

# 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



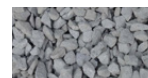
Precious Metals Recovery



Re-Crushing Inventory



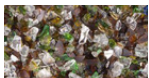
Fractured Gravel



Cubical products



Super Pave Products



Man-Made Materials



Cement Clinker



Concrete Rock



Chips



Shaping

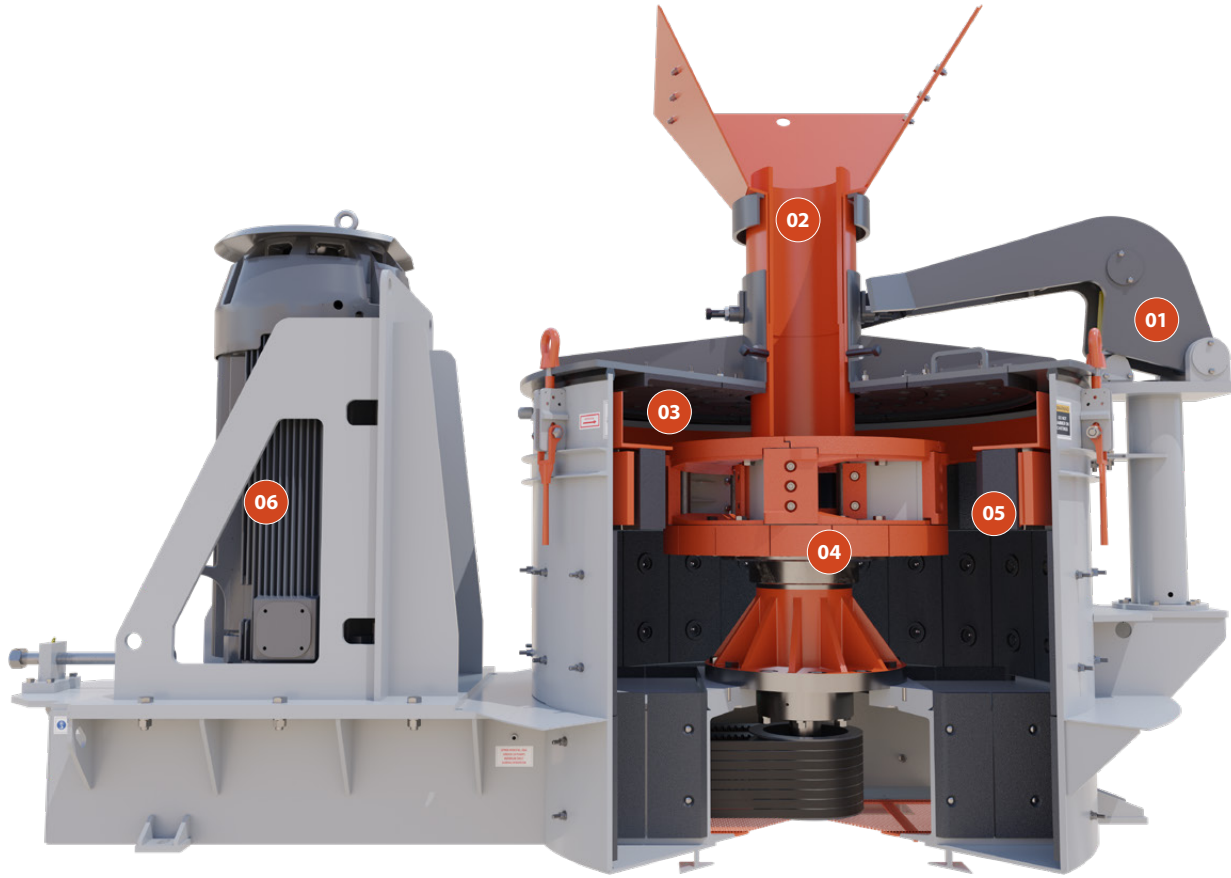


