... Rock Engineered Machinery Company, Inc. is a California Corporation based in Livermore, California USA. It was founded by machinery and minerals processing professionals in 1982, and is now a leader in reduction technology and know-how. REMco manufactures the broadest line of fully autogenous and semi-autogenous VSI crushers for the reduction of hard, abrasive ores and rocks. Our machines serve the needs of mining and the industrial minerals industry. The products made by our machines are well graded, beneficiated and achieve the desired product grading.

At REMco, we understand that size reduction equipment generates revenue for its owner, our customer. Our crushers are designed using top quality materials, the latest design techniques and we provide the best possible technical support to achieve customer satisfaction and attain the lowest crushing cost per ton.

In this catalog, we provide you with the information you need to determine what model machine is best suited for your crushing task. When you have selected what you feel is best from the information contained herein, please contact REMco for application guidance and to discuss what else you must consider to realize the best return from your crusher dollar investment.

The extraction of metals from all types of ore requires multiple stages of reduction crushing. Whether it is iron, copper, silver or gold, it must be crushed to a fine size. In many cases, grinding mills are used to produce the final size before beneficiation or final extraction. Traditionally, the crushing stage just before primary milling is limited to products that are minus 1/2” (12mm) as feed to the primary ballmills. A REMco OreMax can be placed in the circuit to receive product from the 3rd stage cone crushers and further reduce it prior to milling; thereby, increasing the performance of the primary ballmills or allowing the mill’s conversion to a finish mill.

This concept provides capital and operating cost savings when grinding capacity must be expanded. This is because a major increase in grinding capacity is achieved by simply reducing the feed size to the grinding mills. For example, from an F80 of 10 mm or coarser, to an F100 of 6, 5 or even 3 mm, resulting in a much finer mill feed grading.

REMco OreMax VSI crushers reduce the feed mineral principally by high-velocity, energy transfer. This reduction results from particle failure at the plane of weakness within the ore. This more effectively separates the gangue mineral from the pay product. This process increases the yield in floatation and leaching lines over the traditional compression crushed feed to the mill.
REMco OreMax VSI crushers are extra heavy-duty, heavier built machines of REMco’s standard VSI crushers, Series 1530 and larger. The OreMax is available as a fully-autogenous or semi-autogenous type crusher. The semi-autogenous type units are designated as OreMax-ST/AR machines. These are intended for use in less aggressive ores and minerals. The OreMax Premill units are designed for extra-fine crushing and grinding.

We have grown accustomed to designing a crushing circuit based on the limits of specific brands and models of crushing and grinding machines. Where this goes awry is when a change in the operation is dictated after the system is in place. Since most mines have multi-year operating life spans and ore bodies can be counted on to be inconsistent, severe economic consequences can result when conventional machinery is pushed to or beyond its design limit to increase the production rate or produce a finer product. While the historical model size range of cone crushers has served the industry well, compression crushing machines usually encounter buyer resistance when the single machine price or number of units needed for the job is so expensive as to prevent a satisfactory return on the investment for the project. This is not surprising since the crushing capacity of present-day cone crushers is not much greater than 25-year old versions of the same machines. Certainly mechanical refinements and engineering improvements have occurred, but the performance curve has not risen at the same rate as the selling price.

In the real world, squeezing crusher settings on compression machines to achieve finer reduction has serious cost consequences. A final product size change from 19mm (3/4") to 12mm (1/2") to 6mm (1/4") can cut the installed crushing capacity by 30% to 50%. Along with this large production loss can come a doubling or even tripling of repair cost and wear parts usage of cones. The alternative to adding additional like units is quite often surprisingly expensive when the total installed cost is detailed. It should be remembered that the capital purchase price of the crusher or mill is but one portion of the ready-to-run cost for the addition. Often times, changing or replacing ancillary equipment, enlarging concentrator buildings, etc., can be costlier than the added crusher(s) and can make conventional approaches prohibitively expensive.

