

## Hammer mills

High-performance grinding



## **High-performance grinding**

## For many applications





▲ Hammer mill

# Hammer mills for many applications

The quality and know-how inherent in hammer mills are backed by over a century of experience in the feed milling and other related industries around the world. The requirements for grinding a large number of special products have led to the development of hammer mills that can be adapted to almost any application, regardless of whether coarse or fine grinding is required, e.g. raw materials for the production of animal feed, fish feed, pet food, and biomass products, such as wood flakes, straw, and other surplus materials.



The correct combination of hammer mill type, screens, hammers, speed, feeding system, and air suction through the hammer mill ensures the required grinding re-

sults 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.





## **Optimill coarse grinders**

for cattle, pig, and poultry feed



#### **Optimill coarse grinders**



▲ Optimill, type 500/700/900



#### **Optimill series**

The Optimill series consists of hammer mills for raw material grinding of normal to coarsestructured feed products, such as cattle, pig

Optimill, type 500/700/900 Screen frames are mounted inside large sliding access doors. The mill rotor is stopped during screen change.



and poultry feeds. The Optimill series has grinding chamber diameters of 1,100 mm and widths from 500 mm to 1,200 mm. The operating speed is 1,500/1,800 rpm.

## **Optimill features**

- Large screen area
- Optimum particle size range

- Coarse-grained particles
- High capacity
- Low energy consumption
- Reduced noise level
- The patented, closed rotor design can save up to 20% in energy consumption compared to traditional rotor designs
- Feed system for uniform screen load

## Low consumption – high performance

The closed, aerodynamic rotor design directs the material straight out towards the screen, where highly effective, low-energy grinding takes place.

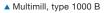
Optimill, type 1201
Four screen sections for minimization of screen costs, particle size flexibility, and ease changing.

# Multimill and 4360 fine grinders

# for aqua feed and pet food

#### Multimill and 4360 fine grinders







▲ Multimill, type 1400 C



▲ Type 4360

#### **Multimill** series

The Multimill series consists of fine-grinding hammer mills for high-capacity production of fish feed, pet food, and other fine-ground materials. The Multimill series has grinding chamber diameters of 650 mm and widths from 450 mm to 1,400 mm. The operating speed is 3,000/3,600 rpm.

#### **Multimill features**

- High-capacity particle size reduction
- Superior feed quality
- Protection of nutritive value of feed ingredients through low temperature operation
- Energy-saving, closed rotor design

lechnical data				
Hammer mill	Motor power	Rotor rpm	Screen area	Filter air
Type Multimill	kW	50/60 Hz	dm²	m³/h
650/630	75-110	3000/3600	83	4000
650/800	90-160	3000/3600	106	5000
650/1000 B	160-250	3000/3600	146	6300
650/1400 C	200-355	3000/3600	186	9000
Type Optimill				
500	160	1500/1800	143	3600
700	250	1500/1800	200	5000
900	315	1500/1800	257	6400
1201	355	1500/1800	346	8800
Type 4360				
4360	450	1500/1800	468	16500

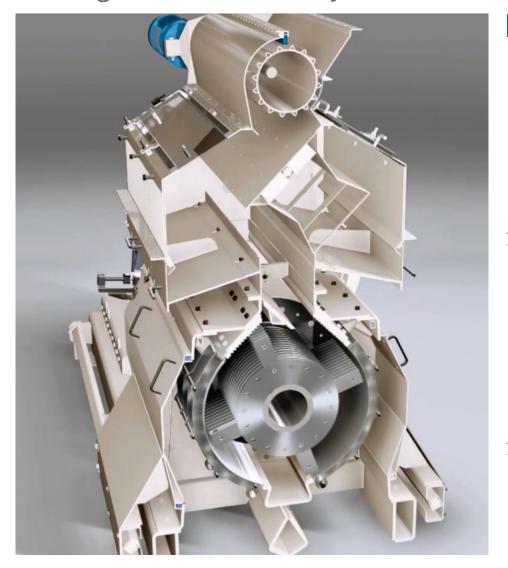
Multimill, type 1000 B Screen change through front doors.





## **Grinding technique**

## for high controllability



#### **Feeding devices**



▲ Distributor screw



▲ Pocket feeder

# % passing through 99.95 99.8 99.6 99.0 98.0 90.0 80.0 Multimill Ø0.75, 23% Multimill Ø1.25, 25% 1.0 1.0 Optimill 5.0 0.125 0.18 0.25 0.355 0.50 0.71 1.0 1.4 2.0 30.0

