

Sandvik VSI Crushers new CV200 series



We have listened to our customers

At Sandvik, we have established ourselves as market leaders in autogenous VSI crushing. In order to maintain our market lead, we have listened to our customers and put into practice many new solutions, to provide economy in use, reliability in operation and significant reductions in maintenance, combined with improved Health & Safety considerations.

MEETING YOUR EVER-CHANGING REQUIREMENTS

We are pleased to announce the new CV200 series, a complete range of six new models developed to meet your ever-changing requirements. This new series has been developed ensuring that all of the existing benefits remain, but are further built upon, providing tangible benefits to the customer and the environment. Reduced power consumption, increased capacities, reduced maintenance costs and intervals, are just a few of the many worldwide patented benefits of the CV200 series.

WIDE RANGE OF APPLICATIONS

Sandvik's VSI crusher is primarily a third or fourth stage crusher. Some, but by no means all, of the applications of this crusher are:

- Manufactured sand
- Premium shaped aggregates (concrete and road products)
- Recycling industry
- Industrial minerals industry
- Mining industry

The autogenous “rock on rock” crushing technique results in several major advantages: product gradation remains constant, even as rotor wear parts wear; contamination rates are extremely low, as no wear parts are used to directly crush the rock; unbeatable product shape (extremely low flake and elongation values).

CONCRETE ADVANTAGES

The new CV200 series offers many real benefits over other existing autogenous VSI crushers:

- Reduced power consumption
- Further reduced operational cost per tonne
- Quick and easy replacement of wear parts **and** spare parts
- Consistent, easily-controlled product grading
- Reduced out-of-balance forces, resulting in longer bearing life (motors and crusher).

The result is a range of advanced, reliable, low-vibration machines that are unrivalled for their ability to increase productivity whilst minimizing downtime.



Reduced maintenance costs and intervals.



Quality manufactured sand 0-5 mm and premium shaped aggregate 5-10 mm.



Sieved fraction sizes -75 μ to 1.18 mm.



Our aim:

benefit your bottom line

ADVANCED ROTOR & WEAR PARTS

New patented advanced **turbo tip plates** effectively reduce high pressure laminated air found within the crushing chamber, leading to increased rotor life and reduced rotor maintenance.

New **turbo cavity wear plates** act similarly to the turbo tip plates, but also give up 30% increased life during operation. Again further reducing maintenance downtime.

These innovations combined with other crusher improvements result in an increase in crusher capacity with no more power consumption.

INCREASED THROUGHPUT WITH REDUCED POWER

Sandvik's patented **Bi-Flow® system** and high performance rotors, in conjunction with the second generation wear parts, have resulted in even greater power reductions. Higher tonnage throughputs with reduced power have been proven in field tests of the 200 series. Now up to 20% of the maximum crusher throughput can be effectively handled through the Bi-Flow system. This means a huge saving in electricity costs for the customer.

However as electricity costs increase further, future cost savings will in reality be even greater. The CV200 series crushers are therefore better for the environment, with lower CO-emissions per tonne of product.

CLEAN, ENCLOSED OPERATIONAL CONTROLS AND TOOLS

Again from listening to our customers, we have provided a **fully enclosed hydraulic cabinet**. This cabinet not only encloses the hydraulic system for quick and easy adjustment of the rotor throttle and drive belt tensioning, but also houses the semi-automatic greasing system and now also the **maintenance tool kit**. The new cabinet now ensures that these vital components are housed away from dust and rain. The inclusion of the tool kit, in a sturdy purpose made toolbox ensures instant accessibility when required for maintenance. The base of the cabinet is sealed to ensure that any accidental leaks of grease or oil are contained and do not pollute the environment.

Ease of maintenance thanks to second generation rotor and wear parts.



Fully enclosed hydraulic cabinet keeps dust and rain away.



Included maintenance tool kit always at machine site.



Reduce health and safety risks ... and downtime

INTEGRATED FEED TUBE REPLACEMENT SYSTEM

This new patented system is a major breakthrough in VSI design. Historically the removal and fitting of the rotor feed tube has been a time consuming and costly operation. Either mobile lifting gear or expensive hydraulic options have been required. Both of these take time and money and require space around the crusher for their use. With Sandvik's integrated feed tube replacement system, the feed tube can now be replaced by one man through the crusher inspection door. This greatly reduces cost, space requirements and reduces health and safety risks.