Since it is optimum cost-efficiency for a given product size that is the goal, each type of reduction machine has a preferred operating range to achieve the production and operating costs targets. Generally, the closer to the lower limit of its application range that a compression crusher operates in, the more expensive it will be on a cost-per-ton basis, i.e., fine crushing in conventional machines is expensive. Not so in a REMco OreMax.
Single Drive OreMax 4060 Series

Dual Drive OreMax 5080 Series - shown with REMco Installation Kit
**The REMco Autogenic Crushing Process**

**ROCK-ON-ROCK** reduction of all material feeds is achieved by high velocity energy transfer which commences as the rock feed enters the feed tube. At this point it is moving by gravity. When the incoming continuous ribbon of rock particles passes over the center distributor plate of the rotor, it is divided into multiple separate streams. These are forcefully impacted on the trailing edge of the autogenous waves at the center of the rotor. As the material begins its path through the rotor, it is being compressed by the rising centrifugal forces created by the rotor’s rotation. This multi-layered stream of rock is abraded, compressed and pulverized against the rock waves which are formed and held in place by the radial rotor walls. The unique geometry of the REMco multi-port rotors intensifies the inter-particle comminution with multiple collisions and a variety of forces act on the individual rock pieces as they proceed through the rotor.

**SUPERIOR ROCK-ON-ROCK CRUSHING PERFORMANCE**

REMco impact crushers are designed for crushing the widest range of rocks, ores and minerals into fine cubical products. REMco crushers with their unique high performance multi-port rotor designs, variable density chambers, and the widest operating speed range have expanded the application capabilities of VSI crushers. REMco has advanced VSI crushing technology for rock-on-rock reduction by performing thousands of crushing tests in its testing facility. This has resulted in a unique application accuracy by adjusting the design variables to suit the user’s specific requirements. This guarantees the right crusher for the job, eliminating guessing and user disappointment.

**LOWEST CRUSHING COST**

REMco has continued to lower the wear parts cost per net finished ton of product. Fully autogenous (rock-on-rock) designs provide the lowest product cost per ton. This is especially true when the desired product size is below 3/8” (10 mm). Even in the hardest, siliceous rocks and ores, REMco VSI crushers are the most affordable fine crushing units. REMco machines will make products that cannot be made by cone crusher, Hammermills or other crushers at an affordable cost. REMco rock-on-rock VSI crushers can routinely be operated in closed circuits to produce a product of minus 1 mm or less.
THE IMPORTANCE OF SPEED

ALL IMPACT TYPE CRUSHING MACHINES USE SPEED TO CRUSH! While there are many factors that affect the crushing efficiency of impact crushers, the most important of these is material velocity. This determines the amount of crushing which is done and the overall grading of the crusher discharge. Generally, the faster the material is accelerated, the greater the amount of crushing that is achieved. For this reason, it is essential that the impact crusher used have a wide operating speed range to accommodate a broad spectrum of material types and feed gradings.

REMco vertical shaft impact crushers have the broadest operating range of all VSI crushers. Please refer to the rotor velocity scale chart. For material reduction, the general velocity range is for particles traveling from 100 ft/sec. (30 mps) to 325 ft/sec. (99 mps). This velocity scale is divided into three basic ranges. These are:

Scrubbing Speed – 100 to 175 ft/sec. (30 mps to 53 mps). At this speed tumbling, rubbing and mild impacts shape the stone. Soft materials can often be reduced at these lower speeds which produce superior shape in all particles fed to the crusher. Very hard rocks may only be mildly cubed at these speeds. A sounder particle is produced by the elimination of soft, fragile portions.

General Crushing Speed – 175 to 250 ft/sec. (53 mps to 75 mps). This is the crushing range for reducing most rocks, ores and minerals. Severe impact, high attrition and compression of the rock stream cause particle failure. This results in a significant production of smaller particles when compared to those being fed to the crusher. Usually it is best to experiment with speed within this range because the fracture characteristics of rocks vary widely. To get good crushing with a balance of recycle load and controlled production of microfines, it is only necessary to achieve the threshold speed of fracture. Additional speed consumes extra power raising energy cost and often generating undesirable size distribution in the crusher discharge.

