

# Canica® Vertical Shaft Impactors



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# Canica®

# Flexible. Innovative. Built to Last.

#### Welcome to the World of Canica®

Canica® provides a comprehensive range of vertical shaft impactors to customers around the world.

Our equipment is designed to produce the highest quality end products. We provide Modular, Portable and static VSI plants and components - plus full parts, service and maintenance with support you can count on, wherever you are.

#### **Key Benefits**

- High cubicity product
- Benificiation of Material (elimination of soft stone)
- Gradation Consistency
- High Product Yield
- High Fracture percentage
- Simple Maintenance
- High Throughput Capacity
- Low Capital Investment

#### We understand your business

We know that you need operational reliability, cost effectiveness plus outstanding service. We have spent over 40 years building our business around delivering all three. Because when you succeed, we succeed.

#### World Class Service & Support

With Canica®, you don't just get best-in-class engineering technology. You get the service, training and support to match.

We understand your need to maximize productivity and control operating costs across the working life of every piece of equipment

We share those goals – and have the solutions to help keep your operations running smoothly, through a dedicated global support network backed by decades of proven experience and expertise.

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# Canica® Vertical Shaft Impactor Key Advantages

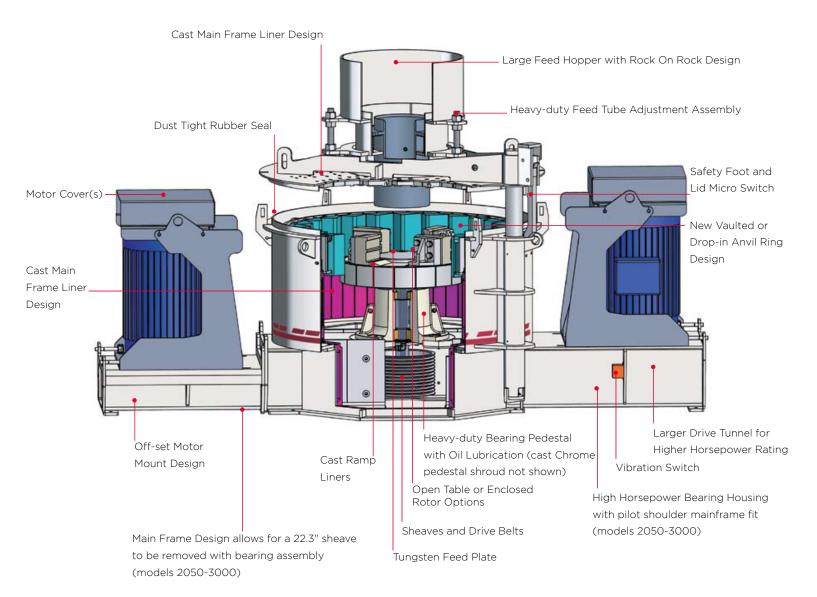
#### Key Advantages

- Heavy Duty main pedestal assembly with large spherical roller bearing to handle high capacities
- Patented hydraulic Hydralid Lid Lifter mechanism provides a safe and convenient way for one person to remotely open the lid
- Externally adjustable feed tube system allows longer feed tube life
- Lid and mainframe liners are 28% cast chrome protected
- Tungsten carbide and ceramic components in table and rotor
- Many internal crusher configuration options to provide crushing solutions for all levels of material abrasiveness

- Modular oil system includes: 35 gallon reservoir, positive displacement oil pump, low pressure relief valve and high pressure lid lifter valve, low pressure shut-down switch, oil heater, oil sight gauge, oil temperature gauge and lube oil pressure gauge
- Standard safety features include open lid safety lock, shut-off switches to detect low oil pressure, excessive vibration (vibration switch) and open lid)
- Auxiliary electrical control cabinet with tachometer/hour meter, lubrication system starter, conveyor starter, oil system heater starter, contains termination points for all safety shut off switches, warning strobe



