

CRUSHING

SCREENING

WASHING

CONVEYING

COMPONENTS

PLANTS

CONSTRUCTION

AFTERMARKET

CRUSHING & SCREENING EQUIPMENT PRODUCT HANDBOOK



TABLE OF CONTENTS

4	Patriot® Cone Crusher
10	Liberty® Jaw Crusher
15	Dakota® Cone Crusher
20	Endeavor® Cone Crusher
25	Cemco® Vertical Shaft Impactor
31	Valor® VSI - Belt Drive
37	Sentry® Horizontal Shaft Impactor
41	Anthem® Inclined Screen
45	Guardian® Horizontal Screen
49	Intrepid® Vibrating Grizzly Feeder





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

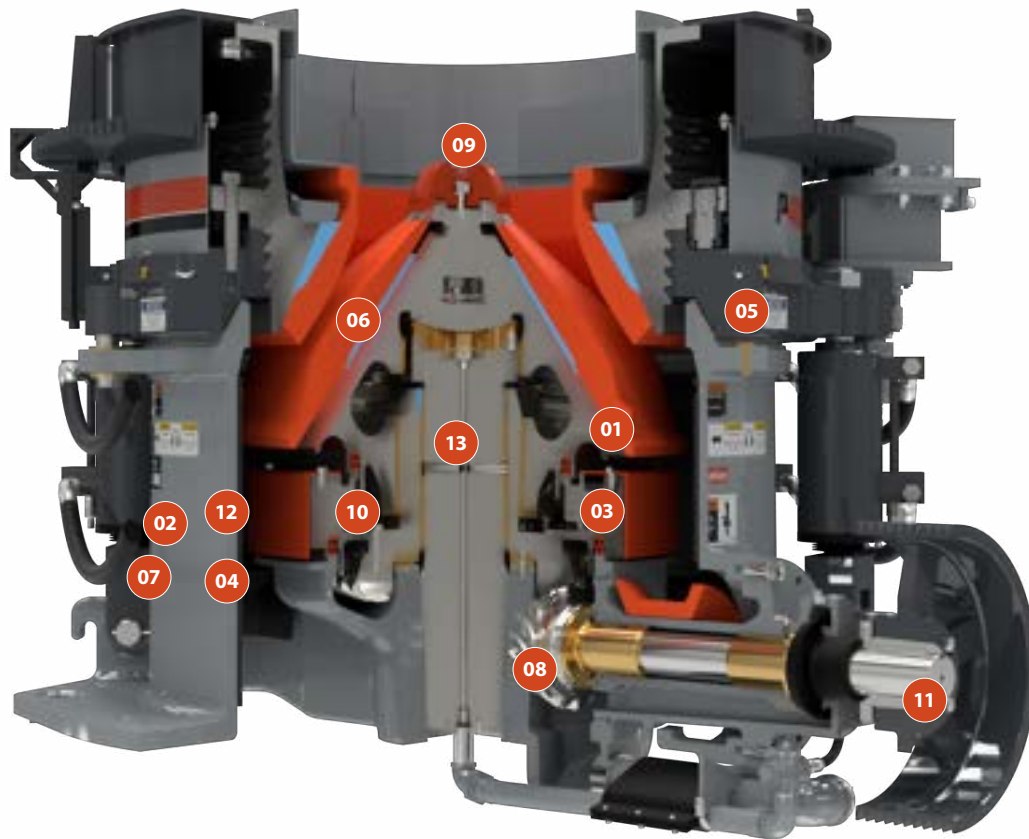


Cubical
products



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.

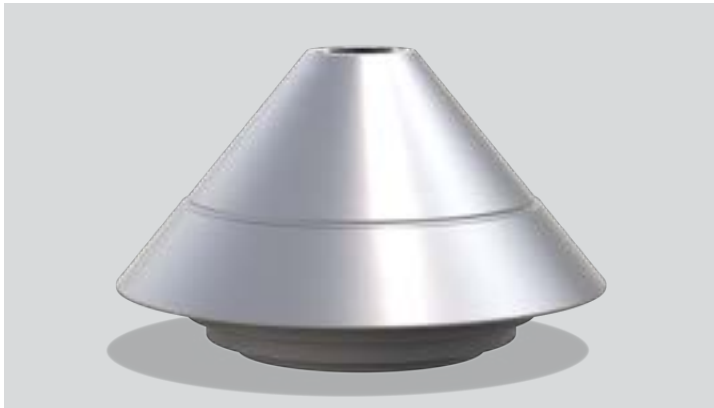
12/ ONE PIECE CAST MAINFRAME

Removes any welding for highest possible strength and durability.

13/ ECCENTRIC & CLAMP RING

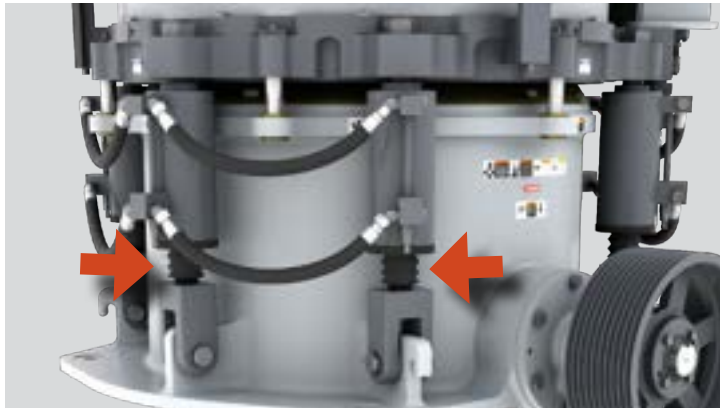
Manufactured with ductile iron which has higher tensile and fatigue strength, resists fracturing and is more impact resistant.