Fine Grinding and Pulverizing – 250 to 325 ft/sec. (75 mps to 100 mps). Speeds above 250 ft/sec. are reserved for applications where pulverizing and grinding of the material is desired. At these higher speeds, it is possible to produce manufactured sand and many industrial mineral products requiring fine sizes, in many cases smaller than 1 millimeter. These applications require care, technical knowledge of processing and experience in good processing circuit design. This way the highest production of the needed fine product can be achieved without excess energy consumption and with acceptable overall operating cost.

Whether your crushing requirement is for dry scrubbing, general crushing or grinding and pulverizing, a REMco VSI can be custom applied to produce your product. Contact REMco for guidance.

How is Speed Applied in a REMco VSI?

REMco VSI crushers use a rotating impeller that acts as a rock pump to accelerate and impart speed onto the rock particles which are fed to it. Depending on the model and particular application, the rotor configuration can be varied to suit. A common feature of all REMco rotors is their unique internal construction, using the most efficient port configuration to accelerate the incoming feed stream and divide it into multiple flows. As the rocks are fed to the crusher, each particle experiences a rapid acceleration and deceleration in microseconds. This fills the crushing chamber with a violent rock cloud. Depending on the desired product, the crushing forces applied can be controlled by the operating speed of the machine. This speed control when combined with a variety of crushing chamber features results in optimum crushing efficiency for the power employed.

In a limited number of cases, hard rocks may only be shaped at crushing speeds and soft rocks can often be crushed at shaping speeds. REMco VSI crushers for ... any rock, any speed, anywhere.
**REMco OreMax VSI** crushers are versatile machines that can be applied conventionally in ways similar to a cone crusher. However, because of their greater ability to produce a finer product with a higher fines content, they can compliment existing circuits by reducing the load on the cone crusher and still produce a finer product with a minimum of crusher dollar investment.

Note: It is recommended that all circuits using a **REMco OreMax VSI** be arranged to include protection from uncrushables by using magnets or metal detectors. Ample size vibrating screens are necessary for optimum crusher performance. Using a surge preceding the crusher and a variable rate feeder will enhance performance, maximize production and provide the lowest wear cost per ton.

This type of circuit is applicable to certain ores especially gold heap leach operations where a high tonnage of fine product is desired with the fewest crushing stages.

Premilling is an accepted concept to reduce the cost of expanding grinding mill buildings and the addition of grinding mills. Finer feed to primary ball mills can increase ball mill capacity from 20 to 30% over existing feed sizes.

This circuit illustrates how to insert a **REMco OreMax** into a conventional crushing/grinding circuit. Additional capacity is achieved by the installation of a wet classifier to remove the VSI fines directly prior to feeding the ball mill. This minimizes over-grinding and raises overall production.

To increase production from an existing SAG mill, it is possible to add a **REMco OreMax** and screen to assist the cone crusher with the reduction of the critical oversize build up in the circuit. The OreMax can operate in closed circuit with the 5 mm sizing of the finish screen. This will reduce total screen deck load and improve screening efficiency if the screen is presently overloaded.

Figure 1

Figure 2

Figure 3

Figure 4
REMco OreMax / OreMax-ST/AR CRUSHERS

CAPACITY TABLE IN TONS PER HOUR AS MEASURED AT POINT A
OPEN CIRCUIT, SINGLE PASS, TOTAL TONS THROUGH THE CRUSHER, 100% THROUGH ROTOR FEED

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Note 1: The capacities shown above are for feed which passes 100% through the rotor. REMco OreMax / OreMax-ST/AR VSI crushers do not use any form of rotor by-pass system such as Cascade or Bi-Flow. These systems provide no crushing benefit and solely create a coarser product while increasing the circuit recycle load.

Note 2: The capacities shown in this table are for crushing sound, competent ore having a crushed bulk density of 100 lbs. per cubic foot. Larger, angular feeds will reduce capacity; finer, cubical feeds will increase capacity.

Note 3: ST designation is for Swing Top / Standard Top.