### Canica® Vertical Shaft Impactor Standard Features



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### Canica® Vertical Shaft Impactor Standard Features

#### Crusher

- Heavy-duty bearing pedestal
- Astralloy main shaft
- Cast chrome pedestal protection
- Patented "Hydralid" hydraulic lid lifter
- Externally adjustable feed tube system
- Cast feed tube
- Cast lid and mainframe liners
- Heavy-duty motor mounts with motor covers and adjustable take-ups Vibration shut-off switch
- Belt guards
- Heavy-duty open shoe table
- Cast lined flywheel
- Drive belts and sheaves
- Patented vaulted anvil system
- Inspection door with safety lock

#### Modular Oil System

- 35 gallon (132 liter) reservoir
- Positive displacement oil pump
- Low pressure relief valve and high pressure lid lifter valve
- Low pressure shut-down switch
- · Oil heater
- Oil sight gauge, oil temperature gauge, and lube oil pressure gauge

#### **Ancillary Electrical Control Cabinet**

- Tachometer/Hour meter
- 2 HP (1.5 kW) lubrication system starter
- 15 HP (11 kW) conveyor starter
- Oil system heater starter
- Contains termination points for ALL safety shut-off switches Warning strobe

#### Standard Safety Features

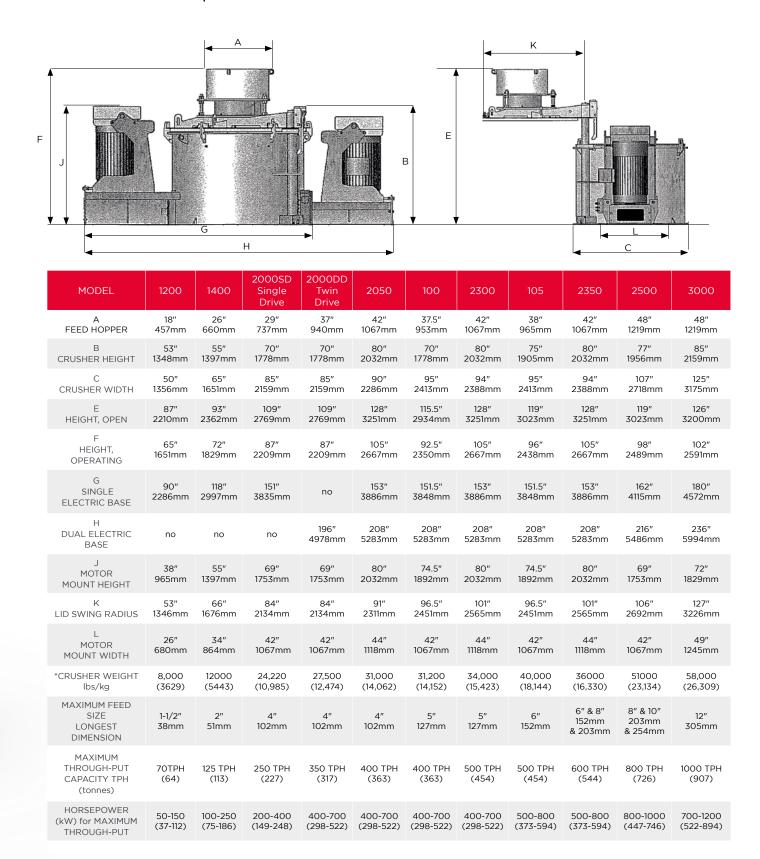
- Open lid safety lock
- Shut-off switches detect: Low oil pressure, Excessive vibration (vibration switch), Open lid

#### Crusher Optional Equipment

- Two-piece crusher design (removable tub section)
- Pinion gear drive assembly
- 4 and 5-port autogenous rotors
- 4 and 5-port anvil ring rotors
- Rockbox
- Ceramic wear parts
- Tungsten carbide wear parts
- Portable chassis mount
- Stationary support stand with walkways and ladders Diesel power
- Variable frequency drives
- Soft starts



# Canica® Vertical Shaft Impactor Technical Specifications



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# Canica® Vertical Shaft Impactor Interchangeable Crushing Chambers



Shoe and Anvil (HD Series)



Rock and Anvil (ROS Series)



Rock on Rock (ROS Series)



Large Feed, Mild to Medium Abrasive Materials

Shoe and anvil configuration offers high tonnage of chip production, high reduction ratios and feed size flexibility.