HIGHLIGHTS



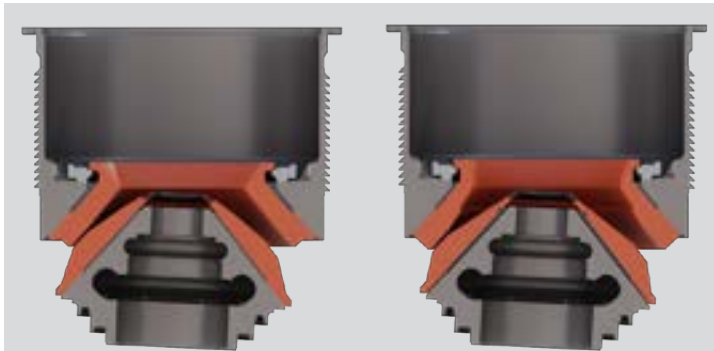
01/ RAISED CONE HEAD SEATING SURFACE

- » Allows reconditioning of head seating surface



02/ INVERTED TRAMP RELIEF CYLINDERS

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



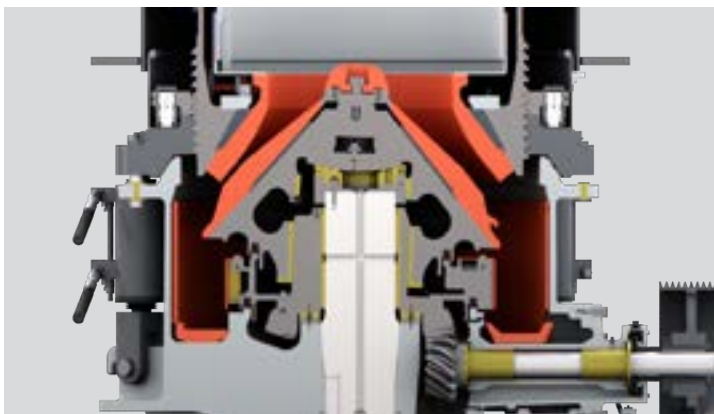
06/ UNIVERSAL CRUSHING CHAMBER

- » Application flexibility from secondary to tertiary



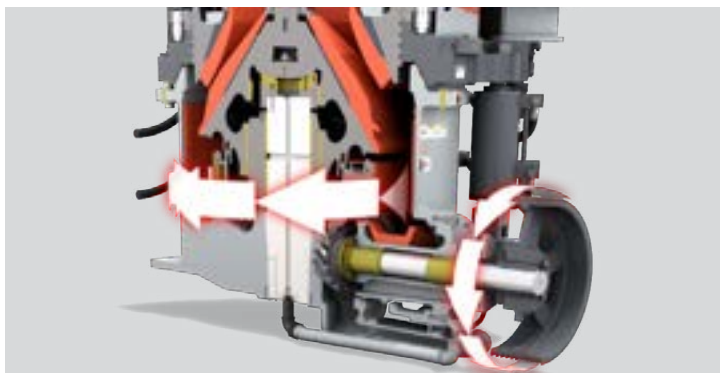
07/ TRAMP RELIEF SYSTEM

- » Reduce maintenance and points of failure with fewer accumulators



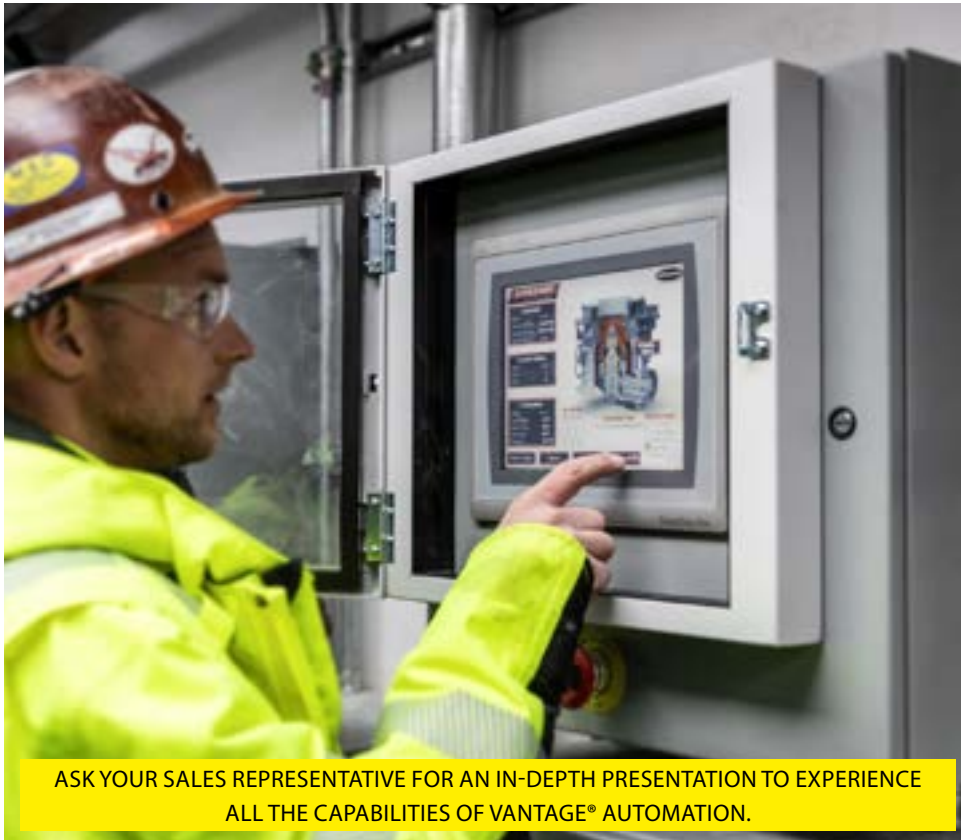
09/ HIGH PIVOT POINT GEOMETRY

- » 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

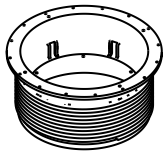
PATRIOT® CONE CRUSHER LIFETIME WARRANTY

LIMITED LIFETIME WARRANTY FOR MAJOR CRUSHER COMPONENTS

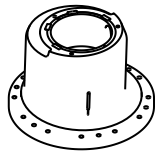
MAJOR COMPONENTS COVERED



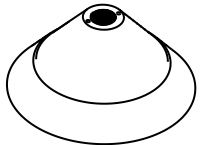
1. Adjustment Ring



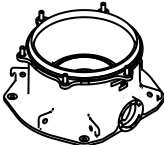
2. Bowl



3. Eccentric



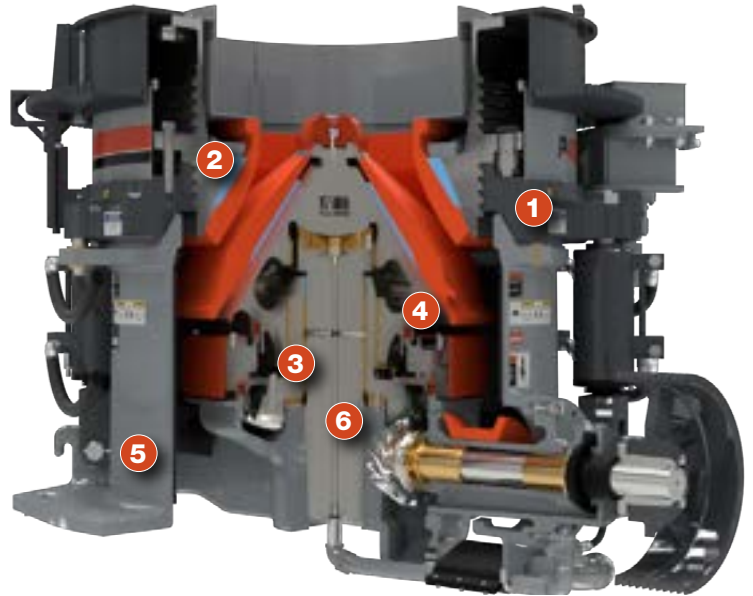
4. Head



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

Feed size is determined by measuring the longest one-way dimension of the material sample.

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





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

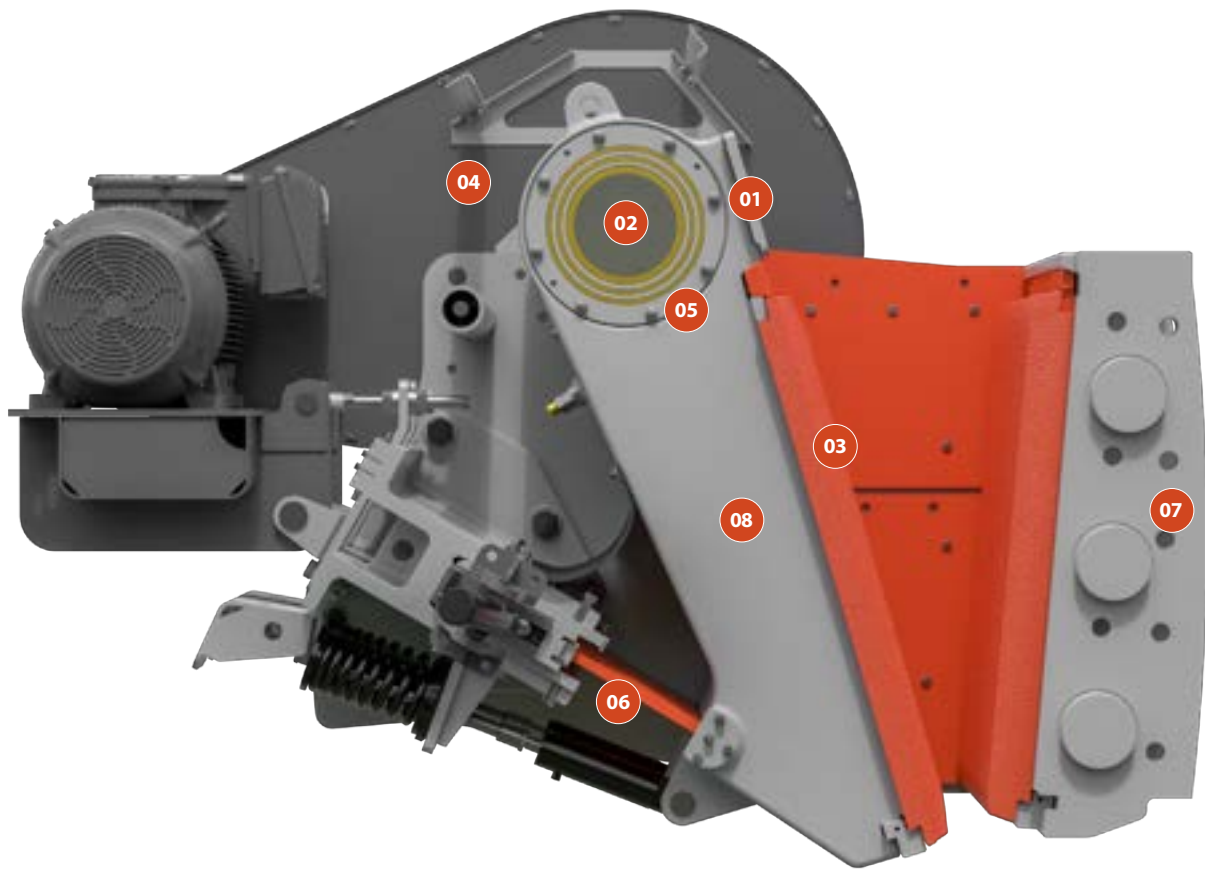


River
Gravel



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



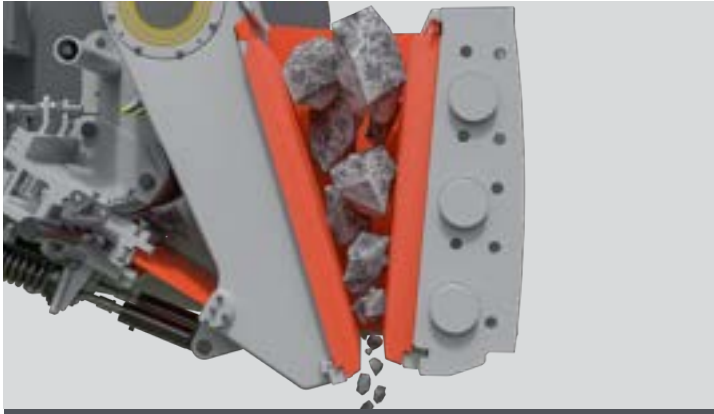
HYDRAULIC WEDGE ADJUSTMENT

- » 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.



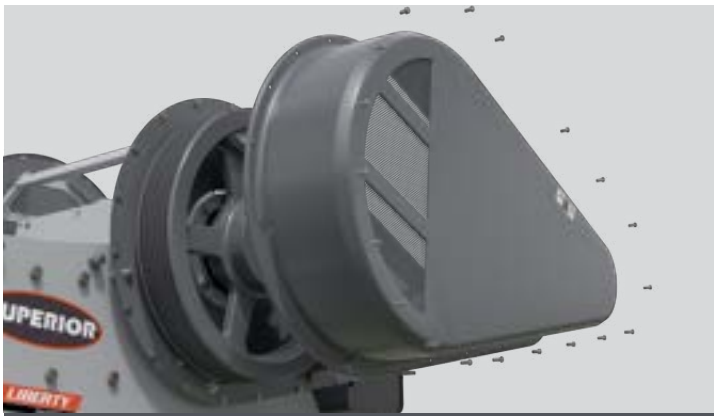
AGGRESSIVE NIP ANGLE

- » 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	in x in	mm	in	mtph	stph	rpm	mm	in	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
6080B	135,000	297,000	1,525 x 2,030	60 x 80	200 - 300	8" - 12"	700 - 1,450	770 - 1,595	200	1,219	48.0"	400	500

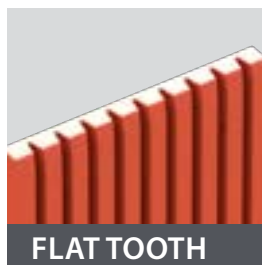
PERCENT PASSING FOR A GIVEN CLOSED SIDE SETTING - AVERAGE FEED MATERIAL (12-14 work index)

	in	mm	1.5"	2"	2.5"	3"	3.5"	4"	5"	6"	7"	8"	10"	11"	12"
			(38mm)	(50mm)	(63mm)	(76mm)	(88mm)	(101mm)	(127mm)	(152mm)	(177mm)	(203mm)	(254mm)	(279mm)	(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%	94	80	70	56	51	47
	8	203						100%	94	82	70	61	49	45	41
	7	177					100%	100%	82	70	60	53	42	38	35
	6	152				100%	99	87	70	58	50	44	35	32	29
	5	127		100%	100%	92	80	70	56	47	40	35	28	25	23
	4	101	100%	95	83	70	60	53	42	35	30	27	21	19	18
	2.5	63	95	85	70	59	50	44	35	29	25	22	18	16	15
	2	50	85	70	57	48	40	35	28	24	20	18	14	13	12
	1.5	38	69	52	42	35	30	26	21	18	15	14	11	10	9
	1	25	44	34	28	23	20	17	14	12	10	9	7	7	6
	0.75	19	32	25	21	18	15	13	11	9	8	7	5	5	5
	0.5	12	22	18	15	12	10	9	7	6	5	5	4	4	3
	0.25	6	12	10	8	6	5	5	4	3	3	2	2	2	1

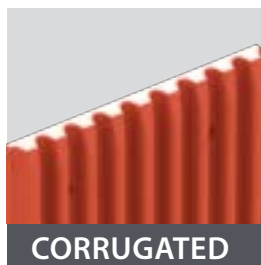
Feed size is determined by measuring the longest one-way dimension of the material sample.

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.