Note 4: ST/AR designation is for Swing Top / Anvil Ring.

Note 5: XH designation is for Extra Heavy-Duty Construction.

Selecting REMco Impact Crusher Capacities

To select the correct crusher for your application, please refer to the Basic VSI Circuit diagram. REMco impact crushers have two distinct capacities. These are measured at different points of the circuit. Understanding this circuit flow is key to proper crusher model and drive power selection.

Reduction Ratio

For REMco crushers, the reduction ratio is calculated as the relationship of the maximum feed size to the desired product size. For example, with a feed of 2” and a product requirement of 1/4”, the reduction is $2.0 \div 0.250 = 8$. Maximum recommended reduction ratios for REMco crushers are, OreMax – 16:1 and OreMax-ST/AR – 6:1. Exceeding the recommended reduction ratio will interfere with circuit balance and may reduce production.
To determine your specific material crushing characteristics and crusher discharge grading by running a formal crushing test, contact REMco.

REMco cautions prospective crusher users to not depend on typical catalog gradings when seriously considering their crusher selection. A formal crushing test is strongly recommended prior to final model and type of selection.

The above graphs illustrate the variation that can be expected in the discharge grading from two different crushers fitted with anvil chambers, there will be a gradual coarsening of the crusher discharge as the anvils wear. In more abrasive materials, this will happen quickly and it will be noticeable by the increase in circulating load and reduced production of net product. In milder, less aggressive ores, this condition may take months or years to develop.

The capacities shown in these tables are in short tons, 2000 lbs., and are neither maximum nor minimum. Tonnages shown are based on processing sound rock, stone or ore in a well designed processing circuit with proper feed controls and adequate screening. Many factors effect capacity, such as individual fracture characteristics, type of rotor, size of drive motor(s), feed moisture content, etc. Producing multiple sizes simultaneously will reduce total net tons of finished product. All capacities are based on 100% screening efficiency.

NOTE: The capacities shown in these tables are in short tons, 2000 lbs., and are neither maximum nor minimum. Tonnages shown are based on processing sound rock, stone or ore in a well designed processing circuit with proper feed controls and adequate screening. Many factors effect capacity, such as individual fracture characteristics, type of rotor, size of drive motor(s), feed moisture content, etc. Producing multiple sizes simultaneously will reduce total net tons of finished product. All capacities are based on 100% screening efficiency.

NOTE: The discharge grading of a REMco VSI crusher is dependent on many factors. When all of these are considered, using the correct application process, a REMco VSI can be configured to any third or fourth stage minerals reduction task.

The discharge of rock-on-rock machines will contain some particles which may range in size up to the original feed size. All particles fed will experience reduction. This makes the rock-on-rock type of chamber best for producing a consistent grading due to the lack of chamber wear. There is no discharge grading change due to the wearing of rotor parts.

For REMco crushers fitted with anvil chambers, there will be a gradual coarsening of the crusher discharge as the anvils wear. In more abrasive materials, this will happen quickly and it will be noticeable by the increase in circulating load and reduced production of net product. In milder, less aggressive ores, this condition may take months or years to develop.

The above graphs illustrate the variation that can be expected in the discharge grading from two different REMco crusher types when processing different size feeds.

REMco cautions prospective crusher users to not depend on typical catalog gradings when seriously considering their crusher selection. A formal crushing test is strongly recommended prior to final model and type of selection.

To determine your specific material crushing characteristics and crusher discharge grading by running a formal crushing test, contact REMco.
REMco OreMax VSI crushers are of extra-heavy duty design and construction. These rugged machines are built for longevity of operation while providing smooth production with a minimum of vibration. This is possible because REMco OreMax crushers are the heaviest built machines. The OreMax and OreMax ST/AR have interchangeable bases and bearing assemblies allowing the use or field conversion to any crushing chamber type or design. The crushing chamber of a REMco OreMax can be custom-configured to provide the best crushing for any ore, rock or mineral. These machines are low cost to operate and offer ease of service that can be readily integrated into existing crushing plant procedures.
The 1530 Series OreMax is a compact, low-profile design which allows installation of the REMco into the dimensional envelope of existing cone crushers and other VSI machines.

