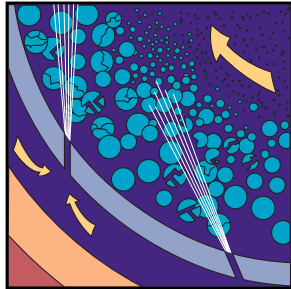
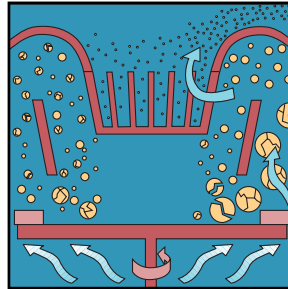


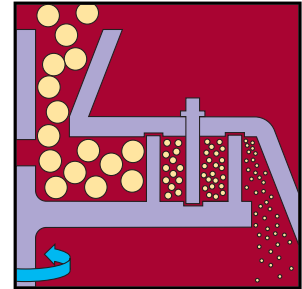
# PROVEN PERFORMERS



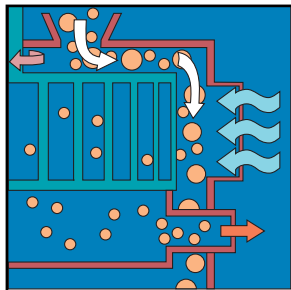
Micronizer®



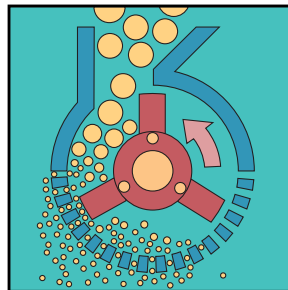
Powderizer®



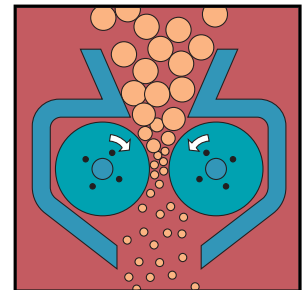
Simpactor®



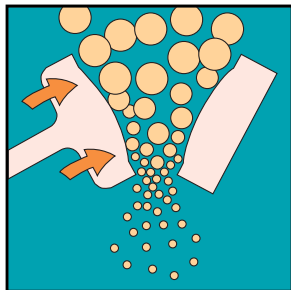
Air Classifiers



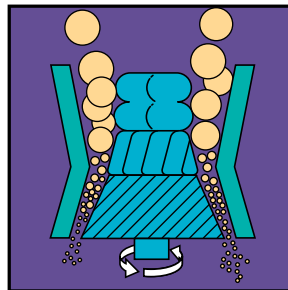
Hammermill



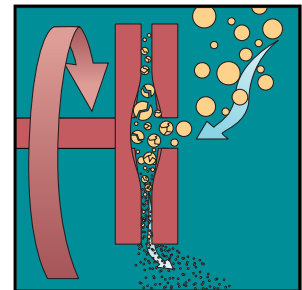
Roll Crusher



Jaw Crushers



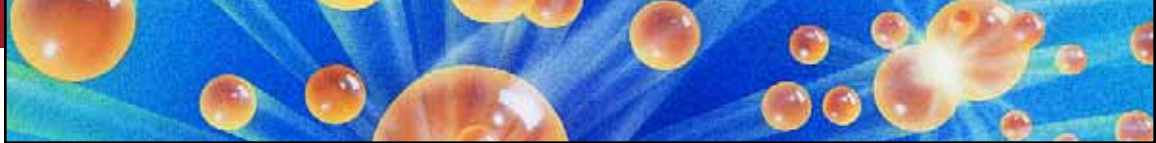
Rotary Crushers



Sample Grinders



POWDER PROCESSING TECHNOLOGY: THE STURTEVANT SOLUTION.

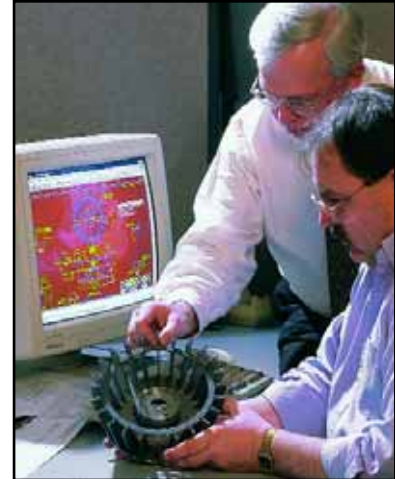


# Since 1883

## Solutions

**"It's not just the metal!"**

Our people enjoy working with you to determine the best solutions for your material processing problems. If all Sturtevant provided was good equipment, we would have been out of business decades ago. Combining over a century of experience, the latest engineering technology, and sincere enthusiasm, we make it easy to solve your processing challenges.