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	in x in	mm	in	mtph	stph	rpm	mm	in	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

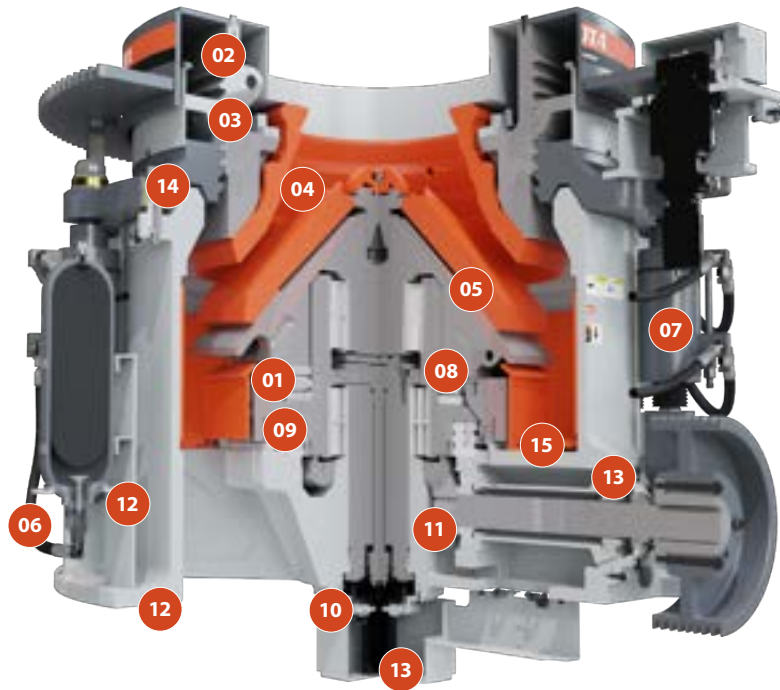


Cubical
products



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

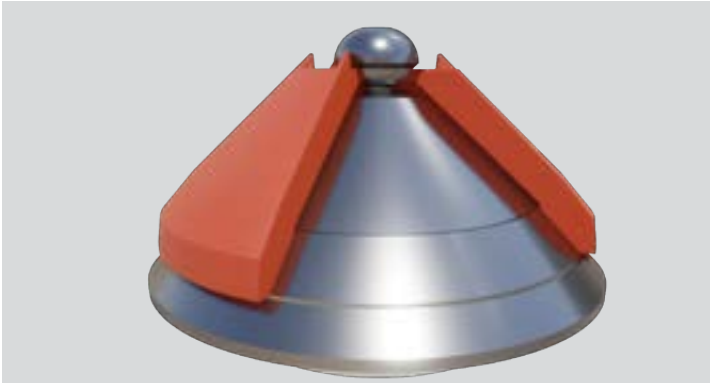
14/ REPLACEABLE SEAT LINERS

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



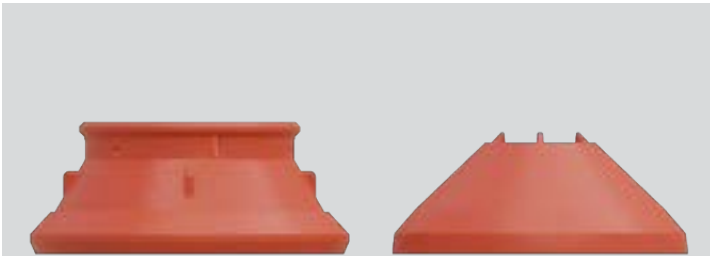
RAISED CONE HEAD SEATING SURFACE

- » Allows reconditioning of head seating surface



INVERTED TRAMP RELIEF CYLINDERS

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



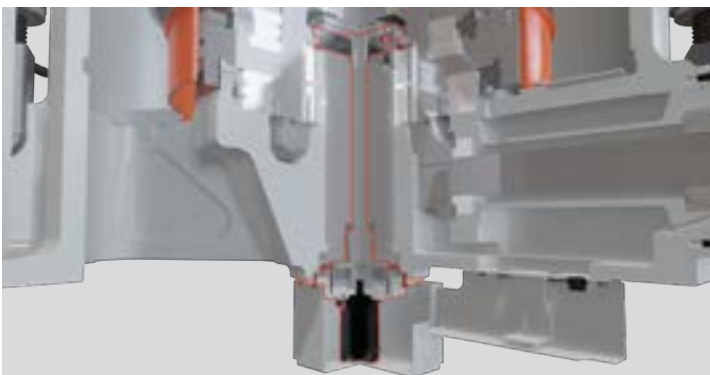
UNIVERSAL CRUSHING CHAMBER

- » Application flexibility from secondary to tertiary



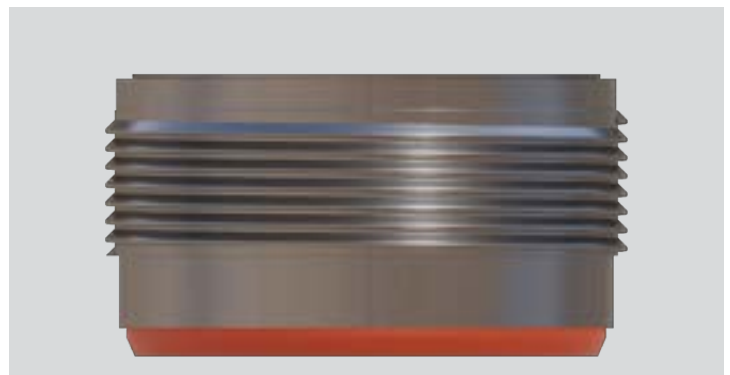
TRAMP RELIEF SYSTEM

- » 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

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

Feed size is determined by measuring the longest one-way dimension of the material sample.

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.



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

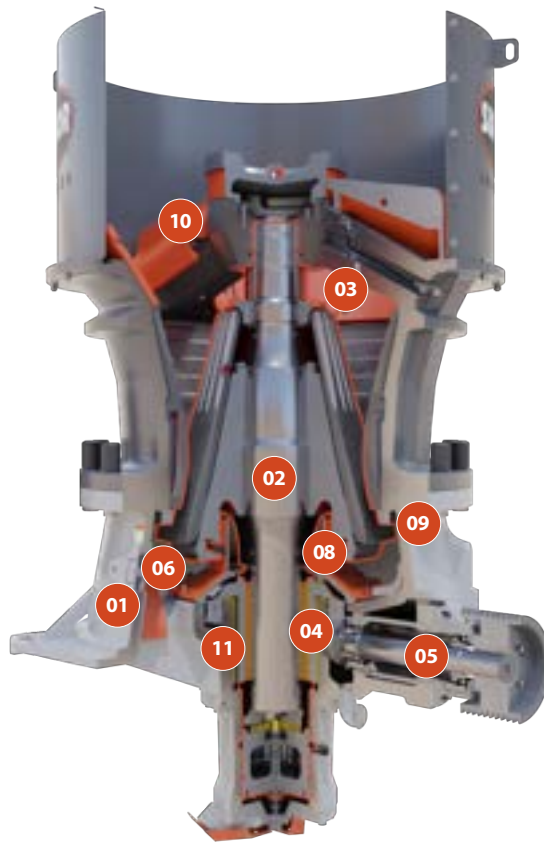


Cubical
products



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.

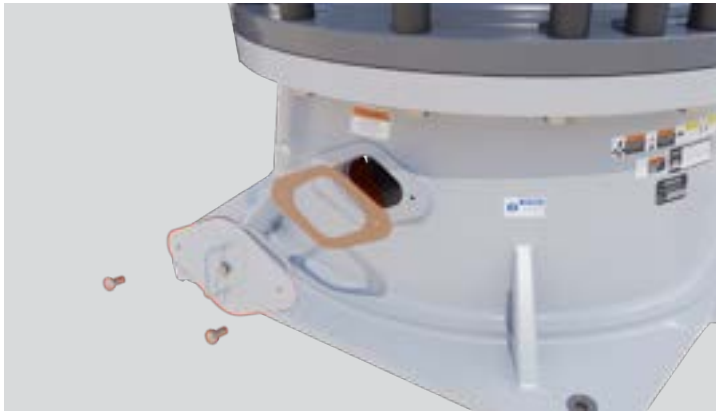
10/ CONSISTENT FEED OPENING THROUGHOUT THE LIFE OF THE LINER

No adjustment to feed needed based on liner wear.

11/ VARIABLE ECCENTRIC THROW

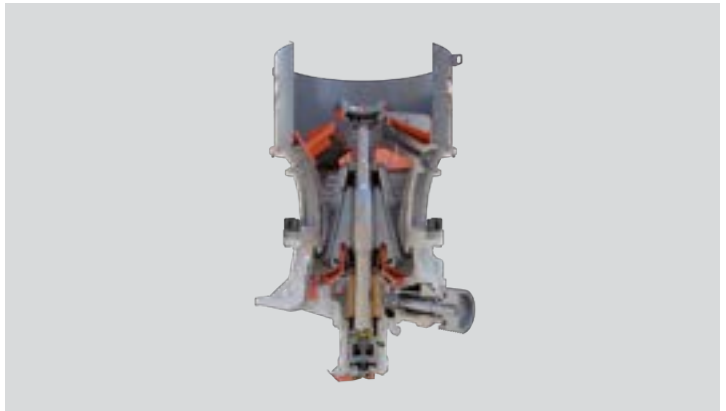
Allows end-user to adjust the stroke of the machine to meet application needs.

HIGHLIGHTS



MAINFRAME INSPECTION DOOR

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



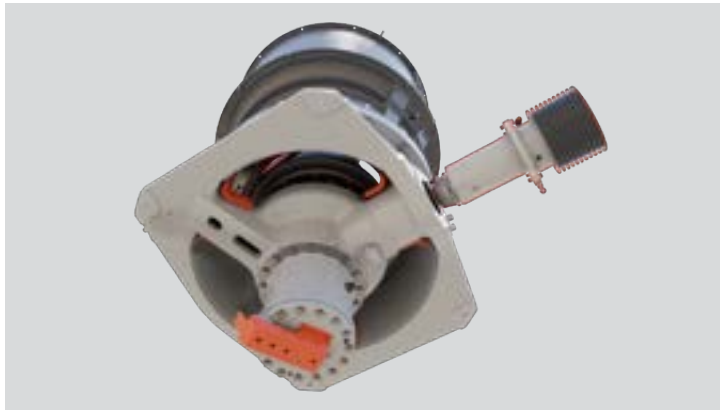
ENCLOSED ECCENTRIC & DUST COVER

- » Protects assembly from wear



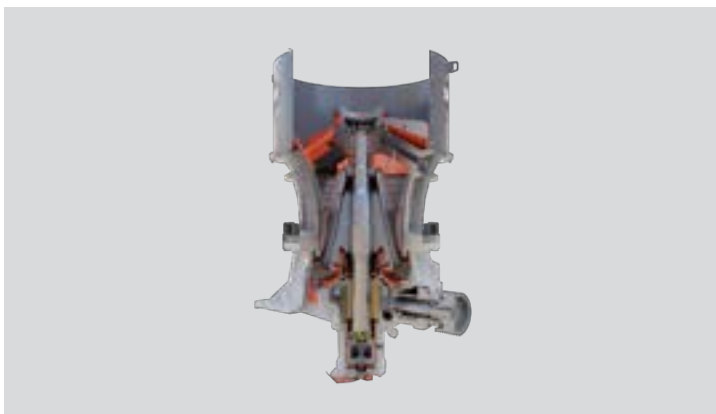
UNIVERSAL CRUSHING CHAMBER

- » 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	mm	in
ST300	1,090	42-15/16	15,870	34,980	225	300	210	8-1/4	1,438	8 - 48	5/16 to 1-7/8
SS300	980	38-9/16	19,980	44,050	225	300	450	17-3/4	1,354	25 - 54	1 to 2-1/8
ST400	1,330	52-9/25	27,440	60,500	300	400	344	13-1/2	1,188	29 - 83	1-1/8 to 3-1/4
SS400	1,138	44-4/5	34,930	77,000	300	400	700	27-1/2	1,060	13 - 51	1/2 to 2

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 Secondary Models	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 Tertiary Models	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

Feed size is determined by measuring the longest one-way dimension of the material sample. 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.



CEMCO® VERTICAL SHAFT IMPACTOR

Creates Cubical Aggregates, Manufactured Sands and Eliminates Unsound Material

ADVANTAGES OF VSI CRUSHING

- » Shaping, cubical product
- » Fine crushing
- » Gradation consistency
- » High fracture face count
- » Simplified maintenance
- » Accepts wetter feed
- » Very portable
- » Lower capital cost than compression crushing

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





01/ HYDRAULIC LID LIFTER

Hydraulic lid lifter and camloc system provide quick internal access.

02/ ADJUSTABLE FEED TUBE

Wear-resistant adjustable feed tube maximizes throughput and insures all feed material is processed.