REMco crushers utilize advanced geometrically-designed rotors of multiple ports and multiple heights. These rotors are available in short, standard and tall designs to suit specific application requirements. This provides the greatest versatility and broadest application range for REMco VSI crushers. REMco VSI crushers use 3, 4, 5 or 6-port enclosed rotor designs.

Figure 1 – The REMco design uses drop-in type tungsten tips for ease of replacement and low cost operation. Multiple grades of tungsten are readily applied for maximum wear life depending on rock type. No bolts are used to hold the tungsten tips in place.

Figure 2 – By using relatively small, very hard chrome iron or steel wear castings, rotor weight is reduced, lowering power demand. This lowers energy cost and wear parts replacement cost. Rotor wear plates are bolted in place to maintain internal balance and prevent shifting during operation.

Figure 3 – REMco rotors do not require extensive repair welding of the rotor body. The rotor is protected by one-piece hardened AR steel wear disks, top and bottom. These are smooth, reducing air drag and are easy to replace after providing long wear life.

Figure 4 – The complete assembly of REMco rotors is designed for maximum tonnage throughput, lower power demand, grading control, ease of balance and wear parts replacement. This provides the user with maximum machine availability.
**Standard Features**

Some of the Many Plus Value Features on REMco Crushers

**REMco** offers six design series for its models with over 40 configurations to fit any crushing job.

Large hydraulic cylinder to raise receiving hopper for quick, safe access when servicing the crusher.

Dual acting heavy-duty ratchet jack for fast, clean and easy v-belt tensioning.

Bearing temperature, interlock switches and vibration safety system is supplied standard on all REMco VSI machines.

All REMco VSI crushers use a standard rugged support frame for ease of installation and isolation of vibration on any support structure, steel or concrete.

Four self-centering vibration isolator mounts for smooth operation and protection of drive motors and surrounding equipment.

Oil lubrication with tank and all safety sensors. Including heating and cooling of lube oil.

Patented cross-key design for locking rotor to mainshaft. Eliminates damage or failure of the shaft from incorrect assembly.

Heavy-duty, hammer-driven steel wedges, secure the crusher top during operation and provide easy, quick access for service.
**OPTIONAL ACCESSORIES**

Some of the Many Plus Value Features on **REMco Crushers**

<table>
<thead>
<tr>
<th><strong>REMco</strong> offers installation kits that include support legs, skids, discharge hoppers and safety service platforms.</th>
<th>Electric or manual service hoists can be used on <strong>REMco’s</strong> optional service crane.</th>
<th>Electric motor solid state starters are available for all size drive motors in any voltage and current characteristics.</th>
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<tr>
<td>Variable volume autogenic crushing chamber inserts with deep well pockets and adjustable gusset protectors.</td>
<td><strong>REMco</strong> offers a full range of drive motors with suitable electrical characteristics for heavy-duty crusher use.</td>
<td>For optimum product control, variable frequency drive (VFD) controllers are available for all motor sizes in single and dual drive models.</td>
</tr>
<tr>
<td>Basic or custom portable trailers are available for all <strong>REMco</strong> model sizes.</td>
<td><strong>REMco</strong> also supplies complete portable plants for all models.</td>
<td>For continuous or multi-shift operations, <strong>REMco</strong> Conqueror rotors provide the longest possible wear life and uptime.</td>
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</table>
REMco custom builds special large machines when applications require very high capacities. These machines are designated as SuperMax models and are configured in any one of the basic designs.

These crushers are generally powered with two motors in dual drive configurations. The SuperMax models operate at 1,000 hp to a maximum of 1,500 hp. REMco has built a number of these units with excellent performance results. SuperMax models have been in service since 1998.

