FEED AND BIOFUEL

HIGH PERFORMANCE GRINDING

HAMMER MILLS
We are crushing it – no matter what it may be

At ANDRITZ we have been engaged in the feed and biofuel industries for a very long time and when you consider the collective knowledge of our engineers and technicians, it is easy to see that we are totally invested in the future of our technology. As a result, we have been able to implement hammer mill solutions that achieve the perfect grind for virtually any materials, coarse or fine, for the raw materials used in the production of biofuel and animal, aqua, and pet food.

A COMPLETE SOLUTION

The correct combination of hammer mill type, screens, hammers, speed, feeding system, and air flow through the hammer mill ensures the required grinding results and creates optimum conditions for subsequent processes, such as mixing, pelleting, and extrusion. Thus, the grinding process is not merely a question of the hammer mill alone, but also includes everything from feed system to discharge hopper, aspiration filter, and electronic control system.
Hammer mills for every purpose

ANDRITZ supplies a wide range of hammer mills for different purposes from biofuel over animal feed to extrusion applications. All hammer mills are globally available in terms of both rotational speed and certification and are continuously updated and improved.

**OPTIMILL**
Optimill hammer mills, designed for grinding coarse structures such as those required for pig, poultry, and ruminant feed, are large circle grinders equipped with four pole motors. They are available in a variety of sizes from 500mm to the 1200mm dual chamber model. Optimills can be combined with feeding and separation devices, collection bins, filters, fans, and platforms.

**MULTIMILL**
Multimills are small circle grinders, equipped with two pole motors for high speed fine grinding applications such as the extrusion of pet food and aqua feed. They come in a variety of sizes from 630mm to 1400mm long and can be installed in a unique double grinding stack.

**US 43”**
This rugged 43” hammer mill is a global product, designed primarily for tough applications like grinding wood chips and fiber for biofuel pelleting. The larger screen area and inlet are ideal for the grinding of low density products.

**US 38”**
The 38” hammer mill is based on the same design principle as the 43” model but tailor made for animal feed applications and grain grinding.

**US 22”**
The 22” hammer mills is based on same design principle as the previous two but optimized for fine grinding and industrial applications like distillers grain. This model is equipped with two pole motors for high speed rotors.

All US hammer mills are supplied with a unique mechanical power-less door interlock system, ideal for dust explosion zones, have heavy duty 1” hammer pins, and are fitted with hard faced hammers.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Hammer mill</th>
<th>Motor power</th>
<th>Rotor rpm</th>
<th>Screen area</th>
<th>Filter air flow</th>
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<td>sq.in. m³/h CFM</td>
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<td>Rotor rpm</td>
<td>Screen area</td>
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**Variance are possible. Please give us the opportunity to discuss your application and design the best mill to suit your needs.**

**Hammer mill can be operated up to 2100 rpm if using a variable frequency drive and inverter duty motor.**
Grinding technique for high controllability

**DESIGN AND FUNCTION**
The hammer mills are fed radially for dual-rotational operation to achieve uniform wear and full utilization of screens and hammers. Models with tangential inlets are available for low-density products. The hammer mills have a directly coupled motor mounted on a base frame. The front doors are bottom-hinged and open on sliding rails. All operating points have electronic safety equipment. The hammer mills are supplied with a separator and a magnet above the inlet to protect the grinding chamber against damage and spark risks from foreign objects in the material flow.

**FEEDING SYSTEM FOR UNIFORM LOAD**
By feeding the material over the full length of the grinding chamber, the particle size can be controlled accurately and the hammers and screens have uniform loading, resulting in longer lifetime of wear parts and higher output per kilowatt.

The feed system, which is available as double screw and separator or as pocket feeder with integrated separator and distribution roll, can be adjusted to suit all raw material types.

**HAMMER MILL CONTROL**
The entire grinding process is controlled by an AFB-HM1 or HMCPS control unit in a cabinet with front operating panel, providing a full view of all operational functions. The efficient feeding system control optimizes product change and mill capacity utilization.
Grinding units for stand alone applications

The Optimill and Multimills are available as complete unit integrated with all necessary machines to provide a complete solution.

**FEEDING DEVICES**

- Distributor screw
- Pocket feeder
- Separator
- Screw feeder
- Air separator

**ANDRITZ GRINDING UNITS**

- Feeder
- Distributer screw
- Separator
- Hammer mill
- Collection bin
- Air lock
- Aspiration filter
- Fan
- Operating platform
- Pre bin
GLOBAL SUPPLIER – LOCAL PRESENCE

With sales, service, engineering, manufacturing and production sites located all around the world, ANDRITZ Feed and Biofuel is truly a global organization with a local presence. ANDRITZ is vital to ensuring a reliable global supply of aqua feed, animal feed, pet food, and biofuel. With full process lines accounting for half the world’s production of aqua feed and biomass alone, we continuously support leading producers in achieving the highest levels in safety, quality, and control from feedstock to final product.

How can we help grow your business?

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