

CRUSHING

SCREENING

WASHING

CONVEYING

COMPONENTS

PLANTS

CONSTRUCTION

AFTERMARKET

# CRUSHING & SCREENING EQUIPMENT PRODUCT HANDBOOK





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31	.....Sentry® Horizontal Shaft Impactor
35	.....Guardian® Horizontal Screen







# 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

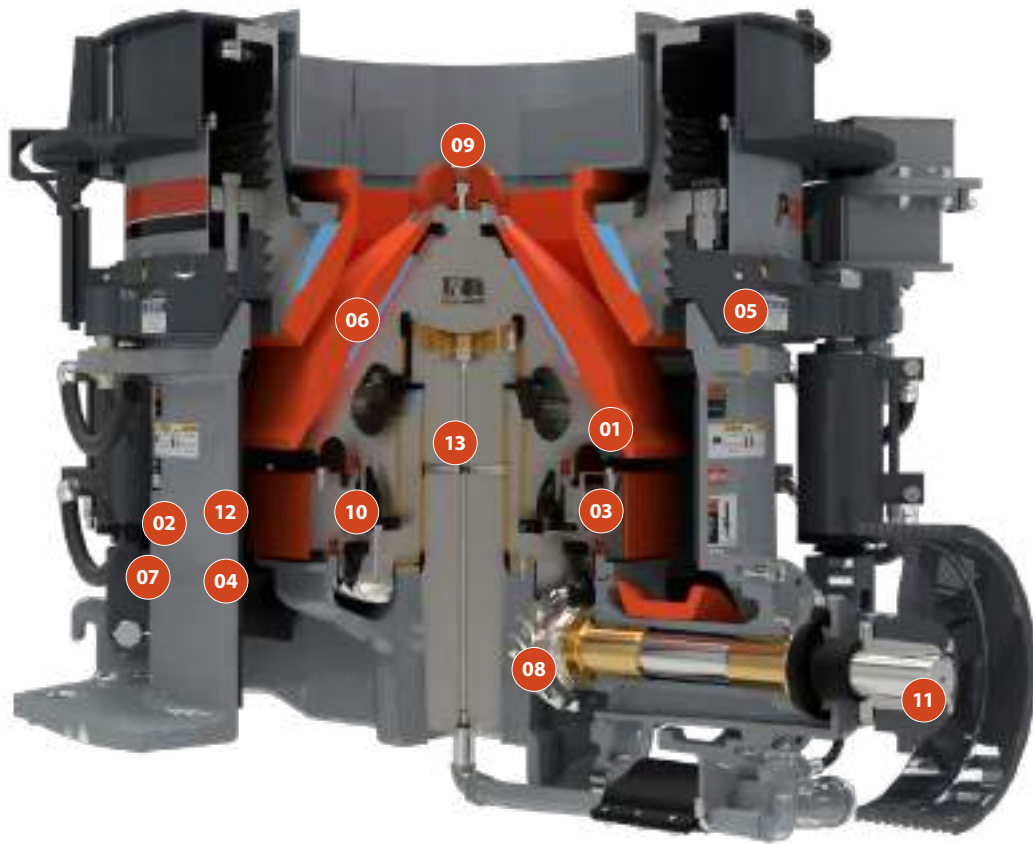


Cubical  
products



Super Pave  
Products

Wheeled   
Stationary 



**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**

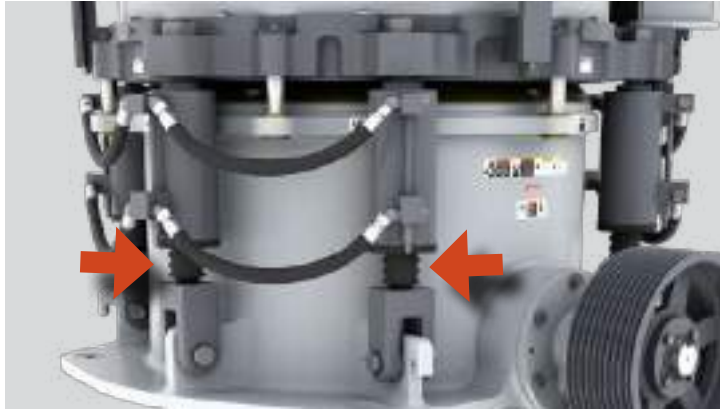
Manufactured with ductile iron which has higher tensile and fatigue strength, resists fracturing and is more impact resistant.

## 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



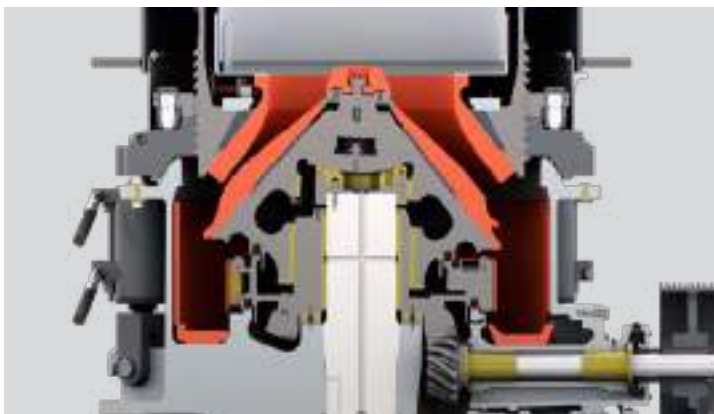
### 06/ UNIVERSAL CRUSHING CHAMBER

- » Application flexibility from secondary to tertiary



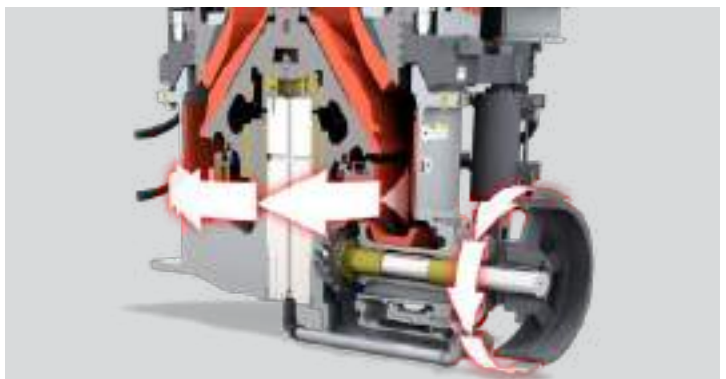
### 07/ TRAMP RELIEF SYSTEM

- » Reduce maintenance and points of failure with fewer accumulators



### 09/ HIGH PIVOT POINT GEOMETRY

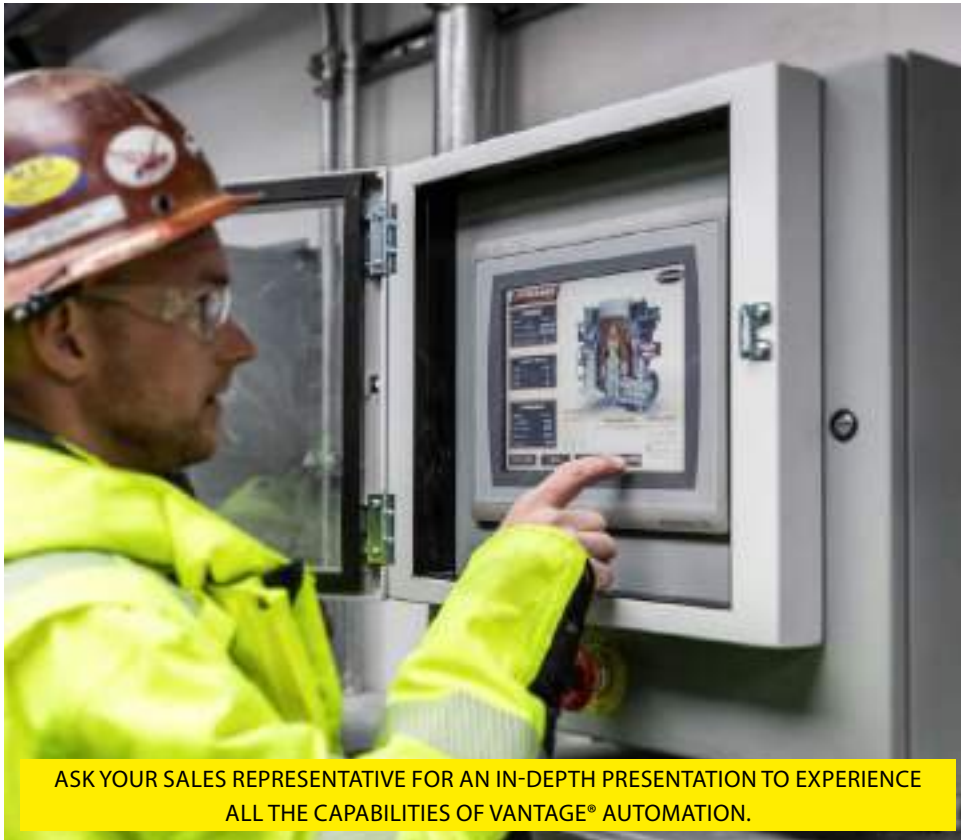
- » Greater volumetric head displacement



### 11/ COUNTERCLOCKWISE COUNTERSHAFT

- » Prevents catastrophic damage





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

- » 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



## 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

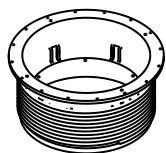
# PATRIOT® CONE CRUSHER LIFETIME WARRANTY

## LIMITED LIFETIME WARRANTY FOR MAJOR CRUSHER COMPONENTS

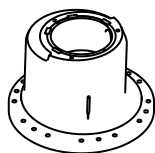
### MAJOR COMPONENTS COVERED



1. Adjustment Ring



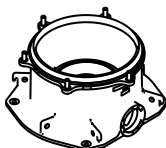
2. Bowl



3. Eccentric



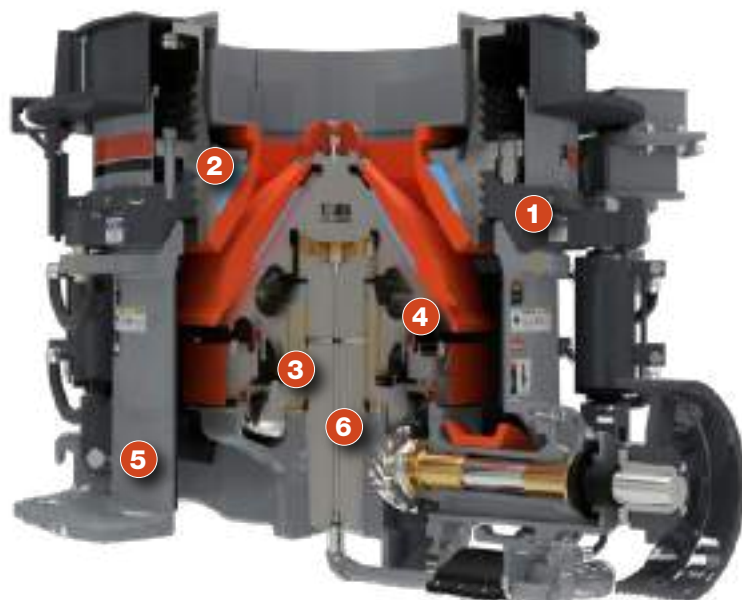
4. Head



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/ft<sup>3</sup> (1.6 mt/m<sup>3</sup>). 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





# LIBERTY® JAW CRUSHER

Demanding Applications Need a Jaw Crusher Designed to Handle Tough Production Requirements.