SuperMax models are complete with all normal accessories such as oil lubrication, spare rotors, installation kits, and the REMco SmartBox systems. Additionally, the SuperMax can include any number of special or unique features as requested by the customer. The SuperMax is usually applied in third or fourth stage crushing applications where large quantities of products are required.
Typical Single Drive Arrangements for Stationary Installation

As an alternate to a complete wheel-mounted, mobile crushing plant, REMco installation kits are a money-saving way of putting the crusher to work.

Proper installation of a new VSI into an existing or new crushing plant is key in achieving optimum performance and lowest cost operation. REMco offers economical installation kits which provide all the necessary supporting components to complete the installation of all REMco VSI models and sizes. These kits also allow for quick relocation of the crusher, if needed, as they mount on simple concrete pads or firm, level ground. Ready access for fast, safe inspection and maintenance of the crusher is also provided. REMco kits minimize dust emissions and can be fully wired for lubrication, motors and motor starters. They can be delivered semi-assembled to the plant site from the factory, and be ready to operate in less than a day.
The future is here. Improved operating control for maximum production at the highest quality.

The REMco VSI SmartBox crusher HMI controller provides consistent real time information about the machine’s operating performance. SmartBox monitors and records all critical elements including:

- Monitors and displays real time temperature of all bearings
- Records oil tank temperature
- Drive motor AMP/ KW draw
- Monitors all crusher vibration levels
- Records no loads / full load R.P.M
- Run Down time feature
- All safety switches functions
- Lube system operation
- All system Alarm notification signals
- Historical data logging, 365 days
- Custom designed historical printout
- Emergency stop function
- On screen alarm page trouble shooting guide
- Integrated System Operators Manual
- Factory recommended settings for the system
- Provides scheduled maintenance alerts
- Records all maintenance
- USB flash-drive accessibility
- Monitors rotor wear parts

Optional System Features:

- Temperature sensing of all motor phases
- Temperature sensing of all drive motor bearings
- Crushing chamber temperature sensing

Optional System Integration:

- Can be integrated to an existing plant control system

Optional Monitoring Features:

- Real time alarm notification sent by text / email*
- Smartphone APP or iPad viewer*
- REMco Diagnostic services*

Optional Multiple Crusher Monitoring:

- 15” HMI touch screen
- Multiple Crusher Monitor in central location

The operating data is gathered and processed through the HMI that is supplied with the system, providing real-time readouts of all operating limits.

*Requires Internet connection

US patent No. 7,489,254 – Foreign patents pending

Typical HMI Screen Capture of SmartBox System in Operation.

SmartBox ... the latest technology in crushing machine management for the modern producer. Improving product quality and production rate by managing operation and maintenance of the crusher. SmartBox ... diagnoses mechanical problems while they are still small, preventing interruption of crusher operation and unscheduled down time. SmartBox ... alerts operating personnel and provides management with continuous feedback on crusher utilization and performance.

SmartBox ... a quick return on your investment in crusher control.
General Clearance and Installation Dimensions

REMco SINGLE DRIVE Model ST VSI

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The dimensions shown are approximate and subject to change. Do not use for construction. Request a certified installation drawing prior to designing the crusher support. REMco reserves the right to change these dimensions without prior notice.

REMco DUAL DRIVE Model ST VSI

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When a new crushing circuit is being considered it is important to determine the crushing characteristics of the rock or mineral to be processed. Proper testing can establish the design parameters for new crushing plants to ensure that the desired product quantity and quality can be reliably produced by the equipment selected.

The only way to predict crushing costs with certainty is to establish the abrasion rate of the material to be quarried and crushed. From the softest limestone to roughest silica, wear rates and the resulting crushing costs can be ascertained, by a REMco crushing test.

REMco provides crushing test to prospective buyers of REMco crushers. These crushing test services are generally performed on a no-charge basis for standard tests. REMco uses a Series 320 VSI with 75 hp and VFD drive for these tests. This crusher can be arranged in a wide variety of configurations for test purposes. For accuracy in testing, it is essential that the right quantity of material be provided. For more information about these services, please visit www.remcovsi.com.

