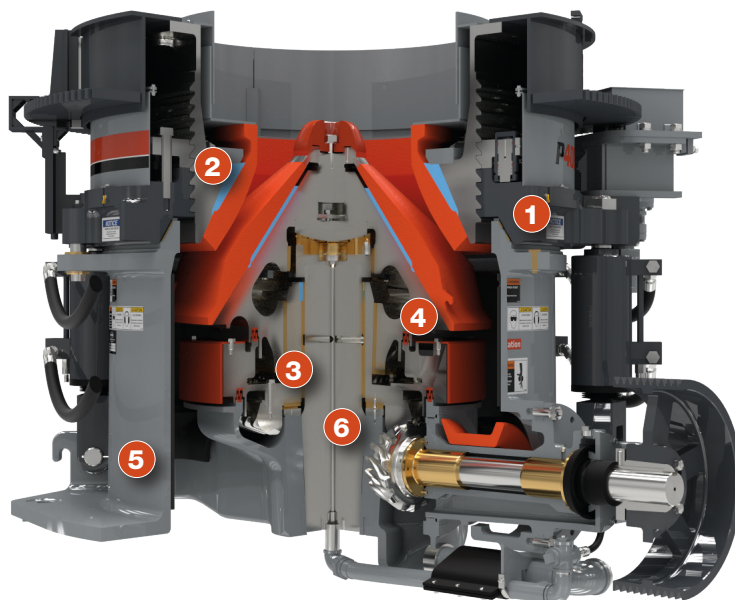
4. Head



5. Mainframe



6. Main Shaft



WARRANTY REQUIREMENTS



- » Exclusive use of Superior parts
- » Paid inspection annually or every 2,000 hours
- » Presale application review
- » Vantage® Automation
- » Operation within design limits

EXCLUSIONS

- » Damage from tramp metal, extended high power draw, misuse or improper maintenance
- » Damage from negligence or accidents
- » Labor, travel or freight costs associated with repairs or installation
- » Damage from unauthorized repairs, modifications or parts
- » Normal wear and tear
- » Non-utilization of Vantage Automation
- » Damage from plant downtime
- » Products rented or leased

Terms and conditions apply. See warranty documentation for details.

SPECIFICATIONS

PATRIOT CONE CRUSHER GENERAL SPECIFICATIONS

Model	Head Diameter		Weight		Recommended HP		Max Feed Opening		CSS	
	mm	in	kg	lbs	kW	hp	mm	in	mm	in
P200	970	38	8,838	19,485	150	200	236	9.3	10 - 50	3/8 - 2
P300	1,117	44	16,029	35,340	225	300	270	10.6	10 - 50	3/8 - 2
P400	1,320	52	24,130	53,200	300	400	310	12.2	10 - 50	3/8 - 2
P500	1,500	59	33,566	74,000	375	500	343	13.5	10 - 50	3/8 - 2
P600	1,500	59	51,113	112,685	450	600	356	14	10 - 50	3/8 - 2

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

Product Size		3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/4"	1-1/2"	2"
in	mm	10 mm	13 mm	16 mm	19 mm	22 mm	25 mm	31 mm	38 mm	50 mm
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

Projected crusher gradings and capacities are based on a material having a work index of 12-14, with a bulk density of 100 lbs/ft³ (1.6 mt/m³). The feed grading must contain less than 20% passing the css for secondary and 10% passing the css for tertiary cone crushers. The crusher drive assemblies are to be maintained in good working order with the ability to apply all available horsepower without drive belt slippage. Plant installation to ensure the crusher is able to operate continuously consuming the FLA rating of the motor(s) with the equipment able to accept and discharge material freely. For secondary cone crusher applications to be used in closed circuit applications consult Superior for capacity adjustments.

PORTABLE CRUSHING PLANTS

