

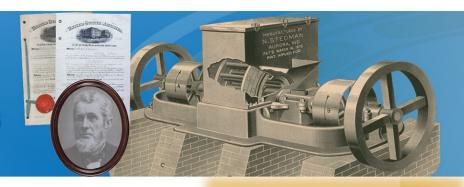
# The Solution To Size Reduction For Over 175 Years







# Complete Size Reduction Solutions



In 1834 Nathan Stedman founded Stedman Foundry & Machine Company. Later Mr. Stedman developed a unique method of size reduction and received multiple patents for what has become known today as the cage mill. Since then, providing solutions for companies on how to reduce material size has become second nature to Stedman Machine Company.

Today, Aurora, Indiana-based Stedman continues to focus on industrial size reduction and works closely with its customers to determine the best, most cost-effective, efficient size reduction method and equipment for their specific applications.

No matter what the material, STEDMAN offers the equipment choices to crush, pulverize, fine grind, blend and/or deagglomerate the toughest materials.

Contact Stedman today to discuss your specific size reduction requirements.

#### FULL RANGE OF SIZE REDUCTION EQUIPMENT

- Primary & Secondary HSI Impactors
- Cage Mill Pulverizers
- V-Slam<sup>™</sup> Vertical Shaft Impactors
- Grand Slam<sup>™</sup> Waste Recyclers
- Micro-Max<sup>™</sup> Fine Grind Air Swept Mill
- Aurora<sup>™</sup> Single & Dual Rotor Crushers
- Hammer Mills
- Chain Mills
- Custom engineered solutions for your size reduction needs

#### WE TACKLE ANY MATERIAL

- Wet, sticky materials
- Pet Coke
- Aglime
- Glass recycling
- Brick & Clay
- Limestone
- Coal
- Metals/Alloys
- Shale
- Grains
- Starch
- Corn
- Aluminum dross
- Slag
- Chemicals
- Floor tiles
- Tungsten carbide
- Asphalt recycling
- Bakery waste
- Gravel
- Salt
- Fertilizers
- Gypsum
- Animal by-products
- Biomass
- Ash



# Primary & Secondary Reduction Equipment

### MEGA SLAM™ PRIMARY HSI IMPACTOR



- · Heavy duty, reversable monoblock and fabricated aprons
- · Capacities from 100-1200 TPH
- Superior solid rotor
- Extra large feed opening
- · Hydraulic pump allows easy opening of the hinged rear housing
- · Fast apron access and adjustment
- Easy Maintenance
- Standard rear apron spring bridge assembly assures accurate product control

# GRAND SLAM™ SECONDARY & TERTIARY HSI IMPACTOR



- · Front and rear opening housings
- · Highest first pass yield
- · Industry leading rotor designs
- Reduction ratios up to 30:1
- Feed sizes up to 16" with capacity up to 1600 TPH
- Open discharge with no screen or grates to plug
- Available with heaters and air cannons for wet sticky materials
- Crush Plus™ grinding path & Max Yield™ Automated apron adjustment systems available

#### **CAGE MILL PULVERIZER**

- Single- and multi-row cage mill pulverizers
- Economical with no hammers or screens to replace
- Hydraulically operated, quick opening retractor
- · Capacities from 100 lbs. to 800 TPH
- One piece single joint housing is positively sealed
- Compact, unitized construction, occupies 45% less space
- Integrated heaters and air cannons impede build-up of wet material.
- Cage mill pulverizers offer selective crushing, high crush counts and cubical product
- Ideal for wet, sticky materials and blending or cleaning products



### Secondary, Tertiary & Fine Grinders

## Specialized Reduction Equipment

#### **HAMMER MILLS**



- Extra-Heavy Housing Liners and Breaker Plates
- Exclusive 2-stage reduction
- Hammer designs to fit your material
- Up and down running
- Air Base
- Large Feed Opening
- Adjustable Grinding Plates
- Carbide hammer overlays available
- Ideal for a large variety of materials



### AURORA™ SINGLE & DUAL ROTOR CRUSHERS



- Produces higher throughput and smaller particles
- Ideal when declumping for pneumatic conveying or unloading
- Superior strength combs
- Double end wall construction
- Many standard cutter designs for multiple materials
- Stuffing box seals
- Liquid tight oil bath with sight gauge
- · Available in carbon steel or stainless steel
- Custom sizes and configurations available