## Experience

For more than 100 years, we have been processing materials in crushing, grinding, blending and air classifying equipment, sometimes successfully, sometimes not, but we have always learned. To benefit from our experience, call us at 800-992-0209. These operators did.

*"When we originally became involved with [Sturtevant Inc] we purchased [their jet mill] because of its superior performance"*

**Dan Higgins,  
CTSP**

*"...The Sturtevant SD Air Classifier gives us better control of the oversize and more consistency in our quality"*

**Daryl Trigg,  
Short Mountain Silica**

*"Average operating hours were reduced by 15 percent, and the tons per hour production rate increased 17 percent"*

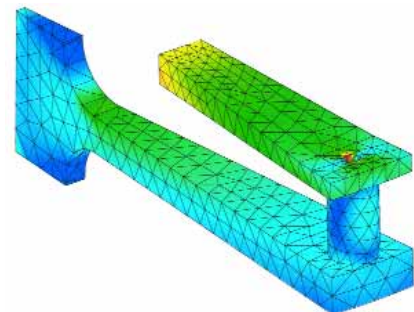
**Ross Donovan,  
Piqua Materials**

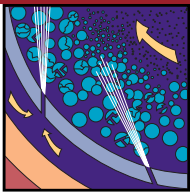
*"From a cost standpoint they were very competitive. But they also overwhelmed us with support. Their knowledge and experience is as important to us as their equipment"*

**Dan Higgins,  
CTSP**

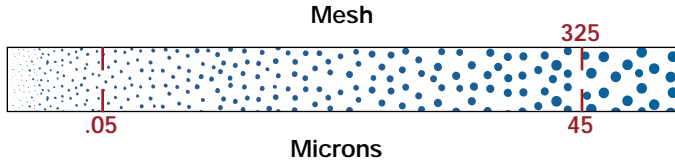
## Technology

Using the latest C.A.D. and Finite Element Analysis, we model Sturtevant equipment to understand and eliminate stresses which could cause failure. Less carefully designed equipment could breakdown more often or fail catastrophically. We take these extra steps to protect your investment and your employees' safety.

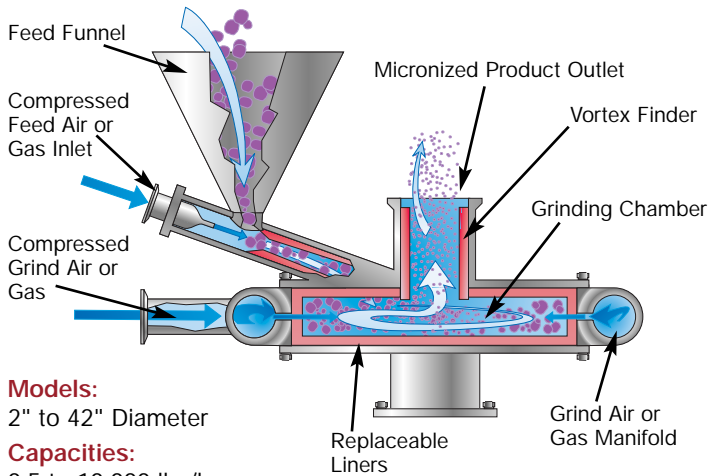




## MICRONIZER®



The Sturtevant Micronizer® is a jet mill employing compressed air or gas to produce particles less than one micron. Inside the Micronizer precisely aligned jets create a vortex. Material is fed into this vortex along an engineered tangent circle and accelerates. High speed rotation subjects the material to particle-on-particle impact creating increasingly smaller fines. While centrifugal force drives large particles toward the perimeter, fines move toward the center where they exit through the vortex finder.