### SPECIFICATIONS

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### ACCESSORIES

O = OPTIONAL      S = STANDARD      N/A = NOT AVAILABLE

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Note: REMco reserves the right to change the above specifications without prior notice.
**REMCO OreMax**

**IMPORTANT APPLICATION INFORMATION AND GUIDELINES**

- The capacities shown in this catalog are for fully autogenous rock-on-rock VSI crushers only and are neither maximum nor minimum. Tonnages shown are based on processing material in a well designed processing circuit with automated feed controls and adequate screening. Many factors effect capacity, such as ore hardness, type of rotor used, number of rotor ports, rotor speed, size of drive motor(s) feed moisture content, etc. For metric capacities, multiply by a factor of .9.

- **REMco** recommends conducting a crushing test prior to applying OreMax crushers or designing a fine ore crushing circuit. Contact **REMco** for details and/or to schedule such a test.

- Water in feed in excess of 3-5% will reduce crusher performance, cause chamber packing, raise power demand and increase parts wear raising the operating cost.

- Maximum recommended feed size will vary dependent on type, hardness and shape of rock or ore to be crushed. Larger, angular feeds will reduce capacity; finer, cubical feeds will increase capacity. All feed size designations shown are for a maximum one-way dimension of the rock pieces.

- OreMax crushers can be operated in open or closed circuit. Closed circuit operation will produce the best results when crushing for optimum particle shape. Closed circuit operation will also yield the greatest net product and the best final product grading.

- The information contained in this catalog is provided as an application aid to assist the user in maximizing the potential of OreMax crushers. No performance guarantees are expressed or implied. To determine the effect of individual conditions, contact **REMco**.

The above applies to all OreMax models shown in this catalog. **REMco** reserves the right to change the capacities and specifications contained herein without prior notice.

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**REMCO OreMax-ST/AR VSI**

**IMPORTANT APPLICATION INFORMATION AND GUIDELINES**

- The capacities shown in this catalog are for crushers using a rock lined rotor and an anvil chamber and are neither maximum nor minimum. Tonnages shown are based on processing material in a well designed processing circuit with automated feed controls and adequate screening. Many factors effect capacity, such as rock hardness, type of rotor used, number of rotor ports, rotor speed, condition of anvils, size of drive motor(s), feed moisture content, etc. For metric capacities, multiply by a factor of .9.

- The capacities shown in this catalog are for crushing sound, competent ore. Larger, angular feeds will reduce capacity; finer, cubical feeds will increase capacity. When crushing to produce improved shape, slower speeds may be utilized. This will increase the crusher feed rate and lower reduction achieved.

- **REMco** recommends conducting a crushing test prior to applying OreMax-ST/AR crushers or designing a crushing circuit. A chemical analysis test of the material to determine abrasive content is also recommended. Contact **REMco** for details and/or to schedule such a test.

- Water in the feed in excess of 3-5% will reduce crusher performance, cause chamber packing, raise power demand and increase parts wear raising the operating cost.

- Maximum recommended feed size will vary dependent on type, hardness and shape of rock or ore to be crushed.

- OreMax-ST/AR crushers can be operated in open or closed circuit. Closed circuit operation will produce the best results. Closed circuit operation will also yield the greatest net product and the best final product grading.

- The information contained in this catalog is provided as an application aid to assist the user in maximizing the potential of OreMax-ST/AR crushers. No performance guarantees are expressed or implied. To determine the effect of individual conditions, contact **REMco**.

- OreMax-ST/AR machines are recommended for use in low abrasion, less aggressive materials. When the total abrasives content of the rock (silica, alumina and iron) exceeds 20%, operation may result in unacceptable operating wear costs. In these instances, **REMco** strongly recommends the use of a rock-on-rock chamber as in **REMco OreMax** models.

The above applies to all OreMax-ST/AR models shown in this catalog. **REMco** reserves the right to change the capacities and specifications contained herein without
REMco ALSO OFFERS SPECIAL CRUSHER DESIGNS FOR AGGREGATE AND THE INDUSTRIAL MINERALS INDUSTRIES. CONTACT REMco FOR DETAILS.