## FEATURES

- » Bolted, non-welded frame construction with premium quality castings and components.
- » Hydraulic wedge adjustment allows for push button control of closed side settings.
- » Aggressive nip angle ensures the jaw consistently processes material and maintains capacity throughout liner life.
- » Mid-mount frame ensures compact installation.

## APPLICATIONS



Ore/Hard  
Rock Mining



Quarried  
Stone

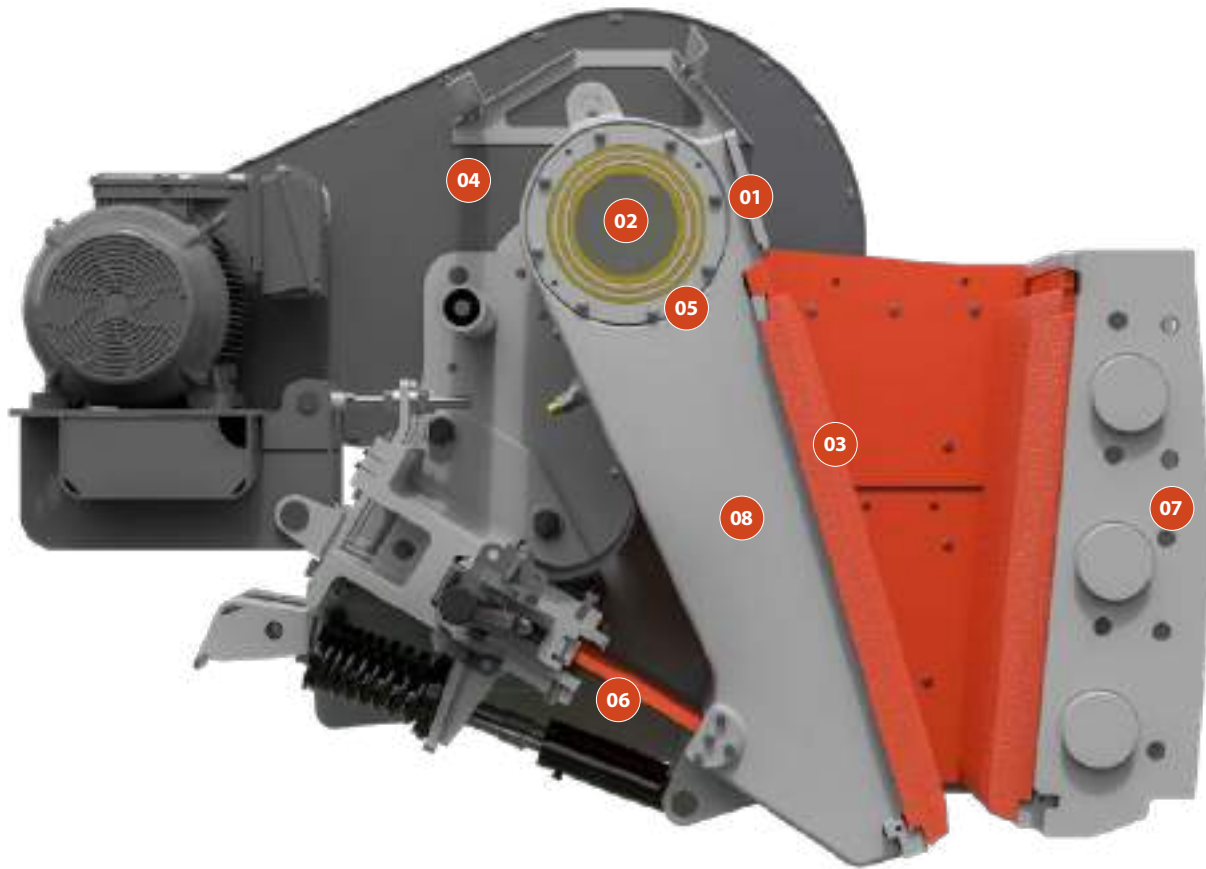


River  
Gravel



Recycle  
Concrete

Wheeled   
Stationary 



**01/ REPLACEABLE BARREL LINER**

Easily replaced and designed to protect the bearings and pitman housing.

**02/ HIGH STRENGTH ECCENTRIC SHAFT**

This hardest working component is precision CNC-machined for proven high strength and reliability.

**03/ MINE DUTY JAW DIES**

Offering different liner configurations expands the application window for the crusher.

**04/ SOLID CAST, HIGH INERTIA FLYWHEELS**

Optimized design to generate the crushing force required for the toughest and hardest materials.

**05/ SPHERICAL ROLLER INBOARD/ OUTBOARD BEARINGS**

Ensures the maximum performance providing the lowest cost of ownership.

**06/ HIGH STRENGTH TOGGLE PLATE**

Provides the correct protection of the crusher to ensure performance and long term durability.

**07/ HIGH STRENGTH SOLID CASTING**

Cast structural components, including end frames and a one-piece pitman, for a high strength machine.

**08/ ONE-PIECE CAST PITMAN**

High strength solid casting.



## HIGHLIGHTS



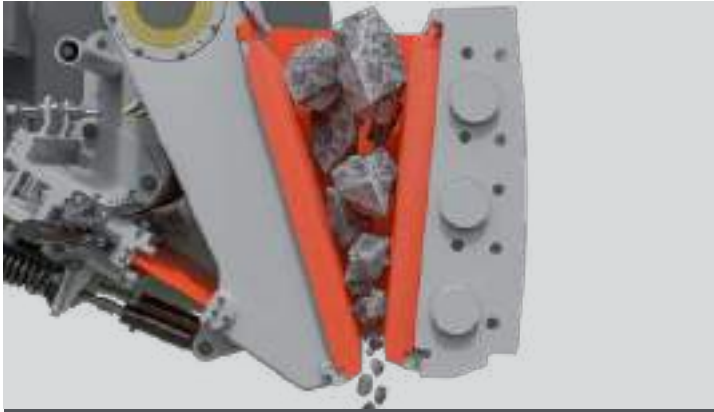
### HYDRAULIC WEDGE ADJUSTMENT

- » Single push button hydraulically allows operators to adjust closed side settings.



### JAW DIE LIFTING POINTS

- » Integrated into the dies versus unsafe welded options, which can break from the dies.



### AGGRESSIVE NIP ANGLE

- » Jaw consistently processes material and maintains strong capacity through liner life.



### PITMAN TOE PROTECTION

- » Replaceable component for protection and to eliminate long periods of downtime for re-machining.



### COMPOSITE DRIVE GUARD

- » Designed for a single crew member to remove guarding for simplified access to drive.

**2-YEAR/  
6000 HR  
WARRANTY**

## SPECIFICATIONS

### LIBERTY JAW GENERAL SPECIFICATIONS

Model	Weight		Feed Opening		CSS		Capacity		Speed	Max Feed Size		Power	
	kg	lbs	mm x mm	inch x inch	mm	inch	MTPH	STPH	rpm	mm	inch	kW	hp
2155B	16,500	36,400	530 x 1,400	21 x 55	40 - 130	1.6" - 5.1"	90 - 400	100 - 440	280	427	16.8"	110	150
2636B	14,050	31,000	650 x 900	26 x 36	60 - 160	2.4" - 6.3"	110 - 360	120 - 396	300	528	20.8"	75	100
3042B	15,700	34,600	750 x 1,070	30 x 42	70 - 200	2.75" - 8"	150 - 500	165 - 550	280	610	24.0"	110	150
3343B	22,300	49,200	830 x 1,100	33 x 43	80 - 200	3.2" - 8"	180 - 620	200 - 680	270	671	26.4"	110	150
3055B	26,950	59,000	760 x 1,400	30 x 55	70 - 200	2.75" - 8"	240 - 780	265 - 855	260	610	24.0"	160	200
3455B	31,500	69,445	860 x 1,400	34 x 55	100 - 200	4" - 8"	320 - 800	353 - 880	250	691	27.2"	160	200
3448B	28,000	62,000	860 x 1,220	34 x 48	70 - 200	2.75" - 8"	170 - 560	185 - 615	230	691	27.2"	160	200
4051B	42,000	92,600	1,010 x 1,300	40 x 51	100 - 200	4" - 8"	290 - 880	320 - 970	230	813	32.0"	160	200
4655B	52,500	115,800	1,160 x 1,400	46 x 55	150 - 250	6" - 10"	400 - 900	440 - 990	230	935	36.8"	200	300
5165B	71,250	157,100	1,290 x 1,650	51 x 65	150 - 270	6" - 10.5"	550 - 1,100	605 - 1,210	220	1,036	40.8"	250	350