#### V-SLAM™ VERTICAL SHAFT IMPACTOR

- Designed for reduction of animal feeds, minerals, ores and chemicals.
- Reduces material with fewer fines
- Adjustable feed tube for longer wear life of shoes and anvils
- Reduction ratios up to 15:1
- Production capacities range from 8-500 TPH
- Automatic recirculating lubrication system
- Drop in anvils (no tools required)
- Replaceable crushing chamber and lid liners
- Cubical particle shape
- Patented features



#### MICRO-MAX™ FINE GRIND AIR SWEPT MILL



- Capable of producing a wide range of particle sizes from 20 Mesh to 20 micron.
- Increased air flow vs. competitive models
- Capable of grinding and drying in one pass
- Internal classifier plate
- Capable of 500 lb to 16,000 lb/hr.
- Screenless
- · Oversized air inlets and outlets
- Carbide faced beaters



#### **CHAIN MILLS**



- Simple design, low in maintenance, this mill can handle large volume of tailings per hour with virtually no possibility of plugging or clogging.
- Developed to handle superphosphate, triple-superphosphate, granular and conventional fertilizer tailings.
- Heavy duty construction
- Removable steel backplate
- Speeds up to 1,500 RPM
- Custom sizes available



#### EXPERIENCE THE STEDMAN DIFFERENCE

- Test Plant with full size crushers
- Full manufacturing, machining, and assembly facilities
- MSHA Trained Sales, Engineering & Service Personnel
- Parts and Service . . . 24 hours a day, 7 days a week, 365 days a year
- Improving size reduction processes
- Full range of crushing equipment
- Financing Assistance Lease or direct purchase





### Full Service Partner

#### **COMPLETE TURNKEY SOLUTIONS**



Innovative Processing Solutions designs, manufactures and installs custom material handling and crushing systems. We provide professionally engineered solutions for your crushing, screening, storage and handling needs including...

- Grinding Rooms
- Retrofits
- Turnkey Systems
- Aggregate plants
- Bulk Conveyors
- Speciality Conveyors
- Feeders Apron & Belt
- · Design & Manufacture
- Installation & Startup



sales@innovative-processing.com www.innovative-processing.com





After the sale is when customers truly appreciate STEDMAN. All of the company's people are focused on industrial size reduction. Therefore, customers can be assured of dealing with experienced engineers, parts and service people.

- Parts and service employees average over 22 years of continued service
- We offer the highest quality wear parts at the best prices
- With a 24-hour Parts and service department, customers know that solutions will come fast.
- Factory reconditioning of units and parts, complete with new warranties
- STEDMAN offers annual inspections to keep your crusher in excellent running condition

parts@stedman-machine.com www.stedman-machine.com/parts.htm





### Testing Materials from A-Z

#### SELECT THE PERFECT CRUSHER FOR YOUR APPLICATION

Stedman's Size Reduction Test Lab features full-size crushing equipment for dependable results. Our highly trained and experienced technicians will test your materials on full-size equipment, giving you the information you need to select the right crushing and size reduction equipment.

Customers can provide 1,000-1,200 lbs of their feed materials - whether they're wet and tacky or dry materials, hard minerals, coal, metals, clay, shale, grains, starch, corn, chemicals, aluminum dross, floor tiles, tungsten carbide, etc. - and run it through the test plant. Computer process simulations produce performance reports and flow diagrams, or Stedman will provide one of over 10,000 application reports on file, so you can choose the right equipment for the job.

Stedman encourages customers to observe the testing process in person, so you can learn the basics of controlled impact crushing, pulverizing or upgrading of materials.

#### FULL SCALE TESTING MEANS POSITIVE EVALUATION

#### MORE THAN JUST UPSCALED TEST RESULTS

After you receive our quality test data, you will be able to estimate your operating costs from power consumption to wear parts. You will see your end product on site and get a confidential, written technical report including:

- Moisture analysis
- Raw feed analysis
- · Product gradation analysis
- Output capabilities
- Bulk density
- Abrasion test
- Estimated metal replacement costs
- Power requirements for start-up and running

### Toll Crushing Available! Contact us for rates

#### STEDMAN Test Plant

108 Indiana Avenue Aurora, IN 47001 Freight Prepaid with MSDS



### TESTING SAVES TIME & MONEY

STEDMAN's unique, full scale test lab takes the guesswork out of selecting particle size reduction technology and equipment best suited for each application in its specific processing environment. Testing assures customers prior to making an investment that they will achieve their size reduction goals in the most cost-effective manner possible. Test data helps customers estimate operating costs from power consumption and wear costs. With more than 10,000 test evaluations of various materials on file, coming to the best solution doesn't take long.