RADIAL LOCK CAVITY RING

The new patented radial lock cavity ring is an important integral component. Whilst it is not a wear part, this component is vital for the effective operation of the crusher. The new design removes conventional fastener fittings and makes periodic replacement much easier, again reducing maintenance downtime and health and safety risks.

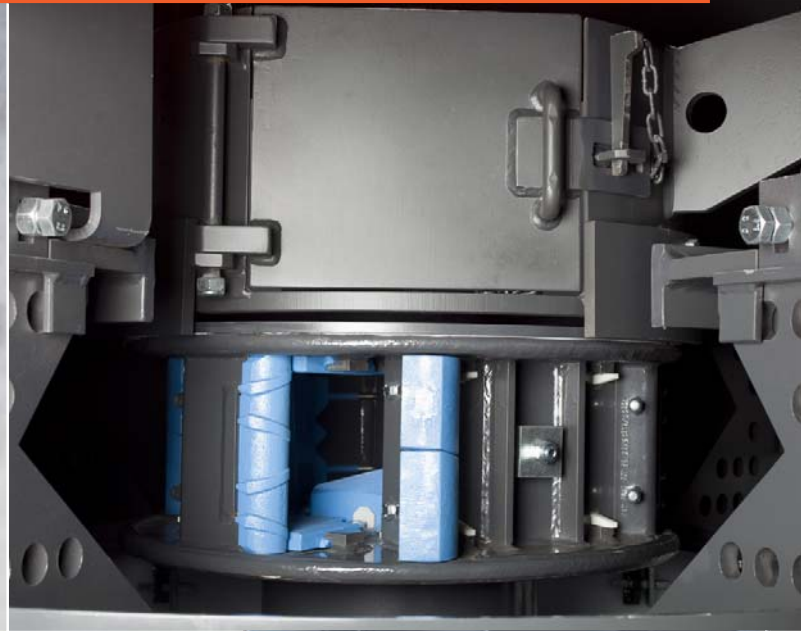
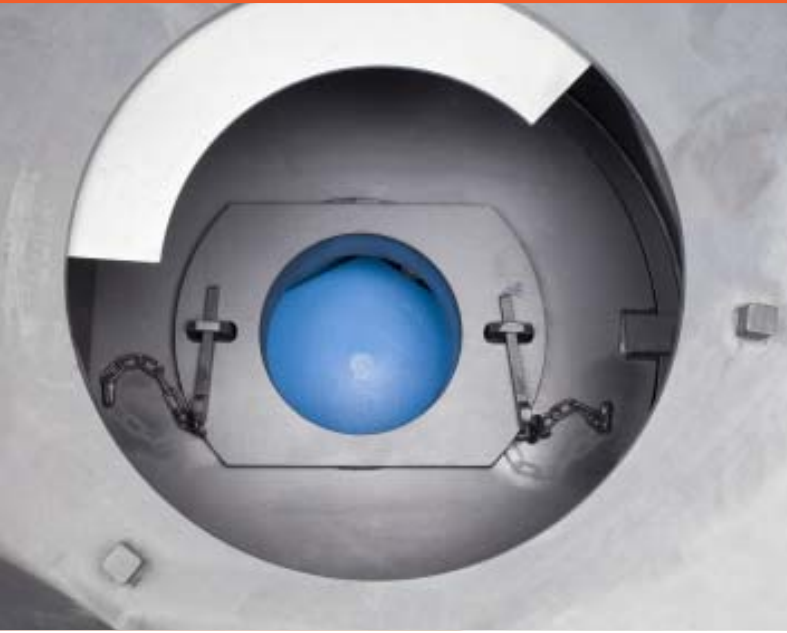
BI-FLOW[®] ACCELERATION SLIDES

The patented Bi-Flow acceleration slides are an optional component used to solve the problem of effectively processing sticky, flaky and elongated feed. These ensure that the Bi-Flow system can be operated effectively, ensuring the lowest possible operational costs and greatest throughput.

UNIQUE KEY SAFETY INTERLOCK SYSTEM

At Sandvik, Health and Safety is an integral component of all design. This is why we supply as standard a timed unique trapped two key system, that ensures maintenance personnel safety combined with electrical isolation. Also supplied and fitted as standard are a vibration detection switch and a pre-start alarm siren.