High Reduction in Medium Abrasive Materials

Enclosed rotor and anvils combine the grinding action of the rotor with the high efficiency reduction of anvils.



For All Rock Types and the Most Abrasive Materials

Enclosed rotor and rock box configuration causes rock on rock crushing which produces the best shaped and most consistent material with the lowest wear cost.

	Model	1200	1400	2000SD Single Drive	2000DD Twin Drive	2050	100	2300	105	2350	2500	3000
	Maximum Feed Size Largest Dimension, Open Table Configuration	1-1/2" 38 mm	2" 51 mm	4" 102 mm	4" 102 mm	4" 102 mm	5" 127 mm	5" 127 mm	6" 152 mm	6" & 8" 152 mm & 203 mm	8" & 10" 203 mm & 254 mm	12" 305 mm
	Maximum Through-put Capacity (TPH) Feed size and tons per hour dependent on type of feed and HP available	70 TPH	125 TPH	250 TPH	350 TPH	400 TPH	400 TPH	500 TPH	500 TPH	600 TPH	800 TPH	1000 TPH
	Horsepower for Maximum Through-put Depending on application	50-150 HP	100-250 HP	200-400 HP	400-700 HP	400-700 HP	400-700 HP	400-700 HP	500-800 HP	500-800 HP	600- 1000 HP	700-1200 HP

# Canica® Vertical Shaft Impactor Gradations I Shoe and Anvil (HD Series)

#### Basalt, Gravels and Tougher Materials

Producing Coarse Graded Material Chips and Dimensional Products

Coarse gradations require:

- 50% to 80% of maximum speed
- 4 or 5 shoe table/rotor

4 of 3 shoe table/fotol							
	Т	able	Table/Rotor				
Sieve		Feed 00 FPM		Feed O FPM		Feed OO FPM	
Size	Feed	Crusher Products	Feed	Crusher Products	Feed	Crusher Products	
3"	100						
2-1/2"	76						
2"	62	100	100	100			
1-1/2"	42	94	99	98			
1"	24	81	40	92	100	100	
3/4"	12	69	26	76	58	97	
1/2"	0	47	10	59	32	74	
3/8"		35	0	44	15	51	
1/4"		26		29	0	38	
4M		23		21		30	
8M		16		11		19	
16M		9		8		13	
30M		7		6		8	
50M		5		5		6	
100M		3		2		4	
200M		1		1		2	

Producing Dense Graded Material Emphasis on Fines for Base and Sands

Dense gradations require:

- 80% to 100% of maximum speed
- 5 or 6 shoe table/rotor

	Т	able	Table/Rotor			
Sieve		Feed OO FPM		Feed 00 FPM		Feed 00 FPM
Size	Feed	Crusher Products	Feed	Crusher Products	Feed	Crusher Products
3"	100					
2-1/2"	76					
2"	62		100			
1-1/2"	42	100	66	100		
1"	24	92	40	97	100	100
3/4"	12	80	26	88	58	98
1/2"	0	63	10	75	32	87
3/8"		52	0	63	15	72
1/4"		41		47		54
4M		34		39		45
8M		23		23		30
16M		15		16		19
30M		10		11		12
50M		7		8		8
100M		5		4		7
200M		3		2		4

#### 1" Feed Size Applications

#### Low Range

- 50% to 80% of maximum speed
- 4 shoe table/rotor
- Tough feed material (basalt, gravel)
- Crusher choke-fed