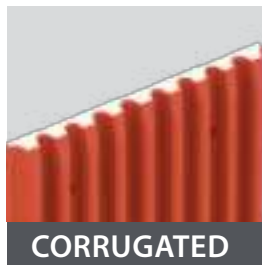
		PERCENT PASSING FOR A GIVEN CLOSED SIDE SETTING - AVERAGE FEED MATERIAL (12-14 work index)												
		1.5" (38mm)	2" (50mm)	2.5" (63mm)	3" (76mm)	3.5" (88mm)	4" (101mm)	5" (127mm)	6" (152mm)	7" (177mm)	8" (203mm)	10" (254mm)	11" (279mm)	12" (304mm)
SIZE OF MATERIAL	18	457											100%	100%
	16	406										100%	98	94
	14	355										98	90	83
	12	304									100%	84	77	70
	10	254							100%	100%	88	70	64	58
	8	203						100%	94	80	70	56	51	47
	7	177						94	82	70	61	49	45	41
	6	152				100%	100%	82	70	60	53	42	38	35
	5	127			100%	99	87	70	58	50	44	35	32	29
	4	101		100%	100%	92	80	70	56	47	40	35	28	23
	3	76	100%	95	83	70	60	53	42	35	30	27	21	18
	2.5	63	95	85	70	59	50	44	35	29	25	22	18	15
	2	50	85	70	57	48	40	35	28	24	20	18	14	12
	1.5	38	69	52	42	35	30	26	21	18	15	14	11	9
	1	25	44	34	28	23	20	17	14	12	10	9	7	6
	0.75	19	32	25	21	18	15	13	11	9	8	7	5	5
	0.5	12	22	18	15	12	10	9	7	6	5	5	4	3
	0.25	6	12	10	8	6	5	5	4	3	3	2	2	1

Projected crusher capacities are based on a material having a work index of 12-14, with a bulk density of 100 lbs/ft<sup>3</sup> (1.6 mt/m<sup>3</sup>). The feed grading must have less than 10% passing the crusher setting. 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.

### MULTIPLE LINER CONFIGURATIONS



FLAT TOOTH



CORRUGATED



SHARP TOOTH



BELLIED-FILLED



ANTI-SLAB

# HYDRAULIC TOGGLE SYSTEM

## FEATURES



HYDRAULIC TRAMP RELIEF SYSTEM

» Allows uncrushable materials to pass through the crusher, protecting major components from damage.



HYDRAULIC CLOSED SIDE SETTING ADJUSTMENT

» A simple push button allows operator to adjust CSS hydraulically.

## SPECIFICATIONS

LIBERTY JAW MODELS WITH HYDRAULIC TOGGLE OPTION													
Model	Weight		Feed Opening		CSS		Capacity		Speed	Max Feed Size		Power	
	kg	lbs	mm x mm	inch x inch	mm	inch	MTPH	STPH	rpm	mm	inch	kW	hp
2636B	14,050	31,000	650 x 900	26 x 36	60 -160	2.4"- 6.3"	110 -360	120 -396	300	528	20.8"	75	100
3042B	15,700	34,600	750 x 1,070	30 x 42	70 - 200	2.75"- 8"	150 - 500	165 - 550	280	610	24.0"	110	150
3343B	22,300	49,200	830 x 1,100	33 x 43	80 -200	3.2"- 8"	180 - 620	200 - 680	270	671	26.4"	110	150
3055B	26,950	59,000	760 x 1,400	30 x 55	70 - 200	2.75"- 8"	240 - 780	265 - 855	260	610	24.0"	160	200
3455B	31,500	69,445	860 x 1,400	34 x 55	100 -200	4"-8"	320 - 800	353 - 880	250	691	27.2"	160	200
3363B	30,500	67,250	830 x 1,600	33 x 63	80 - 200	3.2"- 8"	270 -760	297 - 837	230	650	25.6"	150	200
4051B	42,000	92,600	1,010 x 1,300	40 x 51	100 -200	4"-8"	290 - 880	320 - 970	230	813	32.0"	160	200





# DAKOTA™ CONE CRUSHER

Secondary or Tertiary Crusher For Aggregate and Mining Applications.

## FEATURES

- » Standard 2-year/6,000 hr 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

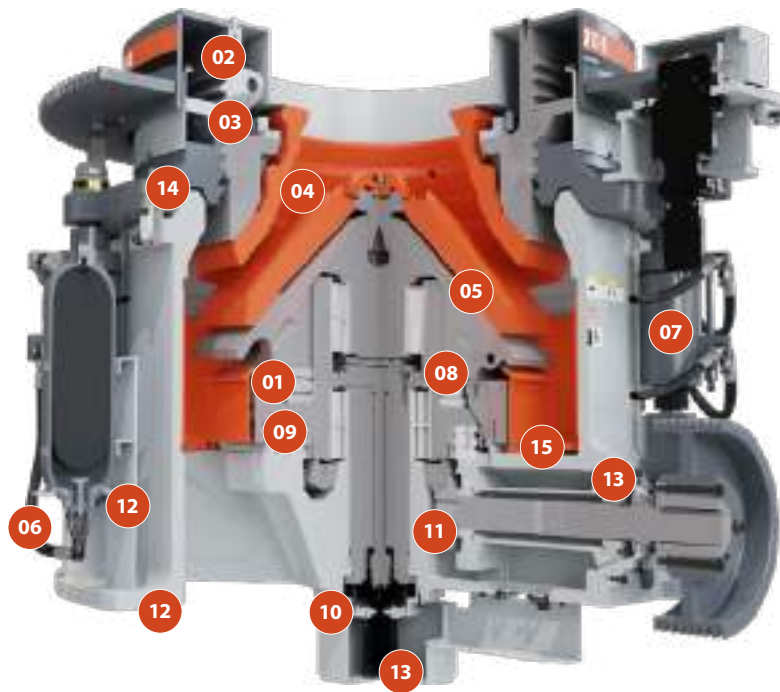


Cubical  
products



Super Pave  
Products

Wheeled   
Stationary 



**01/ BEARING DESIGN**

Bearing design efficiently converts horsepower to crushing forces and benefits from a more compact lube tank.

**02/ LUBRICATED STEEL THREADED BOWL ASSEMBLY**

Stronger and lubricated threads eliminate the requirement for bronze thread inserts and allows for the adjustment of crusher settings with no seizing or fretting.

**03/ LEFT-HAND BOWL THREADS**

Prevents the crusher from closing down if clamp pressure is lost.

**04/ UNIVERSAL CRUSHING CHAMBER**

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

**05/ RAISED CONE HEAD SEATING SURFACE**

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

**06/ TRAMP RELIEF SYSTEM**

A single accumulator means reduced failure points and maintenance requirements with fast acting tramp event relief.

**07/ INVERTED TRAMP RELIEF CYLINDERS**

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

**08/ ENCLOSED WEDGE-PLATE ASSEMBLY**

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

**09/ STEEL LABRYNTH SEALS**

Opposed to UHMW contact seals, non-contact labrynth seals prevent friction, wear and contamination.

**10/ HYDRAULIC ANTI-SPIN MECHANISM**

Prevents the head from spinning when there is no load in the crusher.

**11/ SPIRAL GEAR SET**

Proven to perform at higher speeds with less vibration and noise.

**12/ ONE PIECE CAST MAIN FRAME**

Removes any welding for highest possible strength and durability.

**13/ INDEPENDENT CAST COUNTERSHAFT BOX**

Incorporates roller bearings and Optimizes disassembly process for improved serviceability

**14/ REPLACEABLE SEAT LINERS**

Bronze liners protect mainframe and adjustment ring from wear.

**15/ ARM GUARDS AND MAINFRAME LINERS**

Replaceable AR400 wear parts that protect the mainframe casting from premature wear.

## HIGHLIGHTS



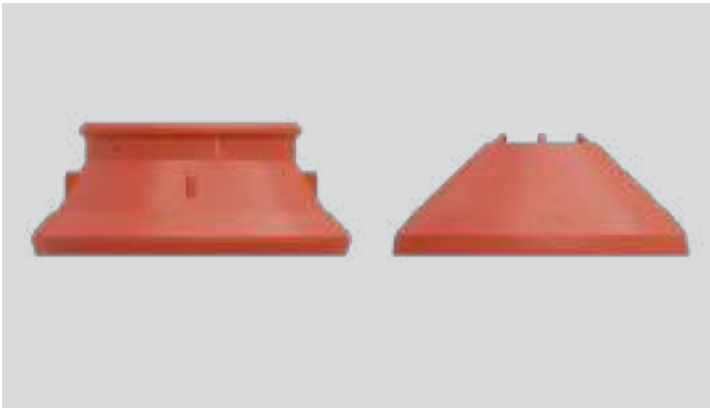
### RAISED CONE HEAD SEATING SURFACE

- » Allows reconditioning of head seating surface



### INVERTED TRAMP RELIEF CYLINDERS

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



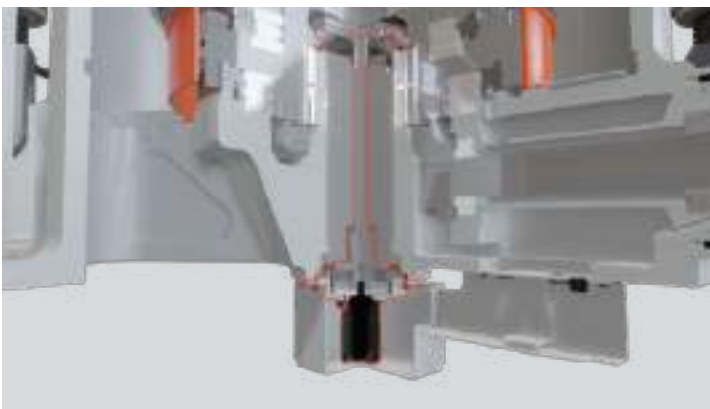
### UNIVERSAL CRUSHING CHAMBER

- » Application flexibility from secondary to tertiary



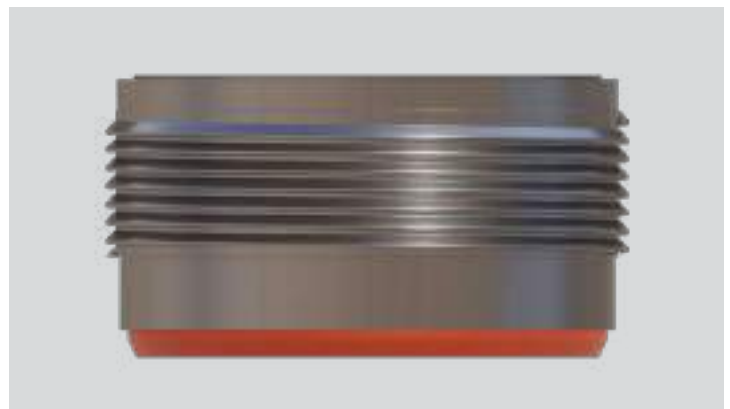
### TRAMP RELIEF SYSTEM

- » Reduce maintenance and points of failure with fewer accumulators



### HYDRAULIC ANTI-SPIN MECHANISM

- » Prevents head from spinning when no load in the crusher



### LEFT-HAND BOWL THREADS

- » 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

- » Motor amperage draw
- » Closed side setting
- » Anti-spin pressure
- » Lube system health
- » Hydraulic health
- » History of alarms