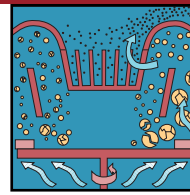
- Models:**  
2" to 42" Diameter
- Capacities:**  
0.5 to 10,000 lbs/hr
- Product Fineness:**  
0.5 to 45 microns
- Compressed Air Requirements:**  
30 to 3300 SCFM @ 100 PSIG

### APPLICATIONS

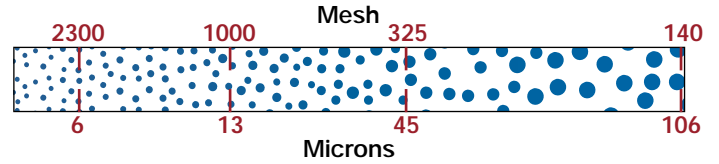
- Agricultural chemicals
- Carbon Black
- Ceramics
- Minerals & Metals
- Pharmaceutical, cosmetics
- Pigments
- Precious metals
- Propellants
- Resins
- Titanium Dioxide
- Toner

### BENEFITS

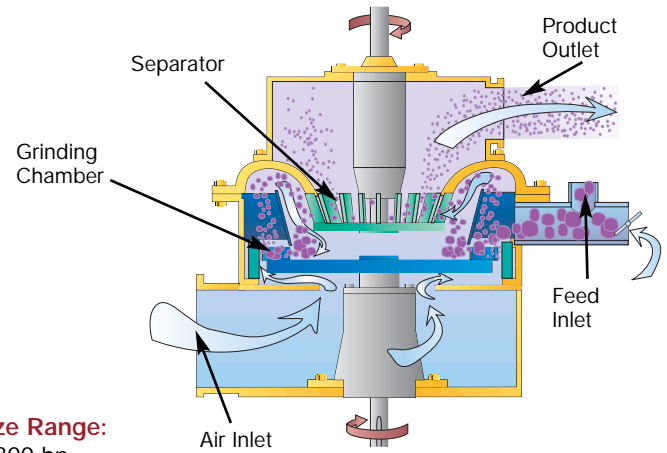
- Narrow particle size distribution
- Spherical uniform particle shape
- No heat build-up
- No product contamination
- Low maintenance
- Simple operation
- Sanitary designs require no tools



## POWDERIZER®



The Sturtevant Powderizer® is a "classifying impact mill" capable of reducing powders down to five microns. It is fast becoming the workhorse in particle size reduction applications due to its combination of impact milling and air classification technologies...in a single unit! Its flexibility of operation can easily process a multitude of products in the chemical, food, minerals, and other industries requiring efficient and economical particle size reduction.



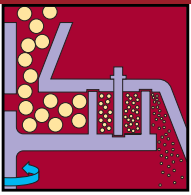
- Size Range:**  
5-300 hp.
- Capacity Range:**  
50-10,000#/hr.
- Product Fineness:**  
5-100 microns
- Air Flow Range:**  
250-15,000 cfm.

### APPLICATIONS

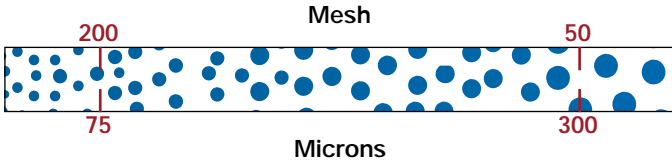
- Agricultural chemicals
- Clay
- Cocoa
- Cornstarch
- Heat-sensitive materials
- Epoxy powder coatings
- Food products
- Limestone
- Magnesium hydroxide
- Pharmaceutical powders
- Pigments
- Powdered Milk
- Sugar
- Talc

### BENEFITS

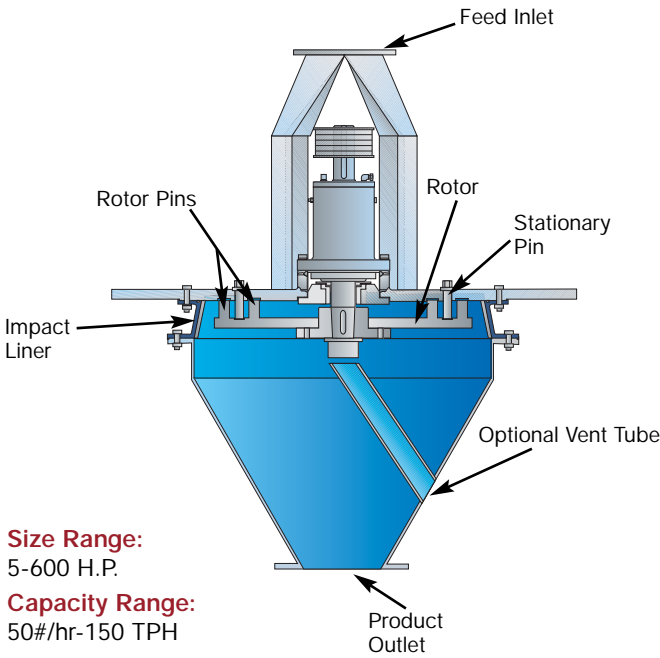
- Reversible impact liner for longer life
- Stainless steel construction
- Optional finishes & materials are available
- Suitable for heat-sensitive products
- Narrow particle size distribution
- Entire system can be fully automated
- "Powderizer®" can be easily disassembled for cleaning and servicing
- Externally lubricated bearings
- Complete system supply
- Bearing cartridge with air purge for longer life



# SIMPACTOR®



The Sturtevant Simpactor®: a centrifugal, pin-type impact mill, reduces low-to medium-density materials to uniform fine particle size of 50-200 mesh.