Asphalt

Wheeled   
Stationary 

Rock Face to Load Out®





**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



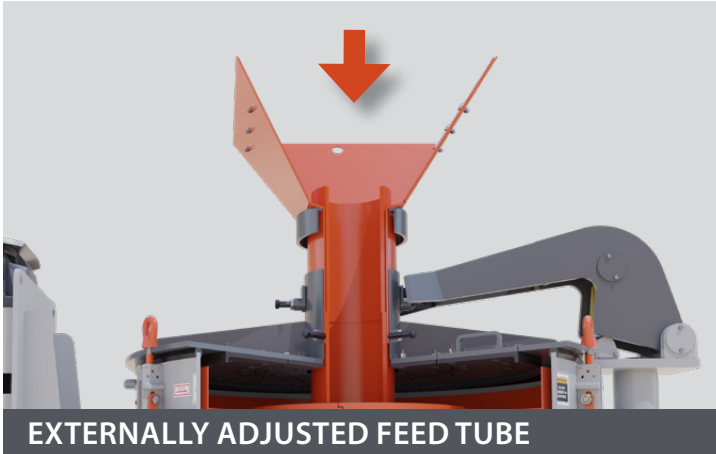
### HYDRAULIC LID LIFTER

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



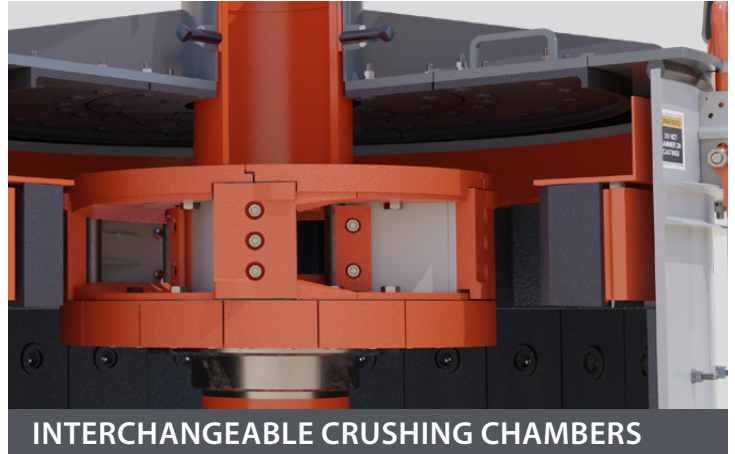
### SINGLE OR DUAL DRIVE

- » 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.