Unique integrated feed tube replacement system allows replacement through the crushing chamber inspection door, meaning reduced downtime.



Bi-Flow acceleration slides ensure minimized operational costs and maximized throughput.

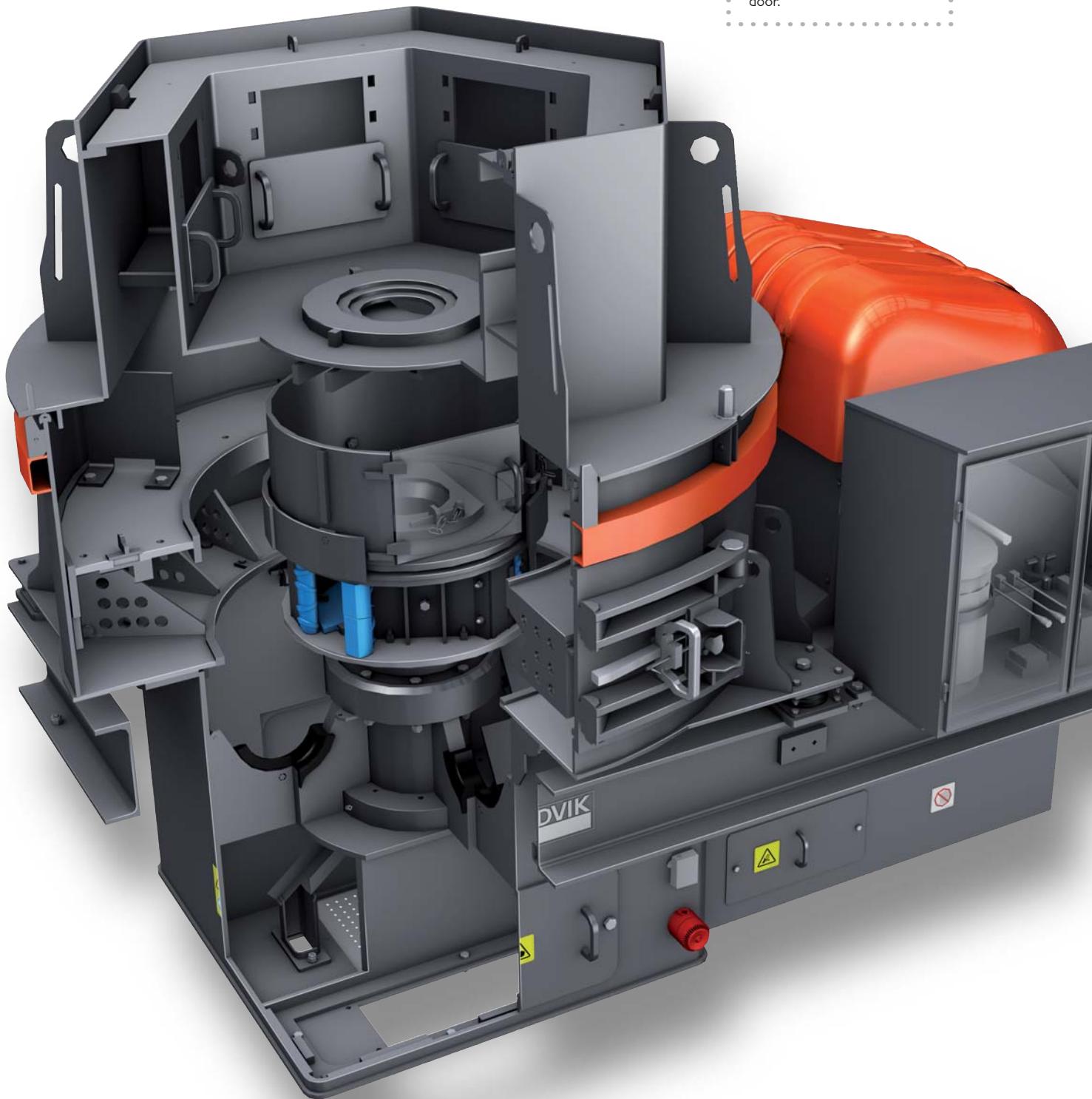


Unique key safety interlock system.

Great reduction in power requirements and increased capacity through innovative and revolutionary design with both the rotor and crusher feed control systems.