### ALARMS FOR HARMFUL CONDITIONS

- » Lube temp, pressure, and level
- » Hydraulic temp and level
- » Tramp and clamp pressures
- » Ring bounce
- » Bowl float
- » High anti-spin pressure
- » Over amperage

### PRECISE CONTROL

- » Auto feed control
  - » Auto level
  - » Auto power
  - » Auto setting
- » Lube heaters- Scheduled start time
- » Lube pump- Scheduled pump start
- » Hydraulic pumps
- » Oil cooler
- » Drive motor
- » Feeder motor - VFD signal-ready

## SPECIFICATIONS

### DAKOTA CONE CRUSHER GENERAL SPECIFICATIONS

Model	Head Diameter		Weight		Recommended HP		Max Feed Opening		Speed	
	mm	in	kg	lbs	kW	hp	mm	in	rpm	Min mtph
D350	1,219	48	20,870	46,000	260	350	305	12	750-950	155

### OPEN CIRCUIT CAPACITIES

Min mtph	Max mtph	Min stph	Max stph
155	415	170	460

### PERCENT PASSING

Model			CSS								
	in	mm	1/2"	5/8"	3/4"	7/8"	1"	1-1/4"	1-1/2"	1-3/4"	2"
D350	4"										100
	3-1/2"									100	96
	3"								100	95	90
	2-3/4"								98	92	86
	2-1/2"							100	95	88	81
	2-1/4"							97	91	83	74
	2"						100	94	86	76	65
	1-3/4"					100	99	89	79	66	55
	1-1/2"				100	99	95	82	68	56	45
	1-1/4"			100	99	95	87	72	56	46	38
	1"		100	99	95	87	80	60	45	36	29
	7/8"		99	95	88	80	71	49	38	30	25
	3/4"		95	91	83	71	58	41	32	26	21
	5/8"		90	85	73	58	50	34	28	22	18
	1/2"		85	75	63	50	42	28	23	19	16
	3/8"		69	63	51	42	35	21	17	14	12
	5/16"		61	56	43	35	29	19	15	13	10
	1/4"		50	45	37	29	21	16	13	11	9
	#4		36	33	28	21	18	14	11	9	7
	0.16"		30	28	23	18	16	12	10	8	6
	#8		26	24	20	16	14	9	7	5	4
	#10		22	20	17	14	10	8	6	4	3
	#16		17	15	13	10	6	6	4	3	2
	#30		11	9	8	6	5	4	3	2	1.5
	#40		10	8	7	5	4	3	2	1.5	1
	#50		8	7	6	4	3.5	2	1.5	1	0.5
	#100		7	6	5	3.5	3	1.5	1	0.5	0.4
	#200		6	5	4	3	2	1	0.5	0.4	0.3

Projected crusher gradings and capacities are based on a material having a work index of 12-14, with a bulk density of 100 lbs/ft<sup>3</sup> (1.6 mt/m<sup>3</sup>). 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.



# ENDEAVOR™ CONE CRUSHER

Secondary or Tertiary Crusher For Aggregate and Mining Applications.

## FEATURES

- » Standard 2-year/6,000 hr 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



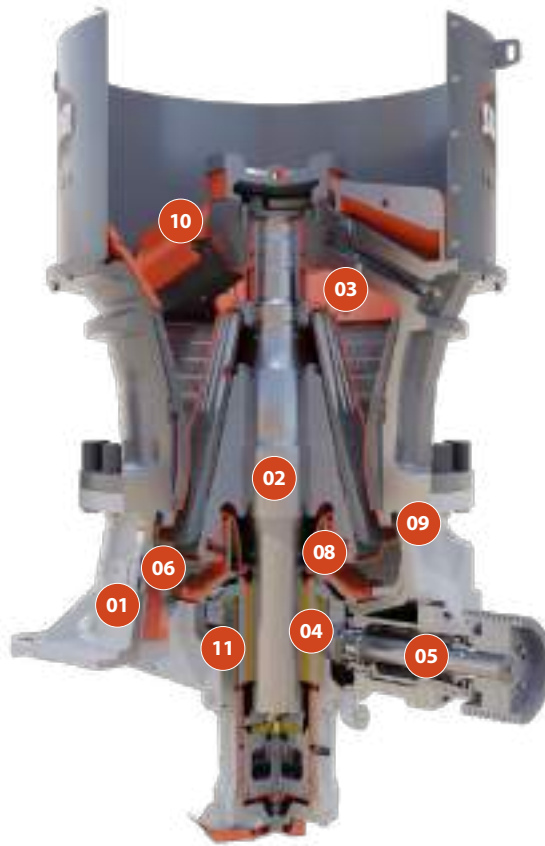
Cubical  
products



Super Pave  
Products

Wheeled   
Stationary 





**01/ MAIN FRAME ACCESS INSPECTION PORTS**

Two ports provide easy inspection access to lower main frame.

**02/ FLOATING SHAFT DESIGN**

Single cylinder to maintain CSS instead of multiple.

**03/ UNIVERSAL CRUSHING CHAMBER**

Application flexibility from coarse to fine crushing.

**04/ SPIRAL BEVEL GEAR SET**

Less vibration and noise than straight bevel gears.

**05/ INTEGRAL COUNTERSHAFT HOUSING**

No countershaft box seal to maintain. Countershaft box out of the flow of discharge material.

**06/ ENCLOSED ECCENTRIC ASSEMBLY WITH BOLT-ON DUST SHIELD**

Protects assembly from wear.

**07/ FULLY INTEGRATED LUBRICATION & HYDRAULIC SYSTEM**

Designed and sized to ensure trouble free operation for each model. [Not shown]

**08/ COMPOSITE DUST SEALS**

Provides superior performance and reliability.

**09/ ONE PIECE CAST TOP AND BOTTOM SHELL**

Greater strength.

**10/ CONSISTENT FEED OPENING THROUGHOUT THE LIFE OF THE LINER**

No adjustment to feed needed based on liner wear.

**11/ VARIABLE ECCENTRIC THROW**

Allows end-user to adjust the stroke of the machine to meet application needs.

## HIGHLIGHTS



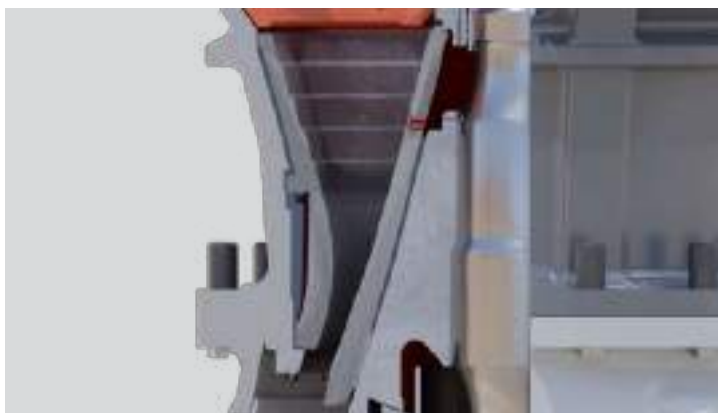
### MAINFRAME INSPECTION DOOR

- » Two ports provide easy inspection access to lower main frame



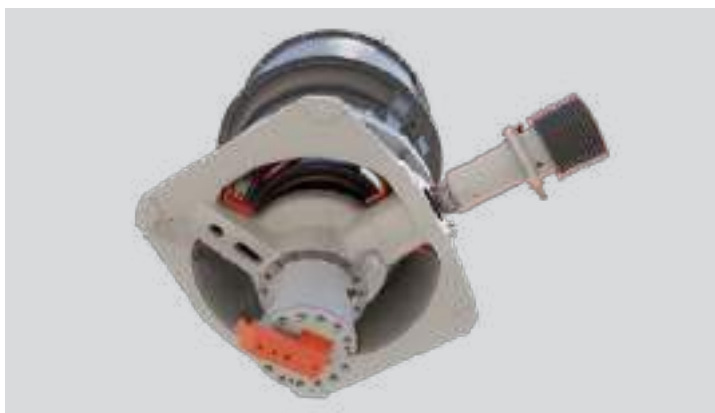
### ENCLOSED ECCENTRIC & DUST COVER

- » Protects assembly from wear



### UNIVERSAL CRUSHING CHAMBER

- » Application flexibility from secondary to tertiary



### INTEGRAL COUNTERSHAFT HOUSING

- » No countershaft box seal to maintain and countershaft box is located out of the flow of discharge material



### FLOATING SHAFT DESIGN

- » Single cylinder maintains CSS and allows chamber clearing during tramp event



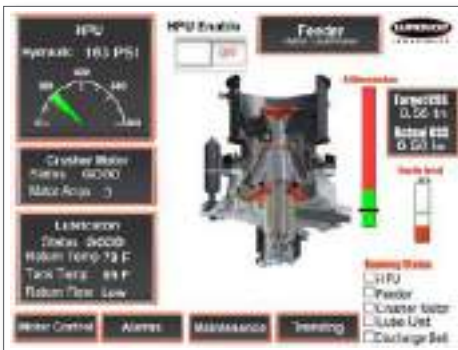
### ADJUSTABLE STROKE

- » Variable eccentric throw allows end user to adjust the stroke of the machine



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

- » 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



## CAPABILITIES

### TRACK TO IMPROVE EFFICIENCY

- » Motor amperage draw
- » Closed side setting
- » Lube system health
- » Hydraulic health
- » History of alarms

### ALARMS FOR HARMFUL CONDITIONS

- » Lube temp, pressure, and level
- » Hydraulic temp and level
- » Tramp pressures
- » Tramp events
- » Over amperage