**Size Range:**  
5-600 H.P.

**Capacity Range:**  
50#/hr-150 TPH

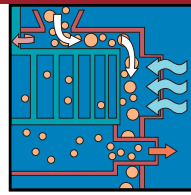
**Product Fineness:**  
50-200 mesh

## APPLICATIONS

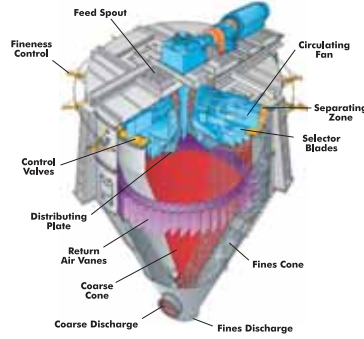
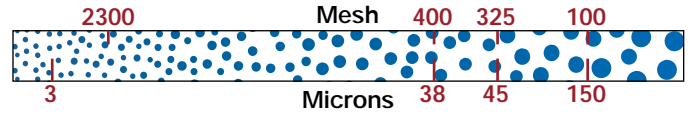
- Clay
- Corn slurry
- Deagglomeration
- Densification
- Flour
- Gypsum
- Infestation destruction
- Packed product recovery
- Resin
- Sodium bicarbonate
- Stucco
- Starch
- Talc

## BENEFITS

- Low maintenance
- Economical; low energy consumption with high throughput
- Efficient & effective; uniform, precise grind
- Easy to operate; adjust grind while operating
- Dry or wet grinding
- Gravity or pneumatic feed
- Optional liner & pin materials available



# AIR CLASSIFICATION

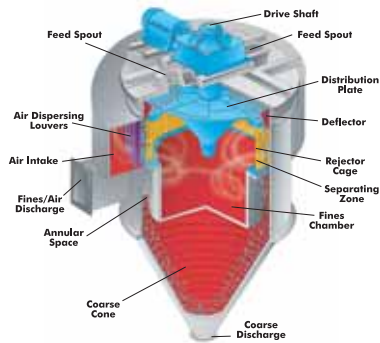
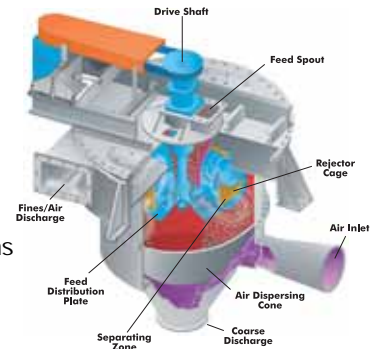


## WHIRLWIND AIR CLASSIFIER

**Models:** 20" to 26 Ft diameter  
**Feed Capacities:** 1 to 800 TPH  
**Product Fineness:** 100 to 400 mesh  
**Operation:** Internal Fan, No Cyclones or Baghouse Required

## SUPERFINE AIR CLASSIFIER

**Models:** 20" to 6 Ft diameter  
**Feed Capacities:** 0.5 to 15 TPH  
**Product Fineness:** 45 to 3 microns  
**Operation:** External Fan, Fines collected in cyclone or Baghouse



## SIDE DRAFT AIR CLASSIFIER

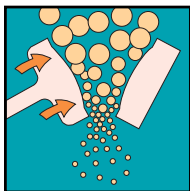
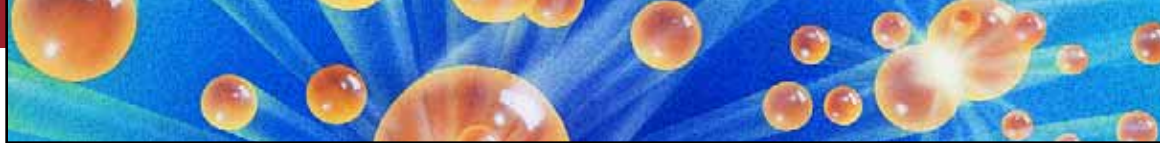
**Models:** SD-20 to SD-180  
**Feed Capacities:** 4 to 1000 TPH  
**Product Fineness:** 100 to 400 mesh  
**Operation:** External Fan, Fines collected in cyclone or Baghouse