03/ CRUSHING CHAMBER

Interchangeable crushing chamber can accomodate multiple rotor and anvil ring configurations for greater application flexibility.

04/ ROTOR ASSEMBLY

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

05/ ANVIL RING

Rotatable and count-adjustable anvil ring

06/ SINGLE OR DUAL DRIVE

Optional twin motor design minimizes cyclic vibration and correctly loads pedestal bearings.

HIGHLIGHTS



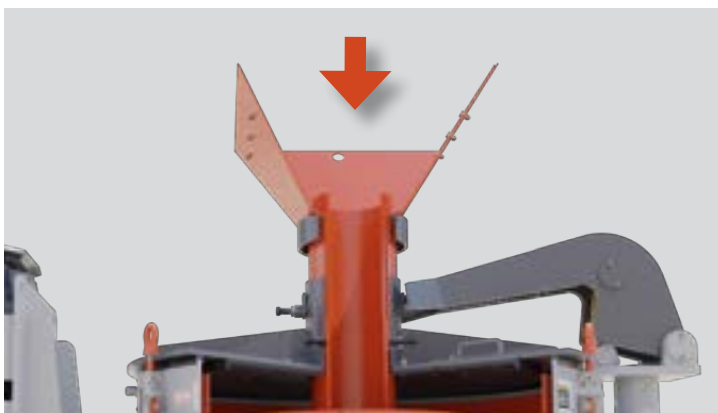
HYDRAULIC LID LIFTER

- » Hydraulic lid lifter and camloc system provide quick internal access for routine inspections and easier maintenance.



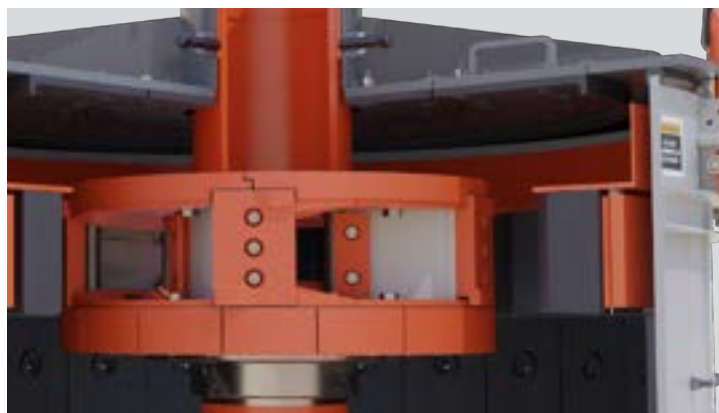
SINGLE OR DUAL DRIVE

- » Optional twin motor design minimizes cyclic vibration and correctly loads pedestal bearings for more power and longer pedestal life.



EXTERNALLY ADJUSTED FEED TUBE

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



INTERCHANGEABLE CRUSHING CHAMBERS

- » Can accommodate several rotor and anvil ring configurations for a broader range of applications.

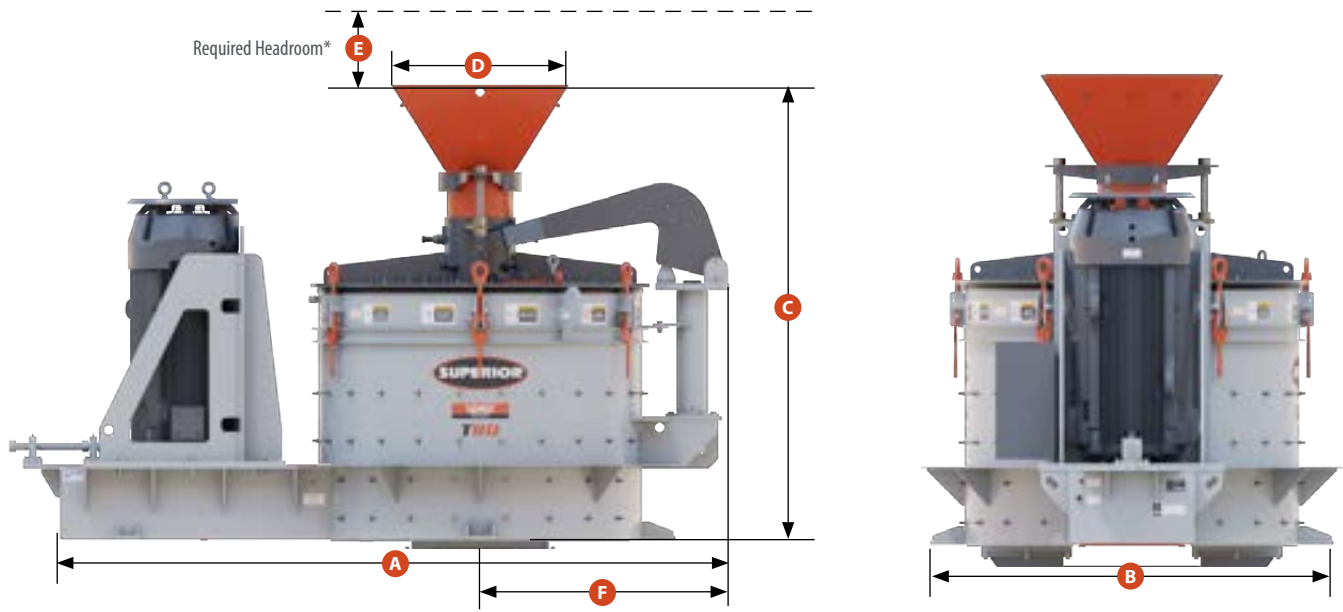


VANTAGE® AUTOMATION

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

**2-YEAR/
6000 HR
WARRANTY**

CEMCO VSI SPECIFICATIONS



*Required headroom for lid to open straight up and the feed hopper to clear the tub wall and swing open.

VSI CRUSHER DIMENSIONS

Model	A		B		C		D		E		F	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
T35 (Single)	2,475	97.44	1,251	49.25	1,621	63.81	617	24.31	300	12.00	795	31.31
T54 (Single)	3,267	132.63	1,930	76	2,268	89.31	832	32.75	300	12.00	1,248	49.13
T70 (Single)	3,532	139.06	2,014	79.31	2,270	89.37	832	32.75	300	12.00	1,306	51.44
T80 (Single)	3,540	139.38	2,090	82.38	2,475	97.43	940	37.00	300	12.00	1,300	51.00
T80 (Dual)	4,180	164.75	2,090	82.38	2,475	97.43	940	37.00	300	12.00	1,300	51.00
T96 (Single)	4,276	168.37	2,314	91.12	2,908	114.5	940	41.75	300	12.00	1,527	60.12
T96 (Dual)	4,869	191.69	2,314	91.12	2,908	114.5	940	41.75	300	12.00	1,527	60.12

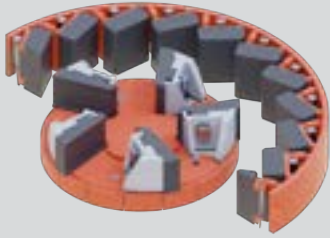
TYPICAL PHYSICAL PROPERTIES

Model	Configuration	Max Feed Size		Table/Rotor Diameter		Capacity		Rotor/Table Operation Range		Typical HP Range		Max Weight	
		mm	in	mm	in	mtph	stph	RPM		kW	hp	kg	lbs
T35 Single	Rotor (4 Port)	25	1	457	18	9-45	10-50	2,000-2,600		56-75	75-100	2,495	5,500
	Shoe Table (4, 5 Shoe)	40	1.5	457	18	9-45	10-50	2,000-2,600		56-75	75-100	2,495	5,500
T54 Single	Rotor (4 Port)	40	1.5	686	27	45-113	50-125	1,200-1,950		112-187	150-250	4,990	11,000
	Shoe Table (4, 5 Shoe)	50	2	686	27	45-113	50-125	1,200-1,950		112-187	150-250	4,990	11,000
T70 Single	Rotor (4 Port)	50	2	813	32	45-136	50-150	1,200-1,850		149-224	200-300	7,030	15,500
	Shoe Table (4, 5 Shoe)	75	3	813	32	45-136	50-150	1,200-1,850		149-224	200-300	7,030	15,500
T80 Single or Dual	Rotor (5 Port)	65	2.5	889	35	90-250	100-275	1,250-1,650		Single 225-300	300-400	8,777	19,350
	Shoe Table (4, 5, 6 Shoe)	100	4	889	35	90-250	100-275	1,250-1,650		Dual 450-600	600-800	11,430	25,200
T96 Single or Dual	Rotor (3,6 Port)	75	3	990	39	136-408	150-450	1,250-1,650		Single 225-300	300-400	12,610	27,800
	Shoe Table (4, 5, 6 Shoe)	100	4	965	38	136-408	150-450	1,250-1,650		Dual 450-600	600-800	15,875	35,000

Feed size is determined by measuring the longest one-way dimension of the material sample.

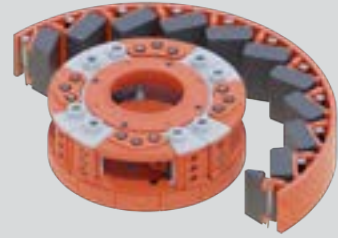
Projected crusher capacities are based on a material having a work index of 12-14, with a bulk density of 100 lbs/ft³ (1.6 mt/m³). The crusher drive assemblies are to be maintained in good working order with the ability to apply all available horsepower without drive belt slippage. Plant installation 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



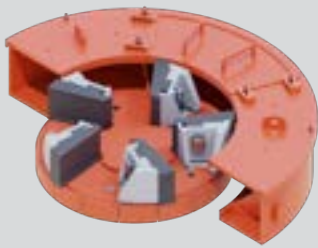
SHOE TABLE / ANVIL RING

- » Medium range friable material
- » Medium to low abrasion material
- » Low to Medium recirculating load
- » Good reduction rate, recommend for “chips” and sand



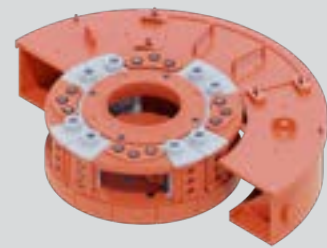
SUPERCHIPPER™ ROTOR/ ANVIL RING

- » Low recirculating load
- » High reduction rate, high “fractured face” ratio
- » Use with high abrasion, low friability material
- » Excellent for producing sands and fines



SHOE TABLE / ROCK SHELF

- » Friable, low abrasion material
- » Low reduction rate, high recirculating load
- » Low percentage of “fracture face” material



SUPERCHIPPER™ ROTOR / ROCK SHELF

- » Good for shaping abrasive material
- » Good for light crushing

SPECIFICATIONS



SHOE TABLE DATA

Model	Diameter		Shoes	Max Feed Size	
	mm	in		mm	in
T35	457	18	4, 5	25	1.5
T54	686	27	4, 5	50	2
T70	813	32	4, 5	75	3
T80	889	35	4, 5, 6	100	4
T96	965	38	4, 5, 6	100	4



SUPERCHIPPER™ ROTOR DATA

Model	Diameter		Ports	Max Feed Size	
	mm	in		mm	in
T35	457	18	4	25	1
T54	686	27	4	40	1.5
T70	813	32	4	50	2
T80	889	35	5	65	2.5
T96	990	39	3, 6	75	3