#### High Range

- 80% to 100% of maximum speed
- 5 shoe table/rotor
- Friable feed material (limestone, dolomite)
- Crusher 85% or less of choke feed rate

Sieve Size	Feed	Low Range	High Range	Average
1"	100	100		100
3/4"	65	97	100	99
1/2"	40	74	93	84
3/8"	25	51	88	70
1/4"	10	38	79	59
4M	0	30	71	51
8M		19	53	36
16M		13	36	25
30M		8	25	17
50M		6	15	11
100M		4	7	6
200M		2	3	3

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# Canica® Vertical Shaft Impactor Gradations I Shoe and Anvil (HD Series)

#### Limestone and Dolomites

Producing Coarse Graded Material Chips and Dimensional Products

Coarse gradations require:

- 50% to 80% of maximum speed
- 4 or 5 port rotor

Producing Dense Graded Material
Emphasis on Fines for Base and Sands

Dense gradations require:

- 70% to 100% of maximum speed
- 4 or 5 port rotor

	Т	able		Table,	/Rotor	
Sieve	3" Feed 8000 FPM		2" Feed 9000 FPM		1" Feed 9000 FPM	
Size	Feed	Crusher Products	Feed	Crusher Products	Feed	Crusher Products
3"	100					
2-1/2"	76					
2"	62	100	100			
1-1/2"	42	98	66	100		
1"	24	88	40	90	100	100
3/4"	12	71	26	71	58	97
1/2"	0	54	10	54	32	84
3/8"		42	0	42	15	65
1/4"		33		33	0	46
4M		27		27		37
8M		17		17		24
16M		12		12		18
30M		8		8		12
50M		6		6		7
100M		3		3		3
200M		1		2		2

ı		Table				ne/Rotor		
	Sieve	3" Feed 11,000 FPM			Feed 00 FPM	1" Feed 13,500 FPM		
	Size	Feed	Crusher Products	Feed	Crusher Products	Feed	Crusher Products	
	3"	100						
	2-1/2"	76						
	2"	62		100				
	1-1/2"	42	100	66	100			
	1"	24	95	40	96	100		
	3/4"	12	87	26	91	58	100	
	1/2"	0	72	10	81	32	93	
	3/8"		62	0	72	15	88	
	1/4"		50		57	0	79	
	4M		42		47		71	
	8M		28		30		53	
	16M		19		19		36	
	30M		12		15		25	
	50M		8		11		15	
	100M		4		7		7	
	200M		3		4		3	

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# Canica® Vertical Shaft Impactor Gradations I Rock on Anvil (ROS Series)

#### Limestone and Dolomites

Producing Coarse Graded Material Chips and Dimensional Products

Coarse gradations require:

- 50% to 80% of maximum speed
- 4 or 5 port rotor

	2" Feed 9000 FPM		1" Feed 9000 FPM		
Sieve Size	Feed	Crusher Products	Feed	Crusher Products	
2"	100				
1-1/2"	66	100			
1"	40	90	100	100	
3/4"	26	71	58	97	
1/2"	10	54	32	84	
3/8"	0	42	15	65	
1/4"		33	0	46	
4M		27		37	
8M		17		24	
16M		12		18	
30M		8		12	
50M		6		7	
100M		3		3	
200M		2		2	

Producing **Dense** Graded Material Emphasis on Fines for Base and Sands

Dense gradations require:

- 70% to 100% of maximum speed
- 5 or 6 port rotor

	2" Feed 12,000 FPM		1" Feed 13,500 FPM	
Sieve Size	Feed	Crusher Products	Feed	Crusher Products
2"	100			
1-1/2"	66	100		
1"	40	96	100	
3/4"	26	91	58	100
1/2"	10	81	32	93
3/8"	0	72	15	88
1/4"		57	0	79
4M		47		71
8M		30		53
16M		19		36
30M		15		25
50M		11		15
100M		7		7
200M		4		3