### PRECISE CONTROL

- » Auto feed control
  - » Auto level
  - » Auto power
  - » Auto setting
- » Lube heaters - Scheduled start time
- » Lube pump - Scheduled pump start
- » Hydraulic pump
- » Oil cooler
- » Drive motor
- » Feeder motor - VFD signal-ready

## SPECIFICATIONS

### ENDEAVOR CONE CRUSHER GENERAL SPECIFICATIONS

Model	Head Diameter		Weight		Recommended HP		Max Feed Opening		Speed	CSS
	mm	in	kg	lbs	kW	hp	mm	in	rpm	Range (mm)
ST300	1,090	42-15/16	15,870	34,980	225	300	210	8-1/4	1,438	8 - 44
SS300	980	38-9/16	19,980	44,050	225	300	450	17-3/4	1,354	24 - 54

### PERCENT PASSING

Model	CSS (SIEVE SIZE)		1.142" (29mm)	1 1/4" (32mm)	1.378" (35mm)	1 1/2" (38.1mm)	1.614" (41mm)	1.732" (44mm)	1.89" (48mm)	2" (50.8mm)
	in	mm	% Passing	% Passing	% Passing	% Passing	% Passing	% Passing	% Passing	% Passing
Endeavor SS300	4.724"	120								
	3.937"	100						100		100
	3.150"	80					100	100	97	95
	2.756"	70			100	100	98	96	93	90
	2.362"	60	100	100	99	98	94	90	84	79
	1.969"	50	99	98	94	89	82	74	69	64
	1.575"	40	92	87	81	74	67	59	53	48
	1.181"	30	75	67	61	56	49	43	38	34
	0.984"	25	63	56	49	43	38	34	30	27
	0.787"	20	49	43	39	35	30	26	23	21
	0.591"	15	37	33	30	27	23	20	18	17
	0.394"	10	24	21	19	17	15	14	13	12
	0.236"	6	17	15	13	12	11	10	9.3	8.9
	#4	4	13	12	11	10	8.9	7.9	7.3	6.9
	#8	2	10	8.9	8.4	7.9	7.4	6.9	6.3	5.9
	#16	1	6.3	5.9	5.8	5.5	5.3	5	4.7	4.5

### PERCENT PASSING

Model	CSS (SIEVE SIZE)		.630" (16mm)	.748" (19mm)	.867" (22mm)	.984" (25mm)
	in	mm	% Passing	% Passing	% Passing	% Passing
Endeavor ST300	5"	127				
	3.937"	100				
	3.150"	80				
	2.756"	70				
	2.362"	60				
	1.969"	50				
	1.575"	40			100	100
	1.181"	30		100	96	91
	0.984"	25	100	97	89	82
	0.787"	20	95	86	74	66
	0.591"	15	81	68	56	48
	0.394"	10	54	43	35	30
	0.236"	6	34	27	22	19
	#4	4	24	19	16	14
	#8	2	15	12	10	8.9
	#16	1	10	8.9	7.9	6.9

Projected crusher gradings and capacities are based on a material having a work index of 12-14, with a bulk density of 100 lbs/ft<sup>3</sup> (1.6 mt/m<sup>3</sup>). 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.





# VALOR® VSI - BELT DRIVE

Cubical aggregates, Manufactured Sands and Eliminates Unsound Material

## FEATURES

- » Hydraulic lid improves safety and simplifies access to crusher chamber.
- » Multiple chamber options for maximum flexibility including steel on steel, rock on steel and rock on rock.
- » Vibration switch to protect crusher components in a high vibration situation.
- » Backed by a standard 2-year warranty, plus a service team committed to exceeding customer expectations.

## APPLICATIONS



Manufactured Sand



Material Beneficiation



Precious Metals Recovery



Re-Crushing Inventory



Fractured Gravel



Cubical products



Super Pave Products



Man-Made Materials



Cement Clinker



Concrete Rock





Chips



Shaping



Asphalt

Wheeled   
Stationary 

Rock Face to Load Out®

VALOR® VSI - BELT DRIVE





### 01/ HYDRAULIC LID LIFTER

Simple hydraulic controls to allow safe access to chamber. Safety switch and support arm are additional safeguards.

### 02/ FEED TUBE

An external design on all models allows adjustments without opening the crusher.

### 03/ CRUSHING CHAMBER

Convertible crushing chamber from anvil ring to rock-shelf for greater application flexibility.

### 04/ BEARING ASSEMBLY

Replaceable pedestal style component can also be rebuilt in a shop environment.

### 05/ BRANDED BEARINGS

High capacity, high load rated bearings.

### 06/ AIR TRANSFER SYSTEM

Reduces possible dust emissions.

## HIGHLIGHTS



### HYDRAULIC LID LIFTER

- » Simple hydraulic controls to allow safe access to chamber. Safety switch and support arm are additional safeguards.



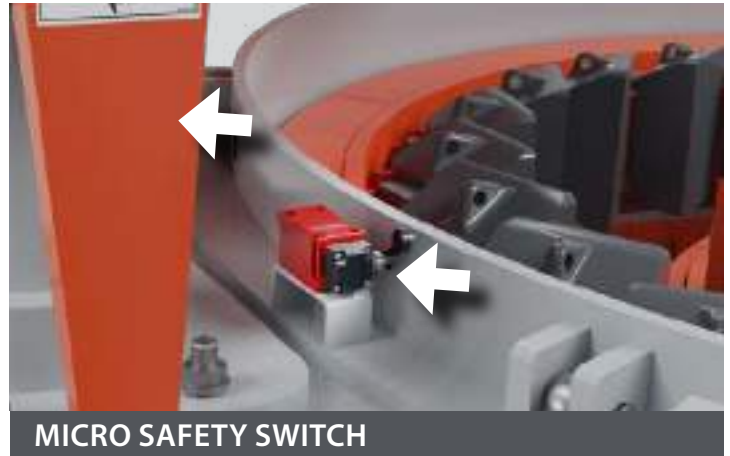
### VIBRATION PROTECTION SWITCH

- » Protects the crusher from catastrophic failure if an imbalance occurs.



### EXTERNALLY ADJUSTED FEED TUBE

- » Allows for the adjustment of the feed tube without opening the crusher.



### MICRO SAFETY SWITCH

- » Safety switch interrupts power and provides protection to operators while servicing crusher.
- » Safety support arm prevents lid from lowering in the event of a loss of hydraulic pressure.

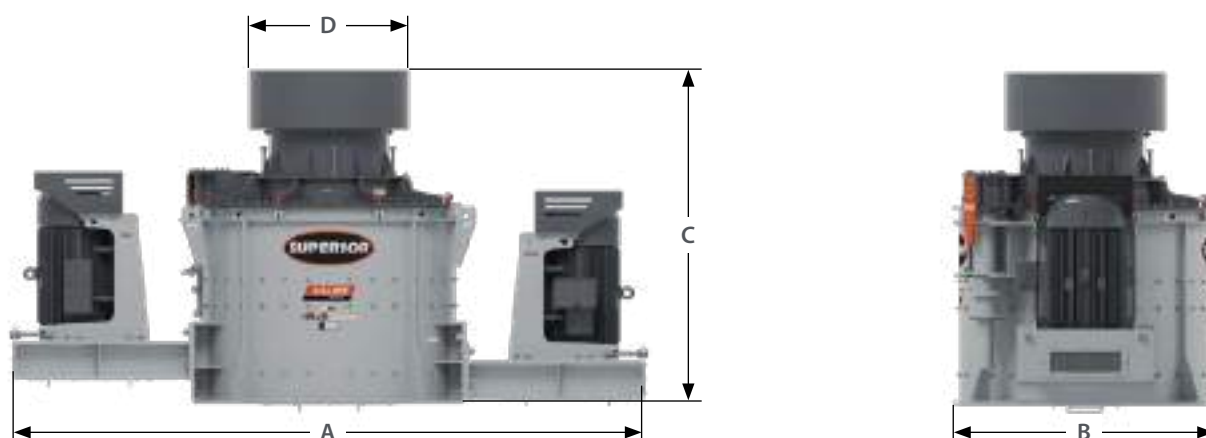


### VANTAGE® AUTOMATION

- » Track to improve efficiency, alarms for harmful conditions and precise control.

**2-YEAR/  
6000 HR  
WARRANTY**

## BELT DRIVE SPECIFICATIONS



### VSI-B CRUSHER DIMENSIONS

Model	A		B		C		D	
	mm	inch	mm	inch	mm	inch	mm	inch
V1680 Single Drive	3,429	135.0	2,159	85.0	2,210	87.0	737	29.0
V2160 Single Drive	4,115	162.0	2,324	91.5	3,104	122.2	1,397	55.0
V2160 Dual Drive	5,563	219.0	2,324	91.5	3,104	122.2	1,397	55.0

### TYPICAL PHYSICAL PROPERTIES

Model	Configuration	Max Feed Size		Table/Rotor Diameter		Est. Max Capacity		Typical Horsepower Range		Weights	
		mm	inch	mm	inch	mtph	stph	kW	hp	kg	lbs
V1680 Single Drive	Impeller Table & Anvils (SOS)	50	2	660	26	225	250	185	250	8,000	17,600
	Rotor & Anvil (ROS)	38	1.5	686	27	70 - 180	77 - 198	110 - 185	150 - 250	8,156	17,980
	Rotor & Rockbox (ROR)	38	1.5	686	27	70 - 180	77 - 198	110 - 185	150 - 250	7,404	16,324
V2160 Single Drive	Impeller Table & Anvils (SOS)	127	5	914 - 1,066	36 - 42	180 - 385	200 - 425	150 - 225	200 - 300	11,952	26,350
	Rotor & Anvil (ROS)	60	2.38	812 - 914	32 - 36	163 - 362	180 - 400	150 - 225	200 - 300	11,483	25,317
	Rotor & Rockbox (ROR)	60	2.38	812 - 914	32 - 36	163 - 362	180 - 400	150 - 225	200 - 300	8,983	19,805
V2160 Dual Drive	Impeller Table & Anvils (SOS)	127	5	914 - 1,066	36 - 42	180 - 385	200 - 425	300 - 450	400 - 600	14,968	33,000
	Rotor & Anvil (ROS)	60	2.38	812 - 914	32 - 36	163 - 362	180 - 400	300 - 450	400 - 600	14,500	31,967
	Rotor & Rockbox (ROR)	60	2.38	812 - 914	32 - 36	163 - 362	180 - 400	300 - 450	400 - 600	12,000	26,455

Projected crusher capacities are based on a material having a work index of 12-14, with a bulk density of 100 lbs/ft<sup>3</sup> (1.6 mt/m<sup>3</sup>). 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.