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



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

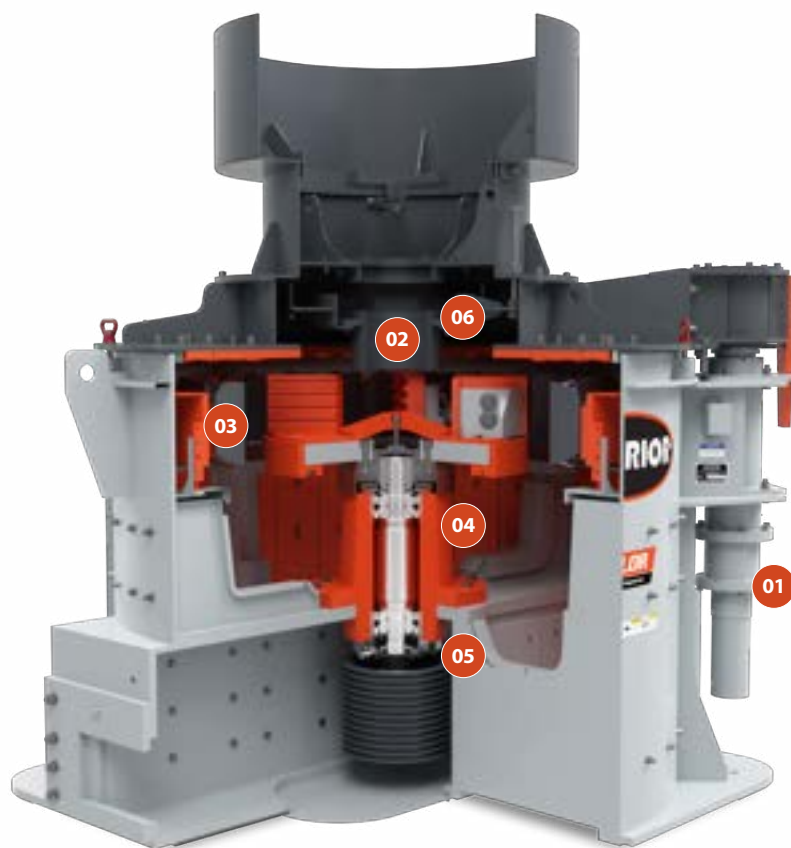


Shaping



Asphalt

Wheeled 
Stationary 



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.

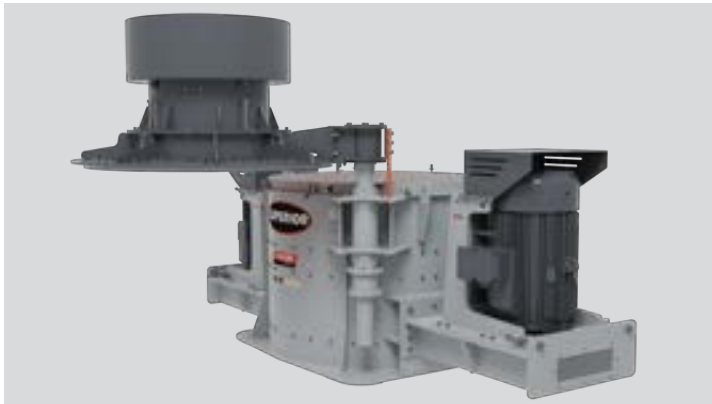
05/ BRANDED BEARINGS

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.



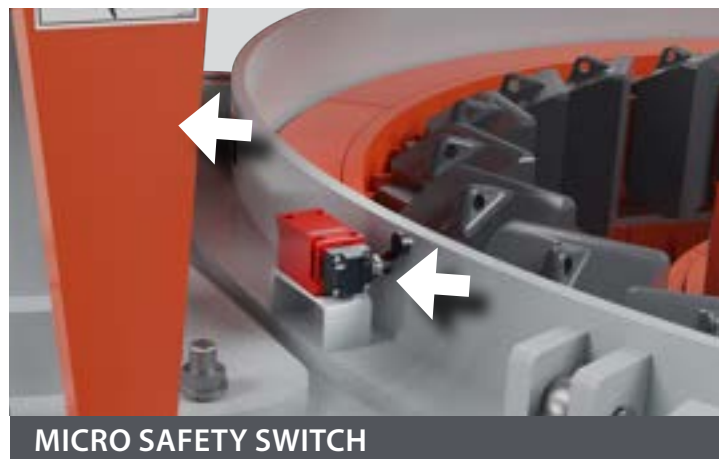
VIBRATION PROTECTION SWITCH

- » 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.

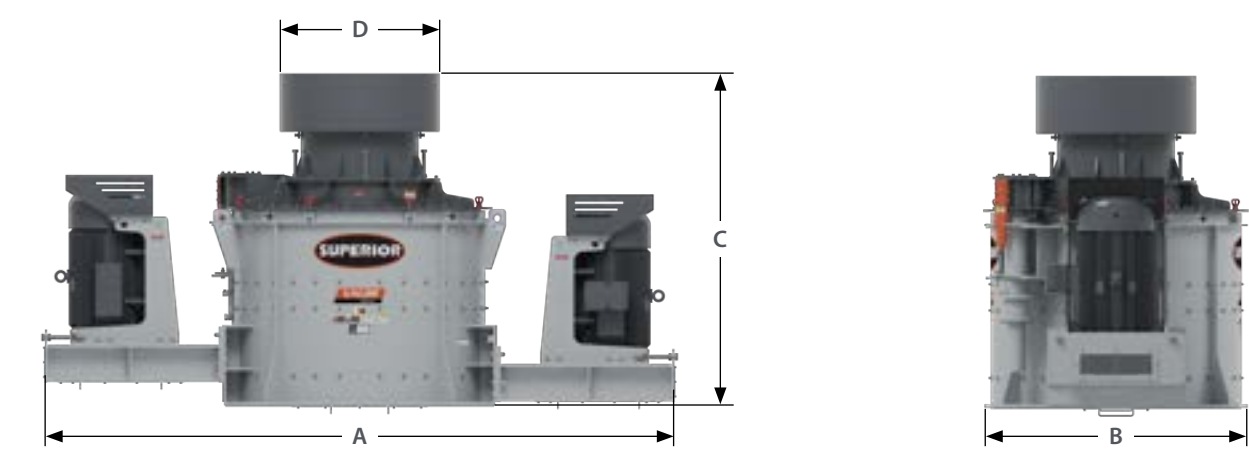


VANTAGE® AUTOMATION

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



BELT DRIVE SPECIFICATIONS

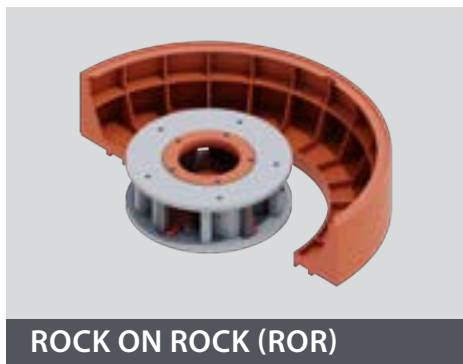


VSI-B CRUSHER DIMENSIONS								
Model	A		B		C		D	
	mm	in	mm	in	mm	in	mm	in
V2160 Single Drive	4,115	162.0	2,324	91.5	3,104	122.2	1,397	55.0
V2160 Dual Drive	5,563	219.0	2,324	91.5	3,104	122.2	1,397	55.0

TYPICAL PHYSICAL PROPERTIES											
Model	Configuration	Max Feed Size		Table/Rotor Diameter		Est. Max Capacity		Typical Horsepower Range		Weights	
		mm	in	mm	in	mtph	stph	kW	hp	kg	lbs
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

Feed size is determined by measuring the longest one-way dimension of the material sample.
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 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

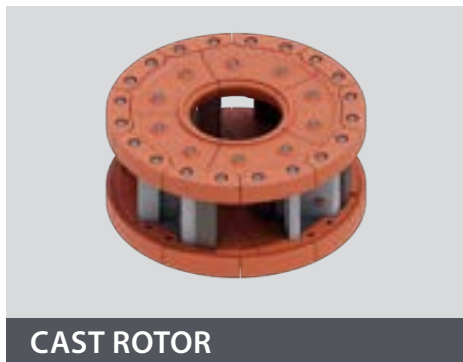


- » Enclosed Rotor and Anvils
- » Feed sizes to 2-3/8"
- » Medium abrasion materials