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## Canica® Vertical Shaft Impactor Gradations I Rock on Anvil (ROS Series)

#### Basalt, Gravels and Tougher Materials

Producing Coarse Graded Material Chips and Dimensional Products

Coarse gradations require:

- 50% to 80% of maximum speed
- 4 or 5 port rotor

	2" Feed 9000 FPM		1" Feed 9000 FPM		
Sieve Size	Feed	Crusher Products	Feed	Crusher Products	
2"	100	100			
1-1/2"	66	98			
1"	40	92	100	100	
3/4"	26	76	58	97	
1/2"	10	59	32	74	
3/8"	0	44	15	51	
1/4"		29	0	38	
4M		21		30	
8M		11		19	
16M		8		13	
30M		6		8	
50M		5		6	
100M		2		4	
200M		1		2	

Producing Dense Graded Material
Emphasis on Fines for Base and Sands

#### Dense gradations require:

- 80% to 100% of maximum speed
- 5 or 6 port rotor

		Feed O FPM	1" Feed 13,500 FPM		
Sieve Size	Feed	Crusher Products	Feed	Crusher Products	
2"	100				
1-1/2"	66	100			
1"	40	97	100	100	
3/4"	26	88	58	98	
1/2"	10	75	32	87	
3/8"	0	63	15	72	
1/4"		47	0	54	
4M		39		45	
8M		23		30	
16M		16		19	
30M		11		12	
50M		8		8	
100M		4		7	
200M		2		4	

#### 1" Feed Size Applications

#### Low Range

- 50% to 80% of maximum speed
- 4 port rotor
- Tough feed material (basalt, gravel)
- Crusher choke-fed

#### High Range

- 80% to 100% of maximum speed
- 5 port rotor
- Friable feed material (limestone, dolomite)
- Crusher 85 % or less of choke feed rate

Sieve Size	Feed	Low Range	High Range	Average
1"	100	100		100
3/4"	65	97	100	99
1/2"	40	74	93	85
3/8"	25	51	88	70
1/4"	10	38	79	59
4M	0	30	71	51
8M		19	53	36
16M		13	36	25
30M		8	25	17
50M		6	15	11
100M		4	7	6
200M		2	3	3

# Canica® Vertical Shaft Impactor Gradations I Rock on Rock (ROR Series)

#### Basalt, Gravels and Tougher Materials

Producing Coarse Graded Material Chips and Dimensional Products

#### Coarse gradations require:

- 50% to 80% of maximum speed
- 4 or 5 port rotor

		eed FPM	1" Feed 11,000 FPM		
Sieve Size	Feed	Crusher Products	Feed	Crusher Products	
2"	100	100			
1-1/2"	66	87			
1"	40	62	100	100	
3/4"	26	46	58	78	
1/2"	10	32	32	47	
3/8"	0	23	15	31	
1/4"		17	0	22	
4M		14		18	
8M		10		14	
16M		7		10	
30M		6		8	
50M		5		6	
100M		4		5	
200M		2		3	

Producing Dense Graded Material Emphasis on Fines for Base and Sands

#### Dense gradations require:

- 80% to 100% of maximum speed
- 5 or 6 shoe table/rotor

	2" Feed 14,000 FPM		1" Feed 14,000 FPM	
Sieve Size	Feed	Crusher Products	Feed	Crusher Products
2"	100	100		
1-1/2"	66	90		
1"	40	72	100	100
3/4"	26	59	58	87
1/2"	10	45	32	63
3/8"	0	33	15	47
1/4"		26	0	34
4M		22		29
8M		15		21
16M		11		16
30M		9		12
50M		7		9
100M		6		7
200M		4		4

Sieve Size	Feed	Low Range	High Range	Average
1"	100	100	100	100
3/4"	65	78	88	83
1/2"	40	47	68	58
3/8"	25	31	52	42
1/4"	10	22	37	30
4M	0	18	32	25
8M		14	24	19
16M		10	18	14
30M		8	13	10
50M		6	10	8
100M		5	8	7
00014		7	_	