## **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.

## **Grinding units**

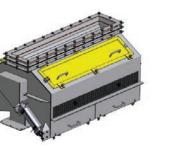
## for stand alone applications

#### **Feeding devices**



▲ Screw feeder





Separator

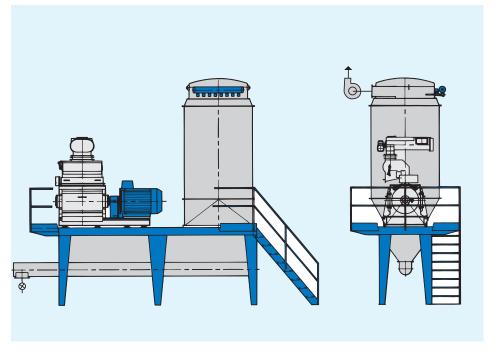
The ANDRITZ product range includes every key processing machine in the feed production line, including weighing machine, mixer, feed expander, pellet mill, extruder, dryer, cooler, coating systems, dosing device for micro-liquids, crumbler, filter, and control systems.

## **ANDRITZ** grinding units

- Feeder
- Distributer screw
- Separator
- Hammer mill
- Collection bin
- Air lock
- Aspiration filter
- Fan
- Operating platform
- Pre bin

### 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.





## Where to find us

# Global supplier - local presence

#### ANDRITZ is truly a global organization

- but also with local presence. We are represented all over the world. The global market for feed technologies is served from five main locations:
- Esbjerg, Denmark
- Sanshui, Guangdong Province, China
- Geldrop, Netherlands
- Muncy, PA, USA
- Humenné, Slovakia

In addition, we operate from several strategic regional sales, engineering, and service locations in China, Vietnam, India, Australia, Mexico, Venezuela, Brazil, Chile, France, the UK, and Germany - and are also represented locally by agents and distributors in many other markets.



#### CONTACT

#### **AUSTRALIA**

#### **ANDRITZ Feed & Biofuel** Australia Division of ANDRITZ Pty. Ltd.

Phone: +61 3 8795 9800 andritz-fb.au@andritz.com

#### RRA7II

#### **ANDRITZ Feed & Biofuel** Brasil Ltda.

Phone: +55 51 3333 0128 andritz-fb.br@andritz.com

#### **ANDRITZ Feed & Biofuel** Chile Ltd.

Phone: +56 2214 5711 andritz-fb.cl@andritz.com

#### CHINA

#### **ANDRITZ Feed & Biofuel** China

Phone: +86 21 64670285 andritz-fb.cn@andritz.com

#### **FRANCE**

## **ANDRITZ Feed & Biofuel**

Phone: +33 24 75 06 364 andritz-fb.fr@andritz.com

## Division of ANDRITZ S.A.S.

#### **GERMANY**

#### **ANDRITZ Feed & Biofuel** Germany **Division of ANDRITZ GmbH**

Phone: +49 2104 9197 0 andritz-fb.de@andritz.com

#### ANDRITZ Feed & Biofuel India Rep. Office of ANDRITZ Feed & Biofuel A/S

Phone: + 91 87544 15287 andritz-fb.india@andritz.com

#### **MEXICO**

#### **ANDRITZ Feed & Biofuel** Mexico **Division of ANDRITZ HYDRO** S.A. de C.V.

Phone: +52 229 178 3669 andritz-fb.mx@andritz.com

#### **NETHERLANDS**

#### ANDRITZ Feed & Biofuel B.V.

Phone: +31 40 2627777 andritz-fb.nl@andritz.com

#### **ANDRITZ Feed & Biofuel Ltd.**

Phone: +44 1482 825119 andritz-fb.uk@andritz.com

#### **ANDRITZ Feed & Biofuel USA**

#### **Division of ANDRITZ Inc.**

Phone: +1 570 546 1253 andritz-fb.us@andritz.com

#### VENEZI IEL A

#### **ANDRITZ Feed & Biofuel** Venezuela Rep. office of ANDRITZ Feed & Biofuel A/S

Phone: +58 241 8422515 andritz-fb.ve@andritz.com

#### **VIETNAM**

#### **ANDRITZ Feed & Biofuel** Vietnam

#### Rep. office of ANDRITZ Feed & Biofuel A/S

Phone: +84 8 6253 9434 andritz-fb.vi@andritz.com

#### **ANDRITZ Feed & Biofuel A/S**

Glentevei 5-7 6705 Esbjerg, Denmark Phone: +45 72 160 300 andritz-fb.dk@andritz.com www.andritz.com/ft

All data, information, statements, photographs, and graphic illustrations in this leaflet are without any obligation and raise no liabilities to or form part of any sales contracts of ANDRITZ AG or any affiliates for equipment and/or systems referred to herein. © ANDRITZ AG 2015. All rights reserved. No part of this copyrighted work may be reproduced, modified or distributed in any form or by any means, or stored in any database or retrieval system, without the prior written permission of ANDRITZ AG or its affiliates. Any such unauthorized use for any purpose is a violation of the relevant copyright laws. ANDRITZ AG, Stattegger Strasse 18, 8045 Graz, Austria.