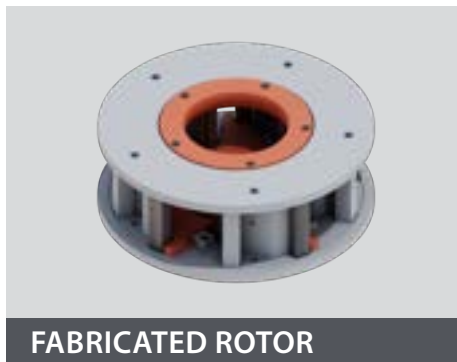


- » Shoe and Anvil
- » Feed size up to 4"
- » Low to medium abrasion materials

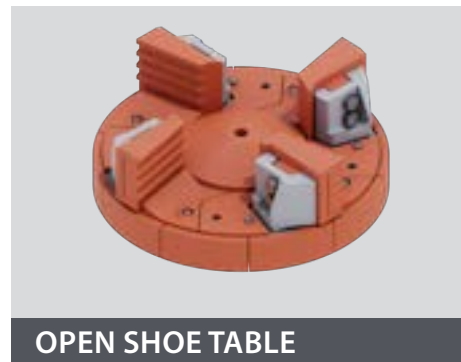
HEAD CONFIGURATIONS



- » 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





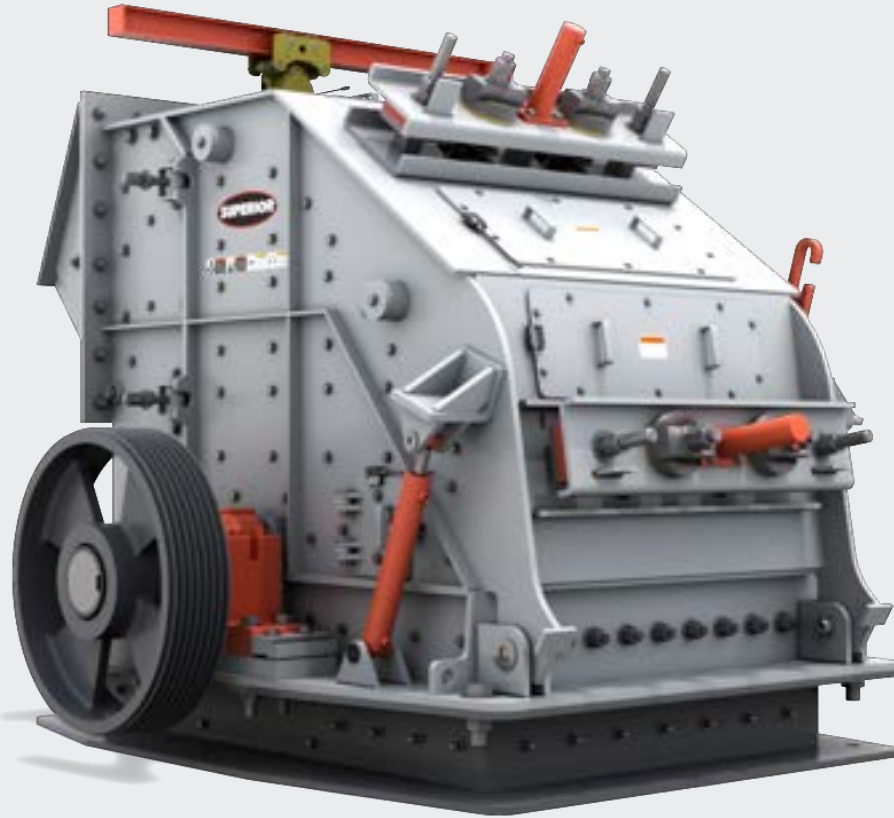
FUSION® PLATFORM SYSTEMS

- » 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

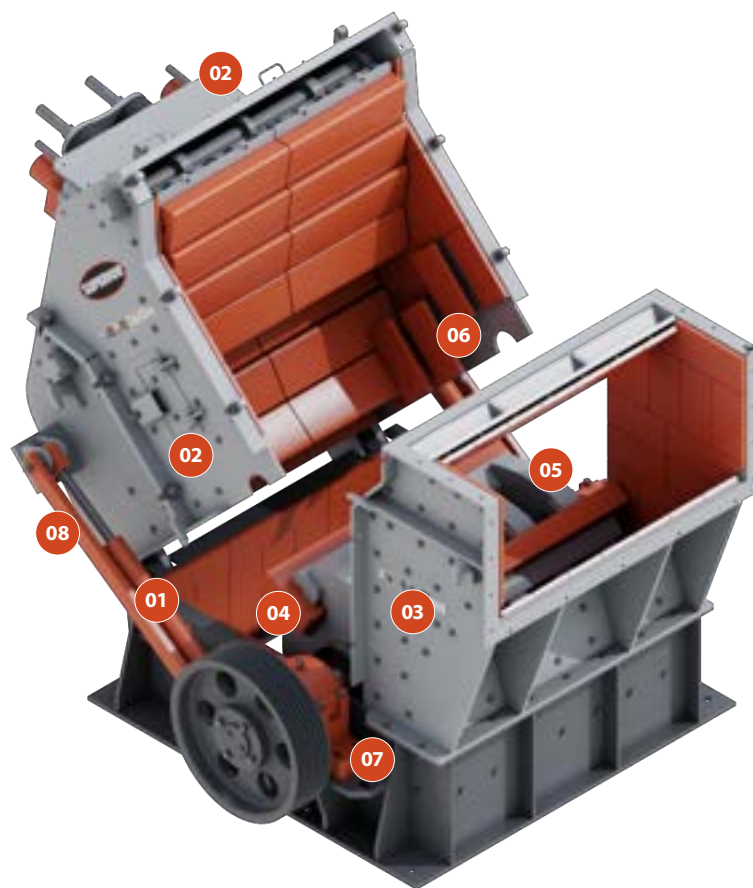


Cubical
Products



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.

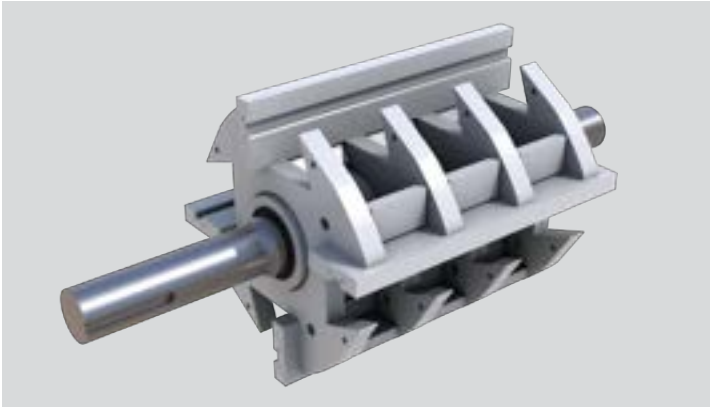
07/ OFF-THE-SHELF BEARINGS

Local sourcing speeds access to parts in emergency situations.

08/ CRUSHER LID SAFETY LOCK

Locks housing for safety during maintenance.

HIGHLIGHTS



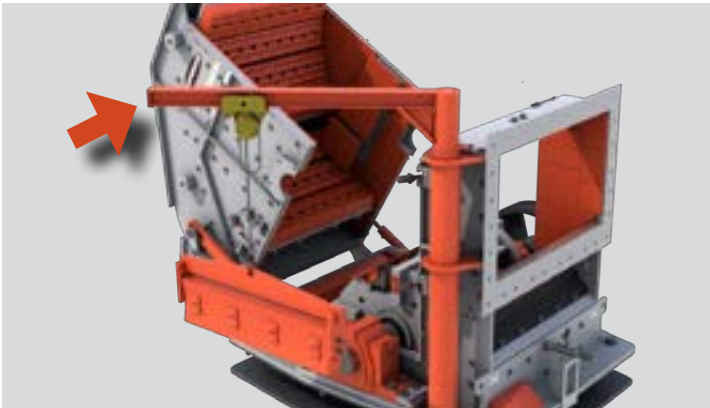
FABRICATED OPEN ROTOR DESIGN

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



HYDRAULIC CURTAIN ADJUSTMENT

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



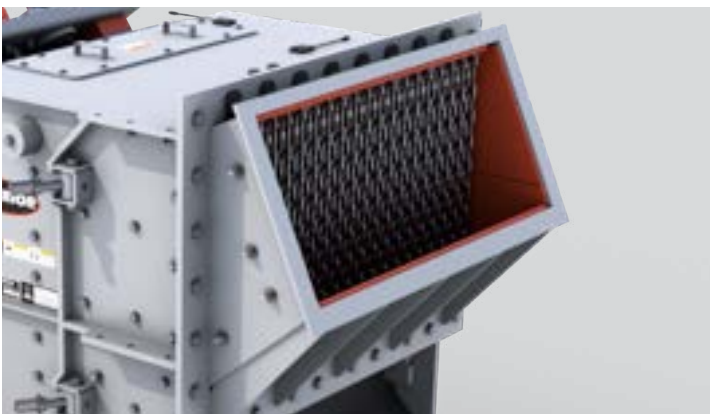
BLOW BAR HANDLING TOOL

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



ROTOR LOCKING TOOL

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

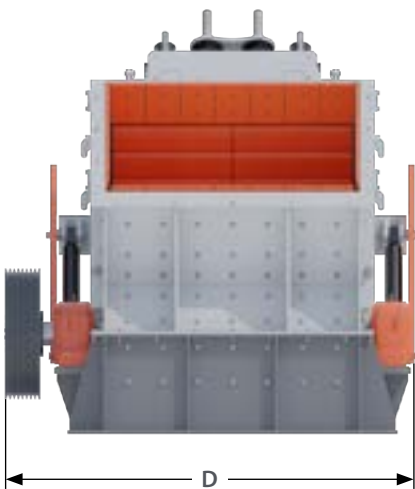
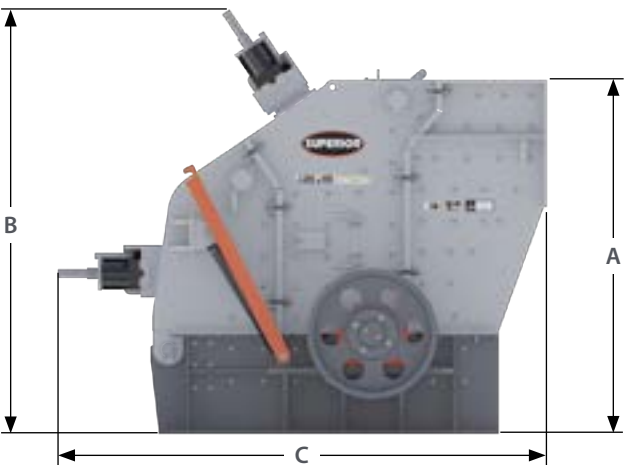


FEED HOOD EXTENSION

- » 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	in x in	mm	in	mm x mm	in x in	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

Feed size is determined by measuring the longest one-way dimension of the material sample. 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.



Pictured is a Superior S18242 Anthem Inclined Screen mounted on a Superior custom structure and conveyor.

ANTHEM® INCLINED SCREEN

Primary or Secondary Screen For Aggregate and Mining Applications.

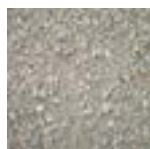
FEATURES

- » Wide range of applications including gravel, crushed stone, recycle and industrial minerals.
- » Custom footprints are available to fit your existing screen structure.
- » Durable screen with scalping, sizing, or finishing capabilities.
- » Spray systems and wash kit options
- » Variety of models available to accommodate specific applications.

APPLICATIONS



Ore/Hard
Rock Mining



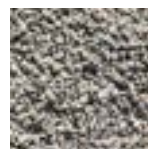
Quarried
Stone



River
Gravel



Recycle
Concrete



Fractured
Gravel



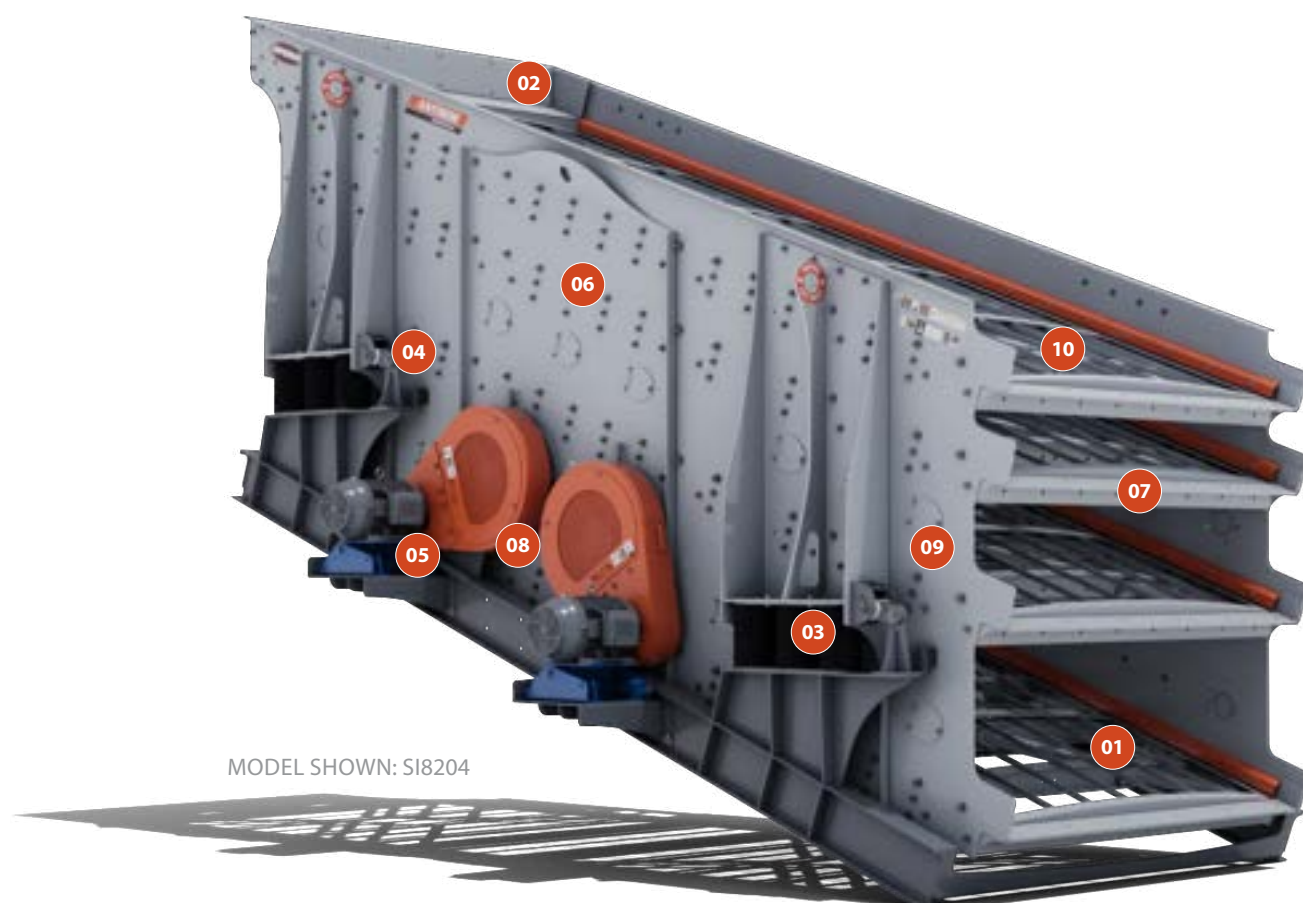
Cubical
products



Super Pave
Products

Wheeled
Stationary





MODEL SHOWN: SI8204

01/ DECK SPACING*

Additional space between decks to for easier change out of media.