## APPLICATIONS

- Aggregates, crushed stone
- Ceramics
- Chemicals
- Cornstarch
- Diatomaceous earth
- Fly ash
- Food products
- Hydrated lime
- Minerals
- Plastics
- Silica sand
- Soda ash, bicarbonate

## BENEFITS

- High quality product, minimal oversize particles
- Dedusted coarse product, minimal fines
- Higher capacity and finer separations than screeners
- Simple construction, low maintenance, easy-to-use
- Dial-In, fineness controls; no system to change products
- Wear-resistance for abrasive applications



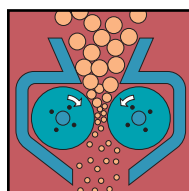
## JAW CRUSHERS

Sturtevant Jaw Crushers are unsurpassed in coarse and intermediate crushing. Even very hard materials can be reduced for further processing.

- Reduces by compression and shear stress
- Heavy-duty, cast-iron construction; decades of dependable service
- Easy access; simplified inspection and maintenance
- Minimal fines production
- Efficient



NOTE: Guards removed for display purposes. Do not operate unless all safety devices are installed properly.



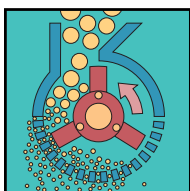
## ROLL CRUSHERS

Sturtevant Roll Crushers are best-suited for controlled reduction of friable materials to granules where fines are undesirable.

- Uniform granular product; minimal fines creation
- Reduces by compression; low wear
- Abrasion-resistant roll surface treatment



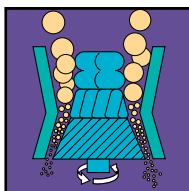
NOTE: Guards removed for display purposes. Do not operate unless all safety devices are installed properly.



## HAMMERMILLS

Sturtevant Hammermills provide unexcelled general size reduction for virtually any dry friable material.

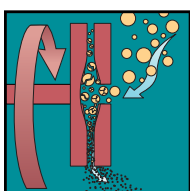
- Wide range of reduction by impact from swinging hammers
- Product size controlled by grates and screens
- Material reduced to granular powder at high rate
- Heavy-duty, cast-iron construction
- Easy access for maintenance or inspection



## ROTARY CRUSHERS

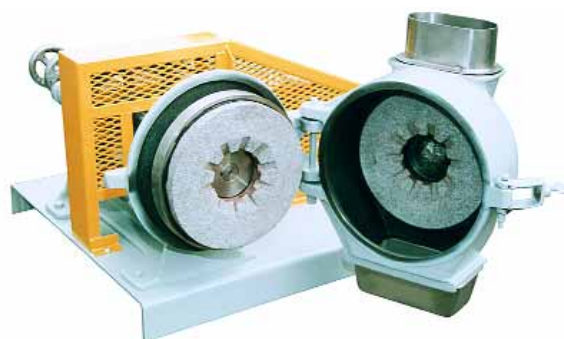
Reduce soft to moderately hard materials without creating excess dust.

- Uniform granular product; minimal fines creation
- Reduces by shear force



## LABORATORY SAMPLE GRINDERS

These Sample Grinders are of the "Open-Door" disc type and are capable of very fine work, producing products as fine as 100 mesh (coarser if desired) when working on dry, friable, soft, or moderately hard materials. In fact, they will do this on many hard rocks and ores, but with somewhat reduced capacities.





## **LET STURTEVANT “SIZE UP” YOUR EQUIPMENT NEEDS.**

Selecting the proper equipment is essential, in order to achieve maximum efficiency and cost-effectiveness. Let Sturtevant help you choose the model that's best for you. Our testing facility is fully equipped to test your materials, so that we can recommend the best equipment for your application.

CALL TOLL FREE:

**800-992-0209**



Sturtevant, Inc.  
348 Circuit Street  
Hanover, MA 02339

- PHONE: 781-829-6501
- FAX: 781-829-6515
- TOLL FREE: 800-992-0209
- E-MAIL: [sales@sturtevantinc.com](mailto:sales@sturtevantinc.com)

POWDER PROCESSING TECHNOLOGY: THE STURTEVANT SOLUTION.

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