Safety in focus with unique two-key trapped system allowing for safe inspection and maintenance work, ensuring both electrical isolation and time delayed release of access keys.

Minimized maintenance downtime thanks to second generation of rotor and wear parts allowing quick and easy replacement, and through unique integrated feed tube replacement system permitting feed tube replacement via the crushing chamber inspection door.



Win-win for new and existing customers

CUSTOMER CARE

We at Sandvik value both our new and existing customers. With this in mind, we have made it possible for existing customers to benefit from ALL of the new patented advantages of the CV200 series.

- The **2nd generation rotor wear parts** (advanced turbo tip plates and turbo cavity wear plates), can all be fitted without modification to existing rotors.
- The **integrated feed tube replacement system**, can be retrofitted easily into any of the Sandvik CV100 series crushers. **Retrofit kits**, complete with instructions are available from your local Sandvik representative. Within only a few hours the crusher can be converted to allow existing customers the benefits of upgrading to all of the advantages of this new patented concept.
- The **radial lock cavity ring** can also be retrofitted when necessary. Again **retrofit kits** complete with fitting instructions are available.
- **Bi-Flow[®] acceleration slides** are available as an option, again with **retrofit kit** instructions for existing CV100 series customers.

SUPPORT WHERE AND WHEN IT COUNTS

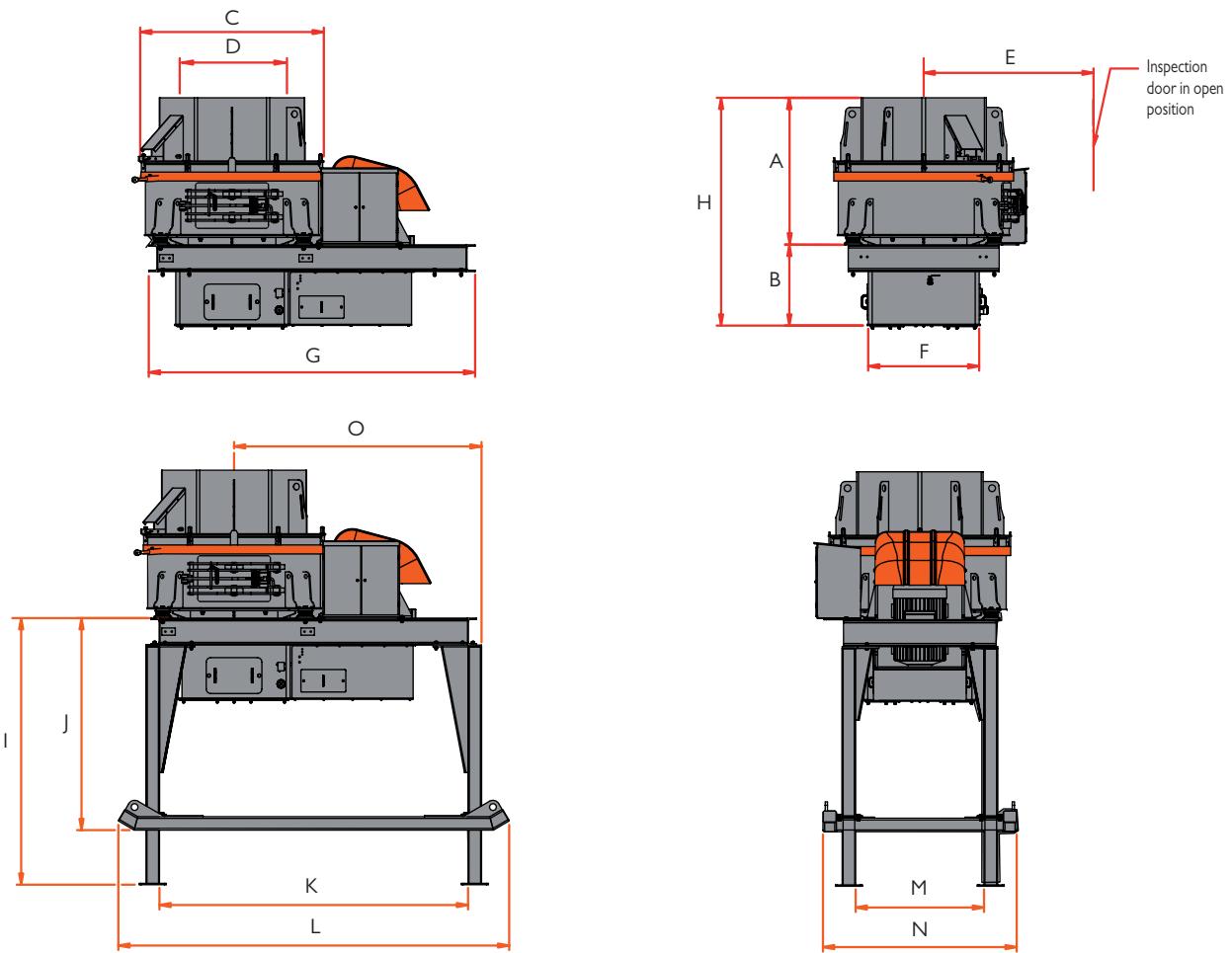
For most people, service is a matter of being available when problems occur. But we at Sandvik prefer seeing it as a matter of being proactive. Investment in, for instance, scheduled inspections and maintenance will help you protect your business from unexpected risks.