02/ INTEGRATED FEEDBOX

Modern feedbox design integrated into frame of screen with bolted wear liners and deflector plates.

03/ COIL SPRINGS

Quiet operation and smooth motion. Shown with flexible spring guards.

04/ VS2 SURGE SUPPRESSION

Ensures smooth startup and shut down of screen.

05/ PIVOT-BASE MOTOR MOUNT*

Provides the correct belt tension to ensure trouble free operation.

06/ HUCK BOLT CONSTRUCTION

Highest reliability and best holding force in vibratory application.

07/ DISCHARGE LIPS/SIDE LINERS*

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

08/ "C" SECTION V BELT DRIVE

Single or dual shaft for application flexibility.

09/ INSPECTION PORTS*

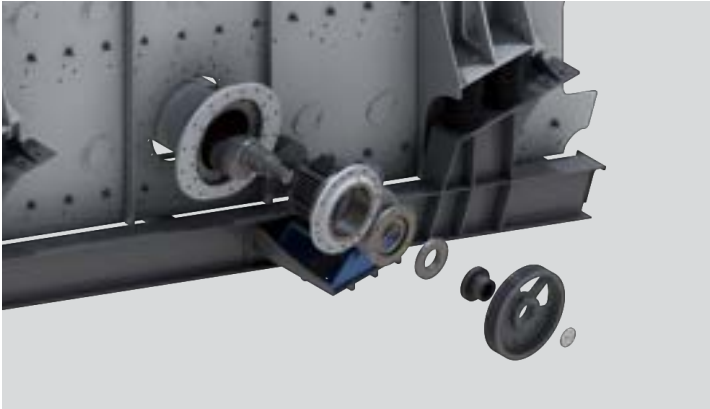
Bolt-locking, hinged inspections ports.

10/ DECK LINERS*

Replaceable deck protection liners extend life of the screen by protecting deck structure from wear.

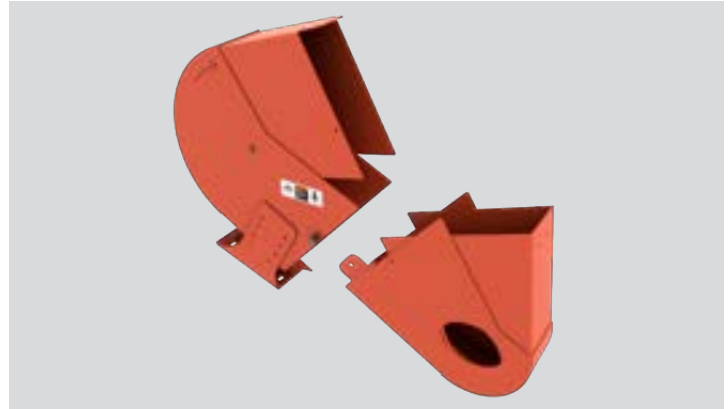
*Low-maintenance features for static plant operators

HIGHLIGHTS



DRIVE DESIGN

- » Reduced downtime via side removal of shaft assembly.



SEGMENTED BELT GUARDS

- » Require only one person to remove and reinstall during maintenance.



HINGED ACCESS DOORS

- » Prevent material spillage through access holes with hinged covers that cannot easily be misplaced.



DECK SPACING

- » Additional space between decks to for easier change out of media



INTEGRATED FEEDBOX

- » Modern feedbox design integrated into frame of screen with the ability to incorporate wear liners and deflector plates.



SPRAY KITS

- » Optional wash system kits are available.

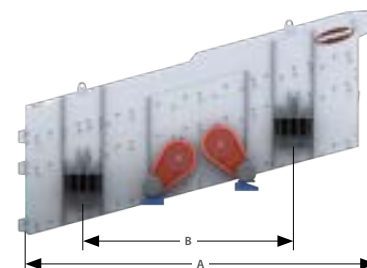
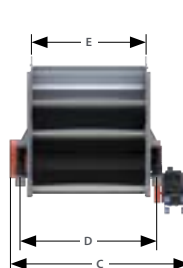
SPECIFICATIONS

ANTHEM INCLINED SCREEN

Model	Decks	Size		Weight		Power	
		ft x ft	mm x mm	lbs	kg	hp	kW
5142-SI	2	5 x 14	1,600 x 4,250	10,000	4,535	15	11
5143-SI	3	5 x 14	1,600 x 4,250	12,800	5,806	20	15
5162-SI	2	5 x 16	1,600 x 4,900	11,100	5,040	15	11
5163-SI	3	5 x 16	1,600 x 4,900	13,500	6,150	20	15
6162-SI	2	6 x 16	1,890 x 4,900	12,500	5,700	20	15
6163-SI	3	6 x 16	1,890 x 4,900	15,400	6,982	30	22.5
6202-SI	2	6 x 20	1,890 x 6,115	14,500	6,600	25	18.5
6203-SI	3	6 x 20	1,890 x 6,115	17,600	7,977	30	22.5
6204-SI	4	6 x 20	1,890 x 6,115	20,700	9,354	40	30
7202-SI	2	7 x 20	2,190 x 6,050	20,000	9,100	30	22.5
7203-SI	3	7 x 20	2,190 x 6,050	28,200	12,800	(2) 25	(2) 18.5
8202-SI	2	8 x 20	2,500 x 6,115	23,100	10,500	(2) 20	(2) 15
8203-SI	3	8 x 20	2,500 x 6,115	29,800	13,500	(2) 25	(2) 18.5
8204-SI	4	8 x 20	2,500 x 6,115	39,600	18,000	(2) 30	(2) 22.5
8242-SI	2	8 x 24	2,500 x 7,320	29,200	13,250	(2) 20	(2) 15
8243-SI	3	8 x 24	2,500 x 7,320	38,580	17,500	(2) 30	(2) 22.5

ANTHEM INCLINED SCREEN (SCALPING SERIES)

Model	Decks	Size		Weight		Power	
		ft x ft	mm x mm	lbs	kg	hp	kW
4102-SISP	2	4 x 10	1,270 x 3,070	11,023	5,000	20	15
5162-SISP	2	5 x 16	1,580 x 5,000	18,298	8,300	30	22
6162-SISP	2	6 x 16	1,860 x 5,000	19,180	8,700	40	30
6202-SISP	2	6 x 20	1,860 x 6,050	21,590	9,800	40	30
7162-SISP	2	7 x 16	2,190 x 5,000	26,000	11,800	40	30
7202-SISP	2	7 x 20	2,190 x 6,050	29,762	13,500	(2) 25	(2) 18.5
8202-SISP	2	8 x 20	2,500 x 6,050	32,628	14,800	(2) 30	(2) 22
8242-SISP	2	8 x 24	2,500 x 7,320	43,210	19,600	(2) 40	(2) 30



DIMENSIONS - INCHES (MM)

Model	A		B		C		D		E	
	in	mm	in	mm	in	mm	in	mm	in	mm
5142-SI	186.0	4,723	90.3	2,294	110.6	2,811	80.9	2,056	62.9	1,600
5143-SI	186.0	4,723	90.3	2,294	110.6	2,811	80.9	2,056	62.9	1,600
5162-SI	208.5	5,296	112.8	2,866	110.6	2,811	80.9	2,056	62.9	1,600
5163-SI	208.5	5,296	112.8	2,866	110.6	2,811	80.9	2,056	62.9	1,600
6162-SI	208.5	5,296	112.8	2,866	124.1	3,152	92.5	2,350	74.4	1,890
6163-SI	208.5	5,296	112.8	2,866	124.1	3,152	92.5	2,350	74.4	1,890
6202-SI	253.2	6,431	157.9	4,012	124.1	3,152	92.5	2,350	74.4	1,890
6203-SI	253.2	6,431	157.9	4,012	124.1	3,152	92.5	2,350	74.4	1,890
6204-SI	253.2	6,431	157.9	4,012	124.1	3,152	92.5	2,350	74.4	1,890
7202-SI	253.2	6,431	157.9	4,012	137.3	3,488	104.5	2,656	86.0	2,190
7203-SI	253.2	6,431	157.9	4,012	137.3	3,488	104.5	2,656	86.0	2,190
8202-SI	255.0	6,482	157.9	4,012	149.6	3,800	116.5	2,960	98.4	2,500
8203-SI	255.0	6,482	157.9	4,012	149.6	3,800	116.5	2,960	98.4	2,500
8204-SI	253.0	6,431	167.7	4,260	149.6	3,800	116.5	2,960	98.4	2,500
8242-SI	298.4	7,580	180.3	4,580	153.5	3,900	116.5	2,960	98.4	2,500
8243-SI	298.4	7,580	180.3	4,580	153.5	3,900	116.5	2,960	98.4	2,500
4102-SISP	139.0	3,531	83.8	2,129	96.0	2,438	67.0	1,702	50.0	1,270
5162-SISP	206.6	5,250	127.9	3,250	112.2	2,850	80.7	2,050	62.2	1,580
6162-SISP	206.6	5,250	127.9	3,250	125.1	3,180	92.5	2,350	74.8	1,900
6202-SISP	248.0	6,300	163.7	4,160	125.1	3,180	92.5	2,350	74.8	1,900
7162-SISP	206.6	5,250	127.9	3,250	138.5	3,520	104.7	2,660	86.2	2,190
7202-SISP	248.0	6,300	163.7	4,160	138.5	3,520	104.7	2,660	86.2	2,190
8202-SISP	248.0	6,300	163.7	4,160	155.9	3,960	117.0	2,972	98.5	2,502
8242-SISP	286.2	7,270	180.5	4,586	155.9	3,960	117.0	2,972	98.5	2,502



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 feedbox and top discharge lip liners.