#### 1" Feed Size Applications

#### Low Range

- 50% to 80% of maximum speed
- Tough feed material (basalt, gravel)
- Crusher choke-fed

#### High Range

- 80% to 100% of maximum speed
- Friable feed material (limestone, dolomite)
- Crusher 85% or less of choke feed rate

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# Canica® Vertical Shaft Impactor Gradations I I Rock on Rock (ROR Series)

#### Limestone and Dolomites

Producing Coarse Graded Material Chips and Dimensional Products

Coarse gradations require:

- 50% to 80% of maximum speed
- 4 or 5 port rotor

	l			
	2" Feed 11,000 FPM		1" Feed 11,000 FPM	
Sieve Size	Feed	Crusher Products	Feed	Crusher Products
2"	100	100		
1-1/2"	66	92		
1"	40	75	100	100
3/4"	26	61	58	80
1/2"	10	47	32	57
3/8"	0	37	15	35
1/4"		29	0	25
4M		24		21
8M		17		16
16M		12		11
30M		11		9
50M		8		7
100M		6		5
200M		4		3

Producing Dense Graded Material
Emphasis on Fines for Base and Sands

Dense gradations require:

- 80% to 100% of maximum speed
- 5 or 6 port rotor

	2" Feed 14,000 FPM		1" Feed 14,000 FPM	
Sieve Size	Feed	Crusher Products	Feed	Crusher Products
2"	100	100		
1-1/2"	66	92		
1"	40	75	100	100
3/4"	26	61	58	88
1/2"	10	47	32	68
3/8"	0	37	15	52
1/4"		29	0	37
4M		24		32
8M		17		24
16M		12		18
30M		11		13
50M		8		10
100M		6		8
200M		4		5

### Canica<sup>®</sup> Services

#### Proven Success. Global Reach

A complete range of services. Original spare and wear parts. Customizable solutions to meet your exact needs. Outstanding technical expertise and support.

This is what Canica® delivers to businesses – and what it delivers to businesses throughout the world via our gobal distribution network, service and distribution facilities and regional warehouses.

#### Spare and Wear Part Support

Our OEM parts help maintain and enhance the performance of your equipment – and you can count on us to get you the spare and wear parts you need, when you need them.

Canica® parts are manufactured according to exacting specifications, using high-quality materials, tools and techniques. By using genuine parts you are helping to ensure the maximum performance and longevity of your machines.

#### A Shared Focus

We understand your key focus is delivering your operational and financial goals. We share that focus: it's how we both measure success.

By combining our global service network and proven, in-depth industry knowledge with your operational expertise we're able to provide you with the right solution to deliver a quality end product – with increased productivity.

#### Field Services

We offer a comprehensive set of field services to meet your maintenance, repair and refurbishment needs – which means you get a cost-effective alternative to purchasing new or replacement equipment.

Our experienced field service and distribution network are available to you on site or at our global service facilities. We can repair broken or damaged equipment to like-new condition and restore worn or irreplaceable equipment to perfect operating condition - which minimizes costly downtime for you.

#### Terex® Financial Services

At Canica® we not only offer a strong and broad product portfolio. We also offer the means for customers to purchase the equipment they need in order to meet their operational and profitability goals.

Terex® Financial Services (TFS) is a globally trusted resource that is able to leverage its knowledge of Terex® equipment plus its marketplace expertise to provide a unique tailored solution for customers.

#### Terex® Financial Services at a Glance

- Providing cost-effective financial solutions to thousands of customers across the globe
- A comprehensive suite of financial solutions tailored to fit individual needs
- Dedicated and knowledgeable team with global reach, focused on customer solutions.

Combining our global service network and deep industry knowledge with your operational expertise ensures that we provide the best solutions...



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