## CRUSHING CHAMBER CONFIGURATIONS



- » Enclosed Rotor and Rock Shelf
- » Feed sizes to 2-3/8"
- » High abrasion materials



- » Enclosed Rotor and Anvils
- » Feed sizes to 2-3/8"
- » Medium abrasion materials

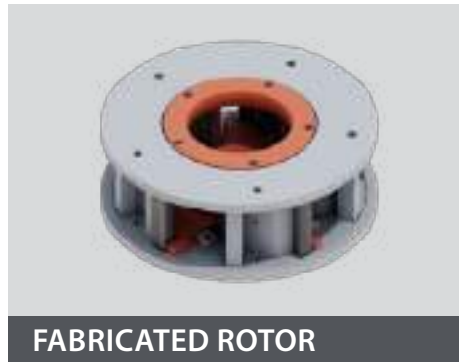


- » Shoe and Anvil
- » Feed size up to 4"
- » Low to medium abrasion materials

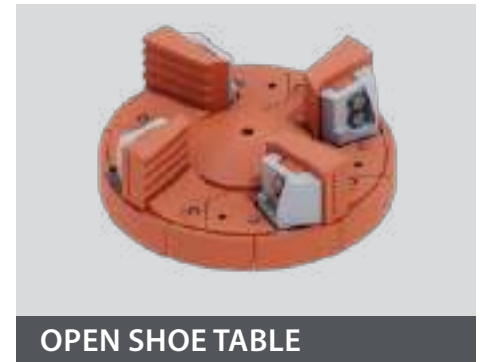
## HEAD CONFIGURATIONS



- » 4 port available
- » Parts interchangeable between top and bottom
- » No hardfacing required



- » 5 port available
- » Designed with fewest parts possible
- » No hardfacing required



- » 4, 5 and 6 shoes available
- » 28% chrome and ceramic available
- » Designed for easy maintenance

## CHAMBER CONFIGURATIONS





### FUSION® PLATFORM SYSTEMS

- » Customized to fit applications
- » Pre-engineered to reduce lead time
- » Simple and quick assembly time in the field



### PORTABLE PLANTS

- » Multiple feed and discharge configurations
- » Customized to fit applications
- » Superior branded conveyor components



# SENTRY® HORIZONTAL SHAFT IMPACTOR

Rugged, Resilient Design Capable of Crushing in Multiple Applications.

## FEATURES

- » Designed with proper spacing inside chamber for processing larger feed sizes.
- » HSI's are able to accept a dirtier feed condition than compression crushers while processing a high tonnage of material.
- » Increased fines production compared to compression crushers.
- » Ideal for portable plants and allows for the adding of a third curtain or grinding path.
- » Backed by an industry-leading warranty, plus a service team committed to exceeding customer expectations.

## APPLICATIONS



Clay and Brick  
Crushing



Quarried  
Stone



Recycle  
Concrete



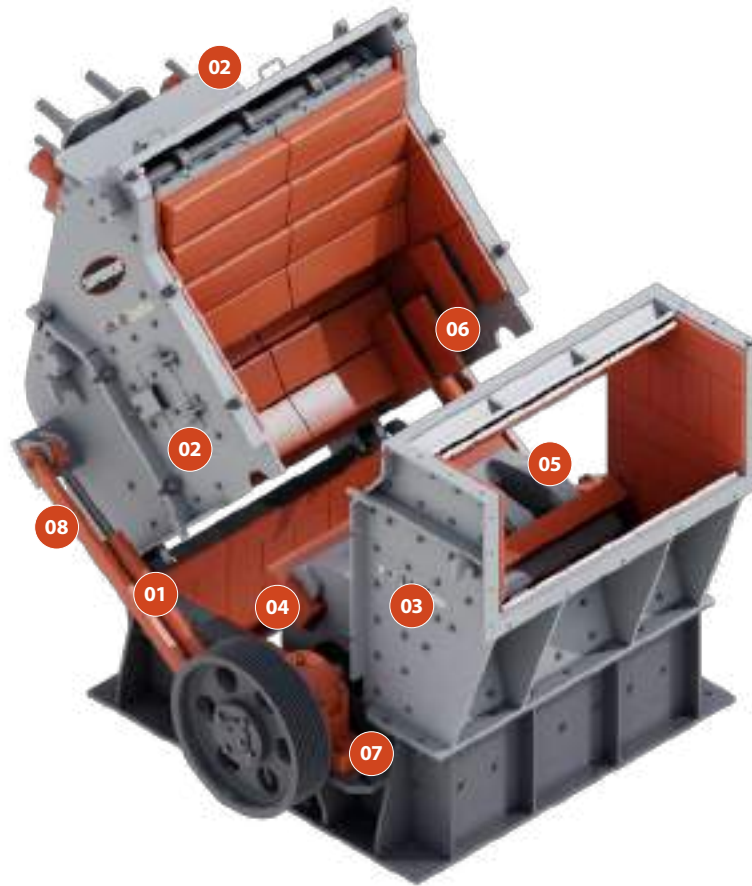
Cubical  
Products



Recycled  
Asphalt

Wheeled 

Stationary 



### 01/ HYDRAULIC OPENING & CLOSING

Safely and simply access internal components for inspection.

### 02/ MAINFRAME INSPECTION DOORS

Access the crushing chamber at additional locations including top, side and back inspection.

### 03/ REPLACEABLE UPPER FEED OPENING SECTION

High wear area is easily replaceable.

### 04/ BLOW BARS

Two or four blow bar rotor option with one or two-piece bars manufactured in a robust 4.5" (114mm) minimum manganese or chrome.

### 05/ FIXED BLOW BAR CLAMPING

Provides maximum clamping for best performance in hard rock applications.

### 06/ COMMONLY-SHAPED SIDE LINERS

Mix and match these liners to prolong wear life and decrease cost of replacement components.

### 07/ OFF-THE-SHELF BEARINGS

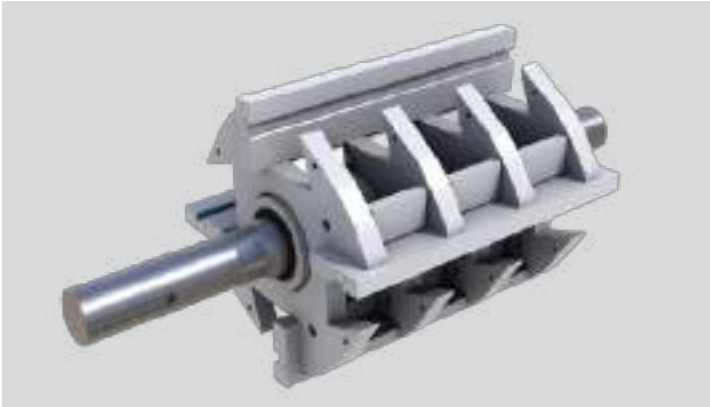
Local sourcing speeds access to parts in emergency situations.

### 08/ CRUSHER LID SAFETY LOCK

Locks housing for safety during maintenance.



## HIGHLIGHTS



### FABRICATED OPEN ROTOR DESIGN

- » Open rotor design with high inertia provides lower cost of ownership.



### HYDRAULIC CURTAIN ADJUSTMENT

- » Easily adjust the crusher's closed side setting (CSS).



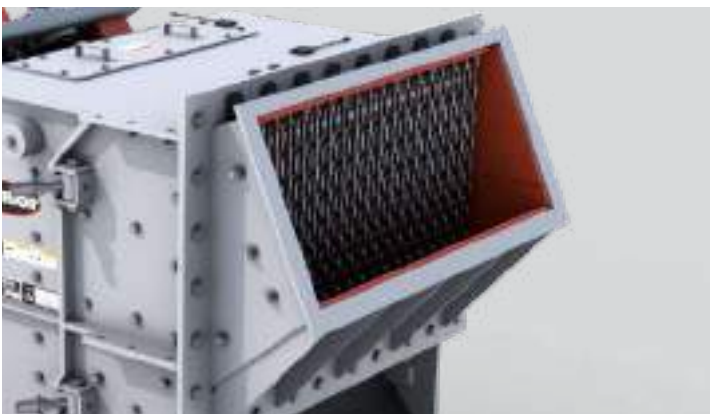
### BLOW BAR HANDLING TOOL

- » Increase safety during the removal or lifting of blow bars.



### ROTOR LOCKING TOOL

- » Included with all machines, this device will improve safety.

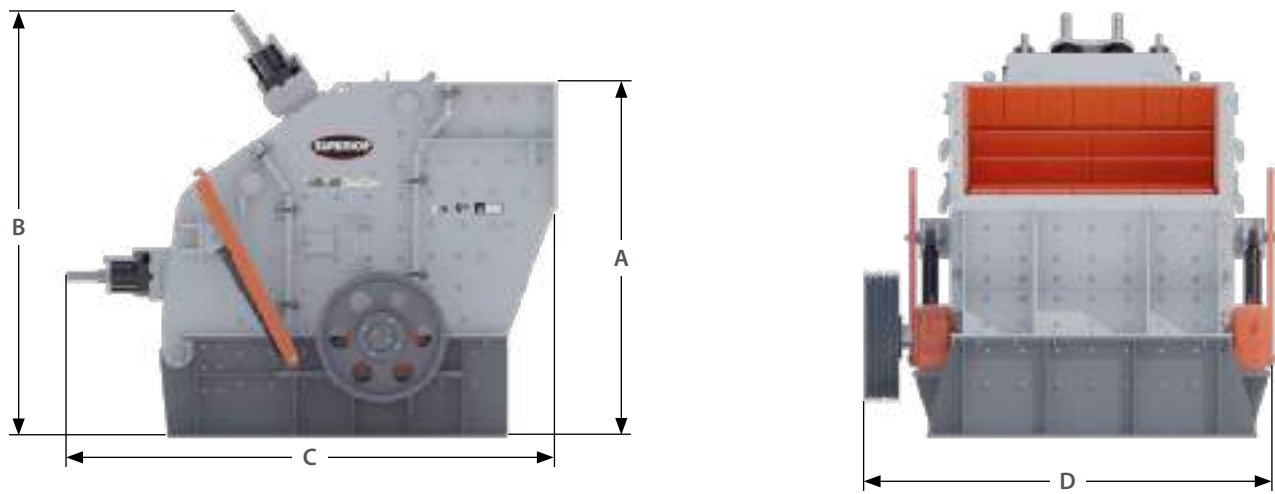


### FEED HOOD EXTENSION

- » Assists in feeding material into crusher at the correct location and angle for proper crushing.