Moreover, availability of essential parts and consumables, efficient and quick logistical processes, fully trained operators... all these ensure trouble-free operations and maximize productivity.

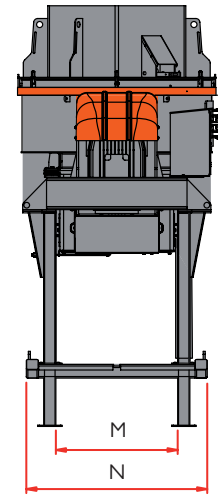
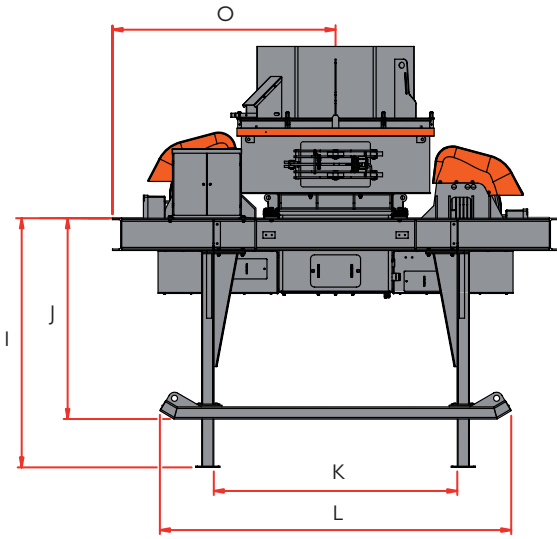
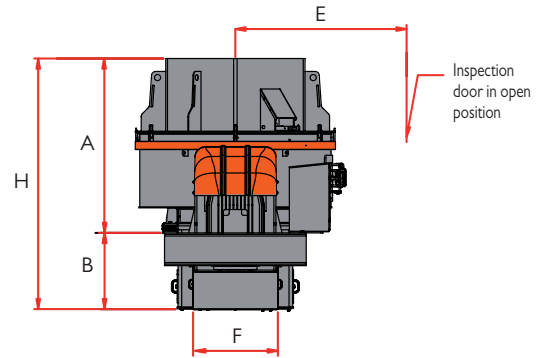
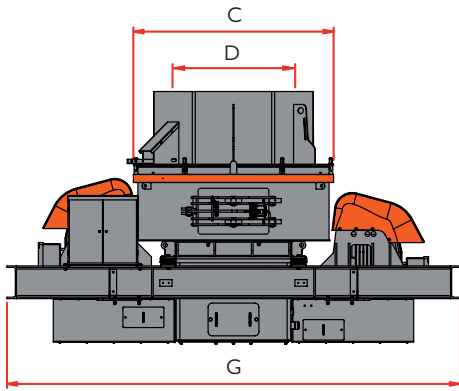
The all new patented Sandvik “200” series VSI gives many real advantages over existing VSI crushers. Continuous research and development and customer feedback ensure Sandvik VSI crushers are the market leaders that others try and follow. From use in **dam construction** in China and Jordan, **iron ore production** in Kazakhstan, **manufactured sand** and **aggregate production** in the UK, India, Sweden, Latin America, Australia, **industrial minerals** in Germany, **glass recycling** in the UK and Australia, in fact all around the world in a variety of applications, Sandvik VSI crushers are In Action.