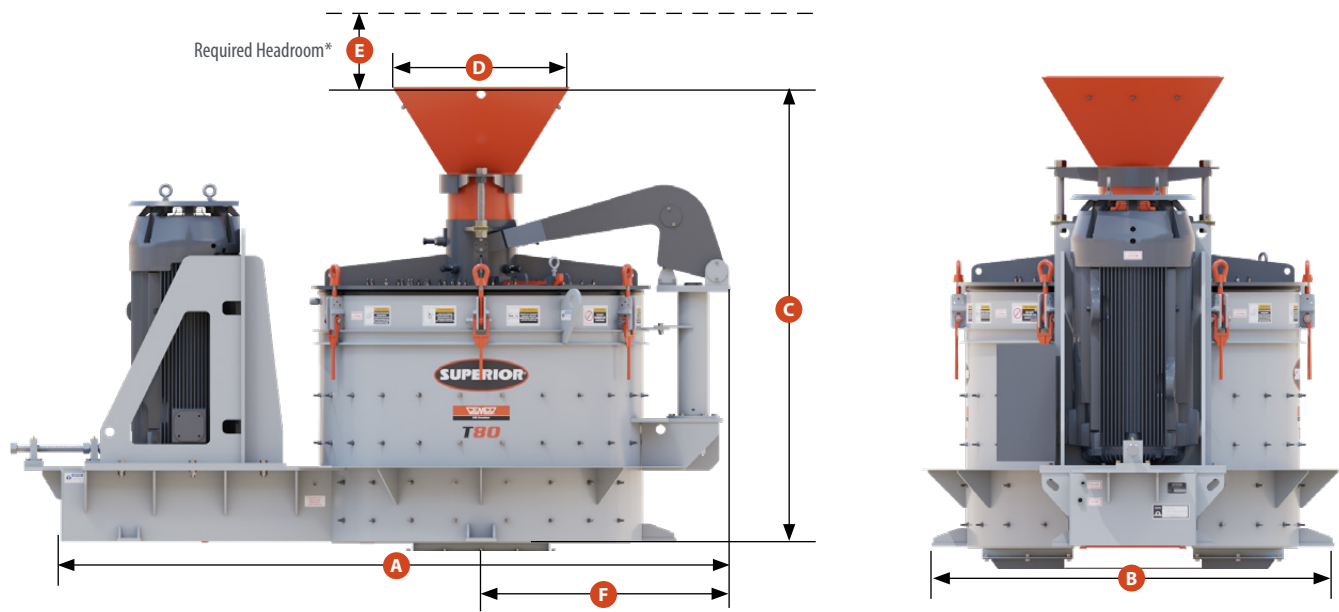


### VANTAGE® AUTOMATION

- » 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 |
| C1920 (Dual) | 4,356 | 171.5  | 2,337 | 92.0  | 1,621 | 110.125* | 1,403 | 55.25 | 3,200 | 126.0 | 1,155 | 45.5  |

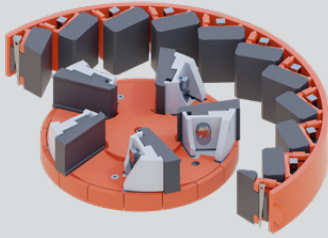
### TYPICAL PHYSICAL PROPERTIES

| 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 |
| C1920 Dual         | Rotor (5 Port)            | 50            | 2   | 813-990              | 32-39 | 136-408  | 150-450 | 1,250-1,750                 | Dual             | Dual    | 15,875     | 35,000 |
|                    | Shoe Table (4 Shoe)       | 100           | 4   | 965                  | 38    | 136-408  | 150-450 | 1,250-1,750                 | 597              | 800     | 15,875     | 35,000 |

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

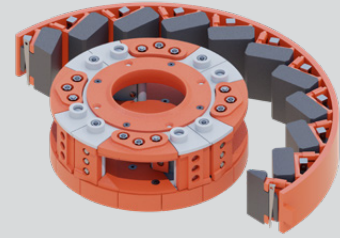
Projected crusher capacities are based on a material having a work index of 12-14, with a bulk density of 100 lbs/ft<sup>3</sup> (1.6 mt/m<sup>3</sup>). The crusher drive assemblies are to be maintained in good working order with the ability to apply all available horsepower without drive belt slippage. Plant installation to ensure the crusher is able to operate continuously consuming the FLA rating of the motor(s) with the equipment able to accept and discharge material freely.

## CRUSHING CHAMBER CONFIGURATIONS



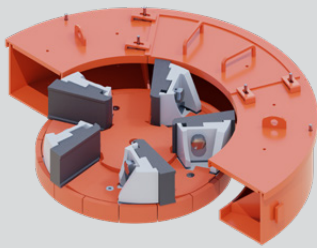
### SHOE TABLE / ANVIL RING

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



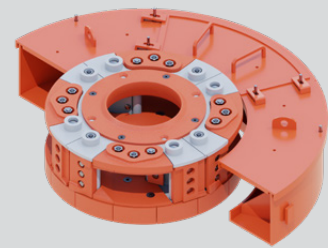
### SUPERCHIPPER™ ROTOR/ ANVIL RING

- » 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

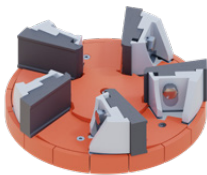
- » Friable, low abrasion material
- » Low reduction rate, high recirculating load
- » Low percentage of “fracture face” material



### SUPERCHIPPER™ ROTOR / ROCK SHELF

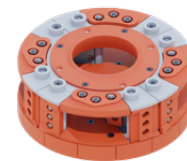
- » Good for shaping abrasive material
- » Good for light crushing

## 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   |
| C1920 | 965      | 38 | 4       | 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 |
| C1920 | 813-990  | 32-39 | 5     | 50            | 2   |



### 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