**2-YEAR/  
6000 HR  
WARRANTY**

SPECIFICATIONS



HSI CRUSHER DIMENSIONS

Model	A		B		C		D	
	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric
SP 4855	100"	2,550mm	96"	2,450mm	118"	3,000mm	96"	2,450mm
SP 5054	46"	1,169mm	69"	1,769mm	112"	2,845mm	119"	3,023mm
SP 5565	116"	2,950mm	117"	2,980mm	212"	5,402mm	104"	2,660mm
SP 6384	141"	3,600mm	144"	3,675mm	239"	6,075mm	157"	3,990mm
SS 3936	88"	2,240mm	82"	2,100mm	105"	2,680mm	84"	2,150mm
SS 4355	90"	2,290mm	84"	2,150mm	107"	2,740mm	93"	2,385mm
SS 5165	114"	2,920mm	96"	2,450mm	132"	3,365mm	112"	2,850mm
SS 5583	118"	3,020mm	103"	2,640mm	138"	3,510mm	148"	3,760mm
SS 4355 G	90"	2,290mm	84"	2,150mm	107"	2,740mm	93"	2,385mm
SS 5165 G	114"	2,920mm	96"	2,450mm	132"	3,365mm	112"	2,850mm
SS 5583 G	118"	3,020mm	103"	2,640mm	138"	3,510mm	148"	3,760mm
SR 3936	89"	2,280mm	84"	2,150mm	105"	2,680mm	84"	2,150mm
SR 5165	91"	2,330mm	86"	2,190mm	107"	2,740mm	93"	2,385mm
SR 5583	114"	2,920mm	101"	2,570mm	192"	4,885mm	112"	2,850mm

TYPICAL PHYSICAL PROPERTIES

Model	Rotor Size (D x W)		Max Feed Size		Feed Opening		Capacity		Motor Power		Weight	
	mm x mm	inch x inch	mm	inch	mm x mm	inch x inch	mtph	stph	kW	hp	kg	lbs
SP 4855	1,200 x 1,400	48" x 55"	600	23.6"	800 x 1,450	31" x 57"	250 -350	275 -385	250	350	15,000	33,076
SP 5054	1,250 x 1,350	50" x 54"	700	27.5	880 x 1,435	34" x 56"	220 -350	220 -350	250	350	18,915	41,701
SP 5565	1,400 x 1,650	55" x 65"	800	31.5"	1,150 x 1,570	45" x 62"	355 -500	390 -550	350	500	26,000	57,332
SP 6384	1,600 x 2,130	63" x 84"	1000	39.4"	1,600 x 2,150	63" x 85"	700 -900	770 -990	500	650	42,000	92,613
SS 3936	1,000 x 900	39" x 36"	400	15.7"	650 x 950	26" x 37"	80 -150	90 -165	110	150	9,500	20,948
SS 4355	1,100 x 1,400	43" x 55"	450	17.7"	700 x 1,450	28" x 57"	150 -250	165 -275	185	250	12,500	27,563
SS 5165	1,300 x 1,650	51" x 65"	500	19.7	750 x 1,700	30" x 67"	250 -440	275 -484	350	500	23,800	52,481
SS 5583	1,400 x 2,100	55" x 83"	600	23.6"	850 x 2,150	33" x 85"	300 -500	330 -550	600	800	33,000	72,767
SS 4355 G*	1,100 x 1,400	43" x 55"	450	17.7"	700 x 1,450	28" x 57"	150 -250	165 -275	185	250	13,500	29,768
SS 5165 G*	1,300 x 1,650	51" x 65"	500	19.7	750 x 1,700	30" x 67"	250 -440	275 -484	350	500	25,000	35,000
SS 5583 G*	1,400 x 2,100	55" x 83"	600	23.6"	850 x 2,150	33" x 85"	300 -500	330 -550	600	800	55,127	77,178
SR 3936	1,000 x 900	39" x 36"	500	19.7"	700 x 950	27" x 37"	80 -150	90 -165	110	150	10,500	23,153
SR 4250	1,067 x 1,270	42" x 50"	500	19.7"	834 x 1,300	33" x 51"	120 -200	130 -220	185	250	12,615	27,811
SR 5165	1,300 x 1,650	51" x 65"	800	31.5"	1200 x 1,650	48" x 65"	250 -400	275 -440	315	400	25,800	56,891

Projected crusher 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 have less than 10% passing the crusher setting. 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.



# GUARDIAN® HORIZONTAL SCREEN

Accurate Sizing and Separation for Construction Aggregates and Mining

## FEATURES

- » Heavy-duty construction handles 10" (254mm) feed size and up to 4" (102mm) openings\*
- » Handles coarse and fine screening with adjustable oval stroke motion
- » Side tension single crown decks
- » Wet or dry screening configurations
- » Various deck options are available including scalping, flat urethane/rubber, and end tension styles\*

\*Medium Scalper option increases feed size to 14". This option includes 6" side liner/extensions and thicker

## 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®

GUARDIAN® HORIZONTAL SCREEN







**01/ BOLT LOCKING HINGED ACCESS DOORS**

Convenient for inspection and maintenance. Hinge prevents misplacement.

**02/ VS2™ TECHNOLOGY**

Low maintenance design ensures smooth startup and shutdown of screen.

**03/ BOTTLE JACK LIFT POINTS**

No cranes or loaders needed for safer spring maintenance or replacement.

**04/ COIL OR RUBBER SPRING SUSPENSION**

Quiet operation and smooth motion for cold weather applications. (Shown with rubber spring option.)

**05/ BRANDED BEARINGS**

Maximum bearing performance. (not shown)

**06/ HUCK BOLT FASTENERS**

Assure high reliability and fatigue resistant performance.

**07/ SEALED CONSTRUCTION**

Integrated Huck® o-ring, shaft tube o-ring, and HGI sealants unique to the Guardian Horizontal Screen.

**08/ DISCHARGE LIPS/SIDE LINERS**

Bolt-on components available with replaceable steel, rubber or urethane liners.

**09/ SEGMENTED BELT GUARD**

Quick access to sheave and flywheel without completely removing guard. One-person job.

**10/ TORSION ARM TENSIONER**

Conveniently integrated and easy access for drive belt tensioning.

**11/ OPTIONAL SPRAY BAR KIT**

Add-on spray kit available for easy conversion to a wash system.

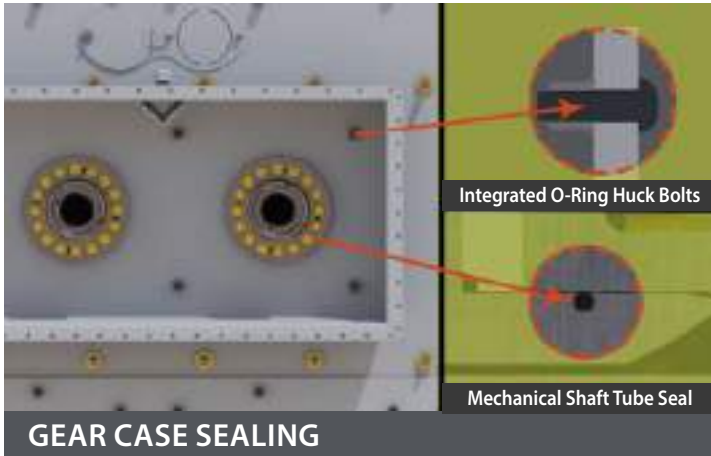


**NEW 4-DECK SCREEN**

- » One screen does the work of two 2-deck screens
- » Reduce circuit size and footprint
- » Higher capacity of fines through bottom deck when using third deck as load relief
- » Five product split (4 products and 1 oversize)
- » No need to split bottom deck in washing applications
- » Dedicate third and fourth decks to making two sand products



## HIGHLIGHTS



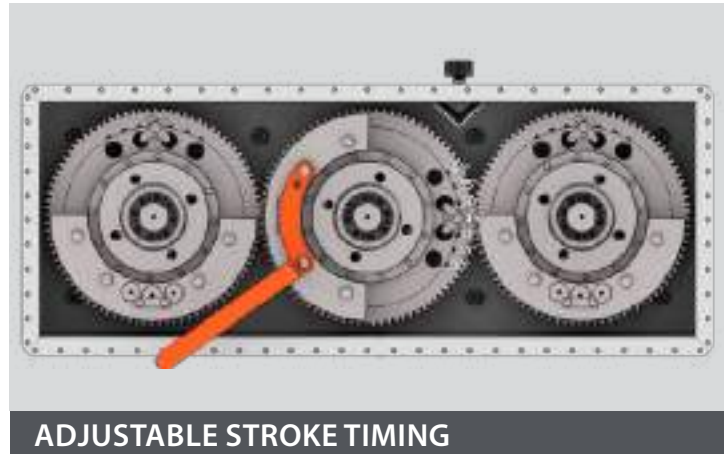
- » Best-in-class industrial sealant
- » Protects bearings and gears from water
- » Eliminates potential for oil leaks



- » Allows for smooth startup and shut-down
- » Extends life of machine and components
- » Low maintenance