Technical Data



Dimensions mm (in)	CV215		CV216		CV217		CV218	
A	1212	(47 3/4")	1648	(64 7/8")	1648	(64 7/8")	2130	(83 7/8")
B	790	(31 1/8")	905	(35 5/8")	905	(35 5/8")	931	(36 5/8")
C	1730	(68 1/8")	2040	(80 3/8")	2040	(80 3/8")	2444	(96 1/4")
D across flats	902	(35 1/2")	1016	(40)	1016	(40)	1216	(47 7/8")
E	1840	(72 3/8")	1912	(75 1/4")	1912	(75 1/4")	2090	(82 1/4")
F	1070	(42 1/8")	1250	(49 1/4")	1250	(49 1/4")	1420	(56)
G	3166	(124 5/8")	3626	(142 3/4")	3626	(142 3/4")	3750	(147 5/8")
H	2002	(78 7/8")	2553	(100 1/2")	2553	(100 1/2")	3061	(120 1/2")
I	2231	(87 7/8")	2970	(117)	2970	(117)	3076	(121 1/8")
J	2362	(93)	2362	(93)	2362	(93)	2480	(97 5/8")
K	2978	(117 1/4")	3438	(135 3/8")	3438	(135 3/8")	3562	(140 1/4")
L	4355	(171 1/2")	4352	(171 3/8")	4352	(171 3/8")	4355	(171 1/2")
M	1170	(46)	1430	(56 1/4")	1430	(56 1/4")	1480	(58 1/4")
N	2158	(85)	2158	(85)	2158	(85)	2228	(87 3/4")
O	2427	(95 1/2")	2757	(108 1/2")	2757	(108 1/2")	2806	(110 1/2")
Weight kg (lbs)	6000	(13228)	9500	(20944)	9500	(20944)	11776	(25963)
Max. feed size mm (in)	40	(1 5/8")	50	(2")	50	(2")	55	(2 3/16")
Capacity range tph (short tons)	10-50	(11-55)	51-121	(56-146)	122-192	(134-211)	193-250	(212-275)
Rotor rpm range (60 Hz speed)	1568-2101	(1576-2112)	1381-1982	(1388-1980)	1391-1973	(1487-1965)	1401-1677	(1408-1666)



Dimensions mm (in)	CV228		CV229	
A	2130	(83 7/8")	2130	(83 7/8")
B	931	(36 5/8")	931	(36 5/8")
C	2444	(96 1/4")	2444	(96 1/4")
D across flats	1216	(47 7/8")	1216	(47 7/8")
E	2090	(82 1/4")	2090	(82 1/4")
F	1420	(56)	1420	(56)
G	5500	(216 1/2")	5500	(216 1/2")
H	3061	(120 1/2")	3061	(120 1/2")
I	3090	(121 5/8")	3090	(121 5/8")
J	2480	(97 5/8")	2480	(97 5/8")
K	3018	(118 7/8")	3018	(118 7/8")
L	4355	(171 1/2")	4355	(171 1/2")
M	1500	(59)	1500	(59)
N	2228	(87 3/4")	2228	(87 3/4")
O	2750	(108 1/4")	2750	(108 1/4")
Weight kg (lbs)	14826	(32686)	14826	(32686)
Max. feed size mm (in)	55	(2 3/16")	55	(2 3/16")
Capacity range tph (short tons)	251 - 444	(276 - 489)	445 - 600	(490 - 661)
Rotor rpm range (60 Hz speed)	1401 - 1677	(1408 - 1666)	1401 - 1677	(1408 - 1666)

Sandvik is a global industrial group with advanced products and world-leading positions in selected areas – tools for metal cutting, equipment and tools for the mining and construction industries, stainless materials, special alloys, metallic and ceramic resistance materials as well as process systems. In 2009 the Group had about 44,000 employees and representation in 130 countries, with annual sales of nearly SEK 72,000 M.

Sandvik Mining and Construction is a business area within the Sandvik Group and a leading global supplier of equipment, cemented-carbide tools, service and technical solutions for the excavation and sizing of rock and minerals in the mining and construction industries. Annual sales 2009 amounted to about SEK 32,600 M, with approximately 14,400 employees.