APPLICATIONS



Ore/Hard
Rock Mining



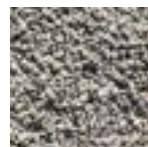
Quarried
Stone



River
Gravel



Recycle
Concrete



Fractured
Gravel

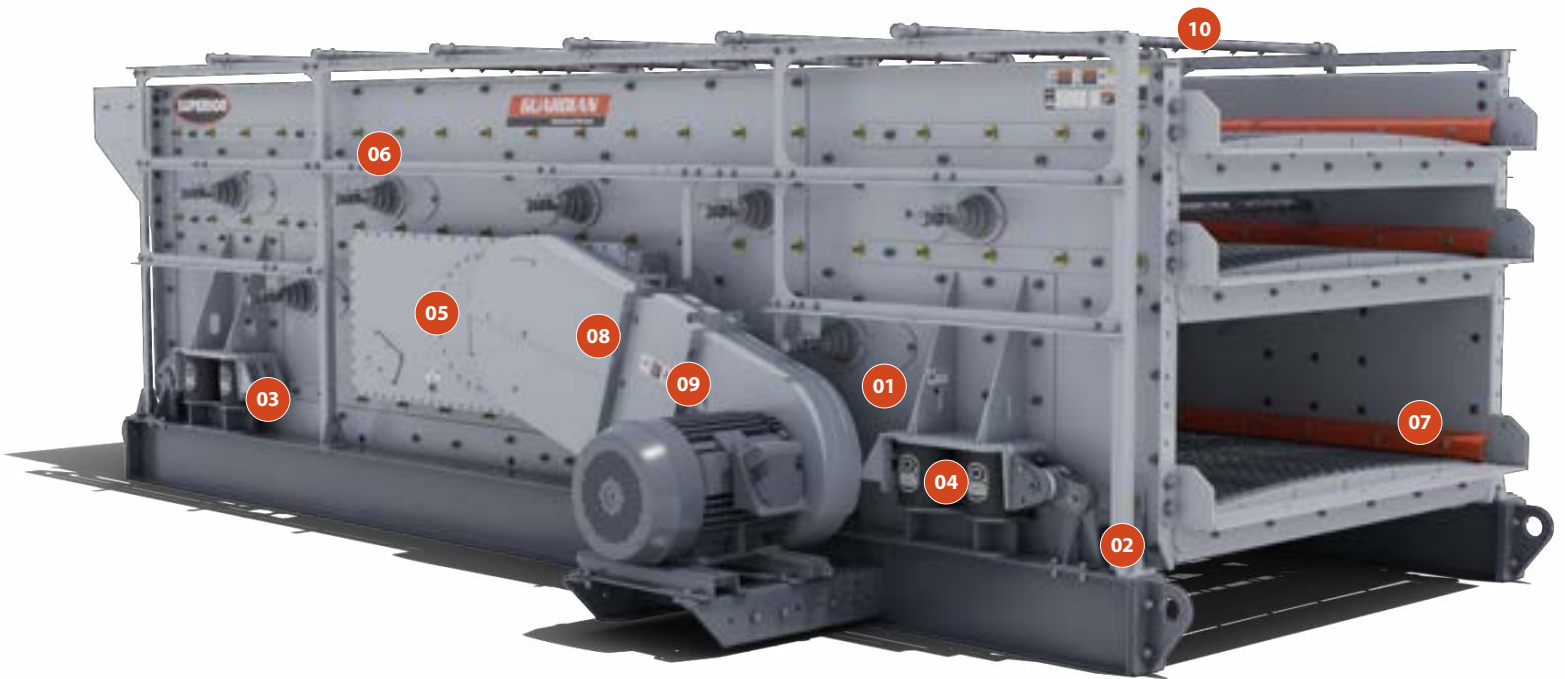


Cubical
products



Super Pave
Products

Wheeled 
Stationary 



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

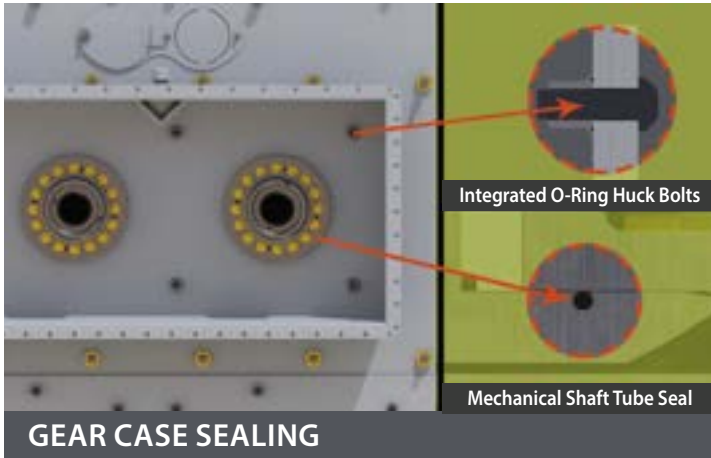
Add-on spray kit available for easy conversion to a wash system.



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



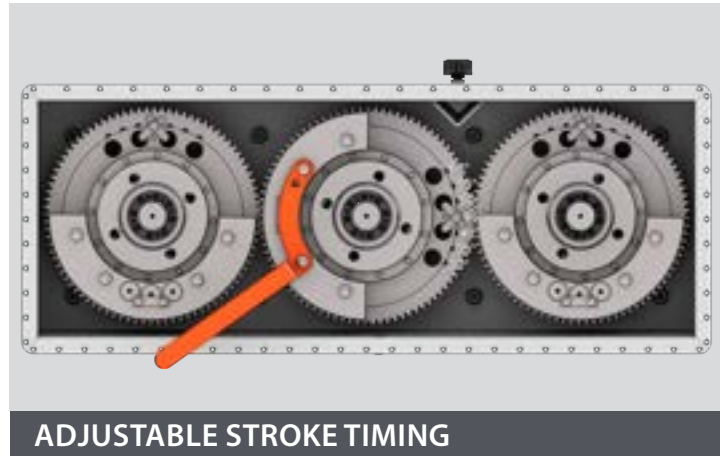
- » Best-in-class industrial sealant
- » Protects bearings and gears from water
- » Eliminates potential for oil leaks



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



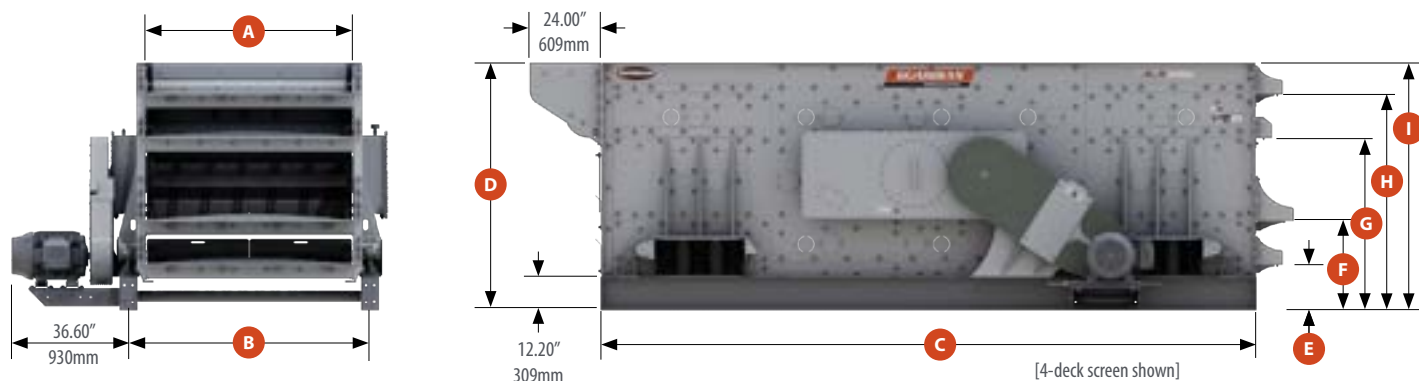
- » Patented tension adjuster with visual indicator
- » Eliminates manual measurements
- » Ensures perfect tensioning every time



- » 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	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	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

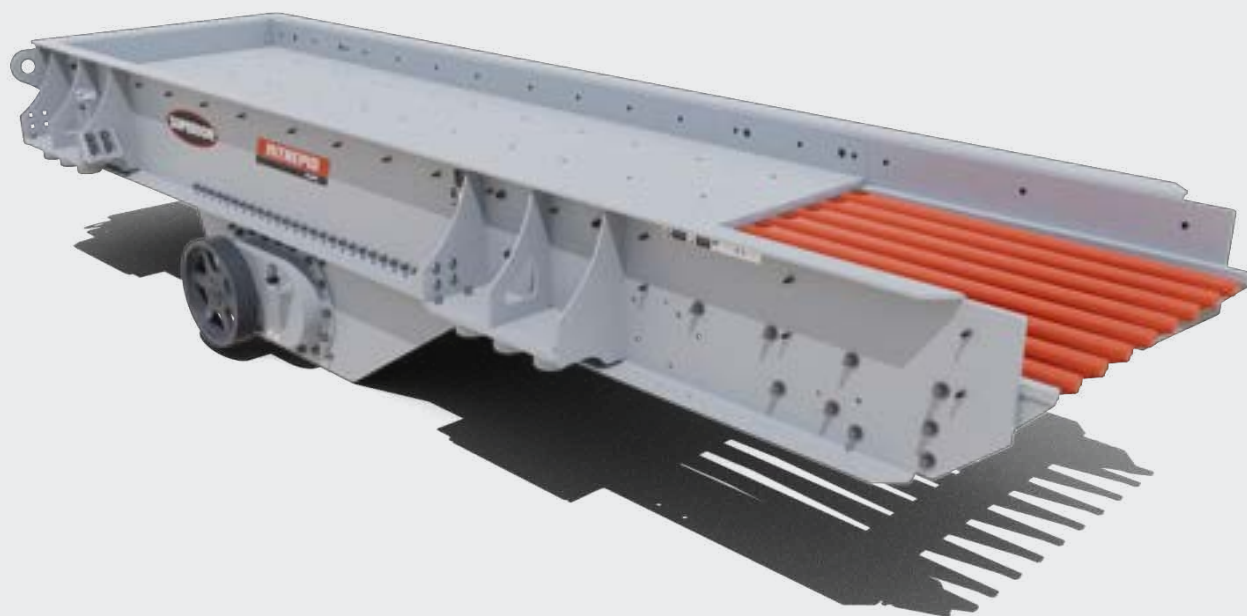
TYPICAL PHYSICAL PROPERTIES

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



Recycle
Concrete



Fractured
Gravel



Cubical
products



Super Pave
Products

Wheeled 
Stationary 

HIGHLIGHTS



CAST GRIZZLY CARTRIDGES

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



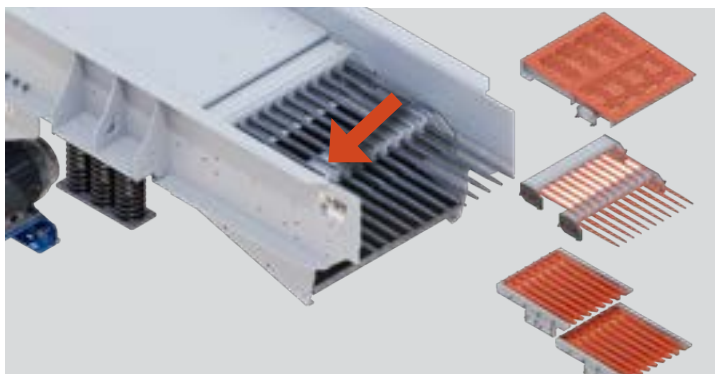
BOTTLE JACK LIFTING POINTS

- » 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	mtph	stph
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
7220VGF	1 or 2	5'	1,830 x 6,090	72" x 20'	11,750	25,904	600-800	56.3	75	1,300	50"	880-1020	980-1130
7224VGF	1 or 2	5'	1,830 x 7,320	72" x 24'	14,000	30,864	600-800	75	100	1,300	50"	880-1020	980-1130

Specifications are subject to change without notice. Consult Superior to confirm your application.



W: www.triconequipment.com.au

P: 1300 859 885

E: sales@triconequipment.com.au





ROCK FACE TO
LOAD OUT™

superior-ind.com

TRICON
EQUIPMENT

2024-10SPHB1156EN-32