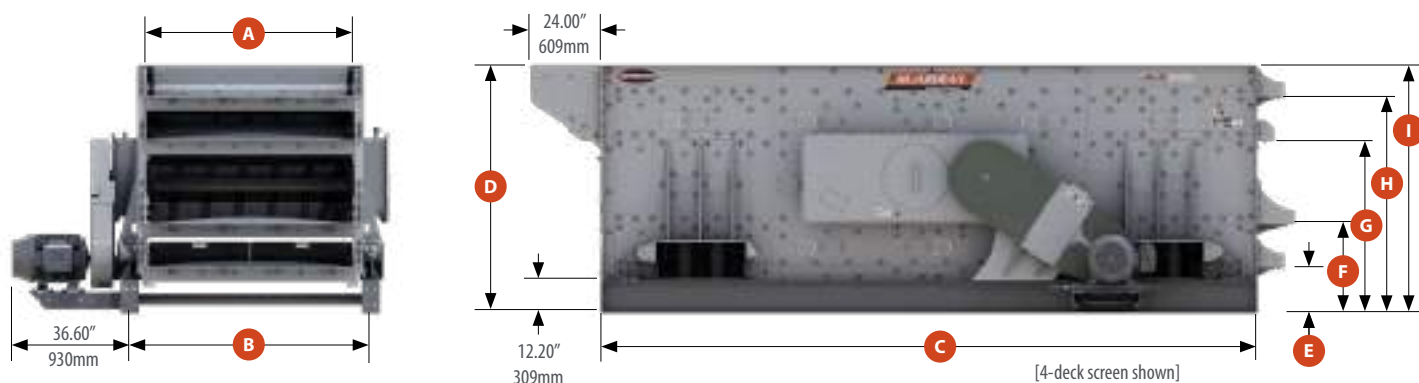
- » Perforated plate
- » Simplified access to middle deck
- » Expedites fines to lower decks
- » Efficiency in finer screening



- » 30° - 60° off vertical
- » 5° increments
- » Factory set to 45°

**2-YEAR/  
6000 HR  
WARRANTY**

## GUARDIAN HORIZONTAL SCREEN SPECIFICATIONS



### DIMENSIONS - INCHES (MM)

Model	A		B		C		D		E		F		G		H		I	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
5162-TH32	61.50	1,562	74.00	1,879	192.75	4,895	59.44	1,509	5.81	147	35.81	909	N/A	N/A	N/A	N/A	47.25	1,200
5163-TH32	61.50	1,562	74.00	1,879	192.75	4,895	75.31	1,912	5.69	144	35.69	906	51.69	1,312	N/A	N/A	63.13	1,603
6162-TH32	76.00	1,930	88.50	2,247	240.75	6,115	59.50	1,511	5.81	147	35.81	909	N/A	N/A	N/A	N/A	47.31	1,201
6163-TH32	76.00	1,930	88.50	2,247	240.75	6,115	75.31	1,912	5.69	144	35.69	906	51.69	1,312	N/A	N/A	63.13	1,603
6202-TH32	76.00	1,930	88.50	2,247	240.75	6,115	59.38	1,508	5.75	146	35.75	908	N/A	N/A	N/A	N/A	47.19	1,198
6203-TH32	76.00	1,930	88.50	2,247	240.75	6,115	75.19	1,909	5.56	141	35.56	903	51.69	1,312	N/A	N/A	63.00	1,600
6204-TH38	76.00	1,930	88.50	2,247	240.75	6,115	90.44	2,297	4.44	113	20.44	519	50.81	1,291	36.63	930	80.25	2,038
7202-TH38	88.00	2,235	100.50	2,552	240.75	6,115	62.19	1,579	5.56	141	38.56	979	N/A	N/A	N/A	930	50.00	1,270
7203-TH38	88.00	2,235	100.50	2,552	240.75	6,115	80.81	2,052	5.44	138	38.44	976	57.19	1,452	N/A	930	68.63	1,743
8202-TH38	100.00	2,540	112.50	2,857	240.75	6,115	62.13	1,578	5.50	139	38.50	977	N/A	N/A	N/A	930	49.94	1,268
8203-TH38	100.00	2,540	112.50	2,857	240.75	6,115	80.69	2,049	5.31	134	38.31	973	57.06	1,449	N/A	930	68.50	1,739
8204-TH40	100.00	2,540	112.50	2,857	240.75	6,115	99.68	2,532	7.63	194	26.38	670	59.38	1,508	78.13	1,985	89.38	2,270

### TYPICAL PHYSICAL PROPERTIES

Model	Decks	Size		Weight (w/base & mtr)		Power	
		ft x ft	mm x mm	lbs	kg	hp	kW
5162-TH32	2	5 x 16	1,562 x 4,900	16,750	7,614	25	18.6
5163-TH32	3	5 x 16	1,562 x 4,900	18,750	8,523	30	22.3
6162-TH32	2	6 x 16	1,930 x 4,900	17,200	7,818	40	29.8
6163-TH32	3	6 x 16	1,930 x 4,900	20,500	9,318	40	29.8
6202-TH32*	2	6 x 20	1,930 x 6,115	19,250	8,750	40	29.8
6203-TH32*	3	6 x 20	1,930 x 6,115	23,500	10,682	40	29.8
6204-TH38	4	6 x 20	1,930 x 6,115	28,500	12,955	50	37.2
7202-TH38*	2	7 x 20	2,235 x 6,115	24,000	10,909	50	37.2
7203-TH38	3	7 x 20	2,235 x 6,115	29,400	13,363	50	37.2
8202-TH38	2	8 x 20	2,540 x 6,115	25,500	11,591	50	37.2
8203-TH38*	3	8 x 20	2,540 x 6,115	31,500	14,318	50	37.2
8204-TH40	4	8 x 20	2,540 x 6,115	39,750	18,068	60	44.7

\* TS (triple-shaft) 2.5 degree slope option \*\*14" (355mm) with medium scalper top deck option

### FOR ALL MODELS

- » Max Feed Size: 10" (254mm)\*\*
- » Speed: 730 - 835 RPM
- » Stroke: 0.5 - .75" (12.5 - 20mm)



# INTREPID® VIBRATING GRIZZLY FEEDER

Remove Unwanted Fines While Providing a Continuous Feed to Plant

## FEATURES

- » Rugged design features like greater I-beam support, precision shafts and Huck fasteners.
- » Unique bottle jack lifting points allow for safer spring maintenance.
- » Adjustable slope and stroke to increase application flexibility and performance.
- » Patent-pending designs manufactured in widths to feed up to 1,400 stph (1,540 mtpd)

## APPLICATIONS



Ore/Hard  
Rock Mining



Quarried  
Stone



River  
Gravel



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Concrete





Fractured  
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Cubical  
products



Super Pave  
Products

Wheeled   
Stationary 

Rock Face to Load Out®

INTREPID® VGF



HIGHLIGHTS



CAST GRIZZLY CARTRIDGES

» Universal bolt-in bars are for flat or 5° applications, so owners and operators can limit stock to one style.



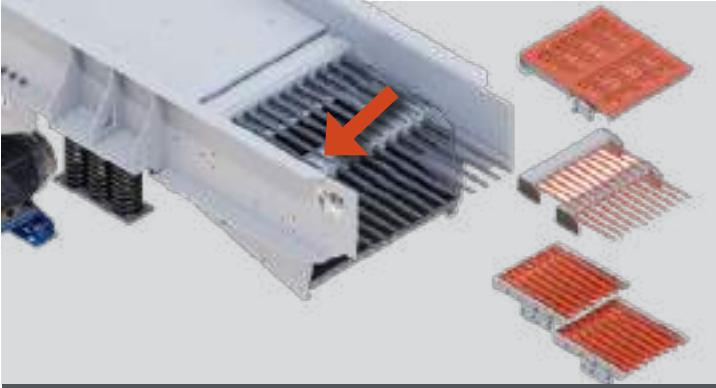
BOTTLE JACK LIFTING POINTS

» Designed into the spring section to improve safety during maintenance or repair. No cranes or loaders needed.



PRECISION MACHINE SHAFTING

» Provides best-in-class shaft strength and better bearing fit up. Easily access from side of feeder.



MULTIPLE GRIZZLY SECTION OPTIONS

» 0 degree or 5 degree Grizzly bars, finger tines and punch plate.

SPECIFICATIONS

INTREPID VGF													
Model	Grizzly Decks	Grizzly Length	Size		Weight (Static)		Operating Speed	Required Power		Max Feed Size		Capacity	
			ft	mm x mm	in x ft	kg		lbs	rpm	kw	hp	mm	in
3617VGF	1	5'	920 x 5,180	36" x 17'	4,535	10,000	600-800	15	20	500	20"	200-300	220-330
4012VGF	1	4'	1,040 x 3,660	40" x 12'	3,550	7,826	600-800	15	20	600	24"	320-420	360-470
4016VGF	1	6'	1,040 x 4,875	40" x 16'	4,850	10,692	600-800	18.8	25	600	24"	320-420	360-470
4220VGF	1 or 2	5'	1,067 x 6,090	42" x 20'	5,218	11,500	600-800	18.8	25	600	24"	320-420	360-470
4820VGF	1 or 2	5'	1,219 x 6,090	48" x 20'	6,120	12,765	600-800	22.5	30	700	28"	450-570	500-635
4824VGF	1 or 2	5'	1,219 x 7,320	48" x 24'	9,520	21,000	600-800	30	40	700	28"	450-570	500-635
5420VGF	1 or 2	5'	1,372 x 6,090	54" x 20'	7,725	17,025	600-800	30	40	800	32"	535-685	595-760
5424VGF	1 or 2	5'	1,372 x 7,320	54" x 24'	9,700	21,500	600-800	37.5	50	800	32"	535-685	595-760
6020VGF	1 or 2	5'	1,534 x 6,090	60" x 20'	8,500	18,739	600-800	37.5	50	900	36"	615-765	685-850
6024VGF	1 or 2	5'	1,534 x 7,320	60" x 24'	11,300	23,500	600-800	37.5	50	900	36"	615-765	685-850
6620VGF	1 or 2	5'	1,670 x 6,090	66" x 20'	10,100	22,266	600-800	45	60	1,100	44"	750-900	830-1020
6624VGF	1 or 2	5'	1,670 x 7,320	66" x 24'	11,150	24,581	600-800	45	60	1,100	44"	750-900	830-1020
7420VGF	1 or 2	5'	1,870 x 6,090	74" x 20'	11,750	25,904	600-800	56.3	75	1,300	50"	880-1020	980-1130
7424VGF	1 or 2	5'	1,870 x 7,320	74" x 24'	14,000	30,864	600-800	75	100	1,300	50"	880-1020	980-1130







ROCK FACE TO  
**LOAD OUT™**

[superior-ind.com](http://superior-ind.com)

2023-04SPHB1156ENPR-22