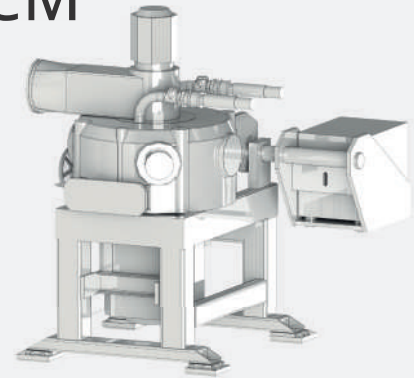


For Ultra Fine Grinding of Fish and Shrimp Feeds

IMPACT-CLASSIFIER MILL TICM

The impact-classifier mill TICM is our solution for high fineness requirements in the production of extruded fish and shrimp feed with particle sizes in the range of 98 % smaller 100-400 µm.

Size reduction takes place via a rotating disc with grinding tools and a circumferential impact plate. An integrated classifier ensures that only the fine particles can leave the grinding chamber.



Your Advantages

Efficient Grinding with Very High Fineness Requirements

- Specially designed for the requirements of ultra-fine grinding
- Optimised design for temperature-sensitive products
- Integrated air classifier to control the maximum particle size as well as for a narrow grist spectrum
- Direct drive for energy efficiency
- Grinding disc and classifier wheel driven separately, different speeds possible
- Variable grist spectrum by changing the speeds of grinding disc and classifier wheel (when using a frequency converter)

Reliable Operation and Long Service Life

- Robust welded steel construction for continuous industrial operation (24/7)

- Grinding chamber equipped with wear elements to protect the housing, easy to change

High Availability with Low Downtimes

- Split, swiveling mill housing for quick accessibility and easy maintenance
- Low-maintenance direct drive

High Safety of Personnel and Plant

- Temperature and pressure measurement before and after the mill
- Pressure shock resistant design according to PSR 11 optionally possible
- ATEX design of the electrical components optionally possible

Technical Details

Impact mill	TICM 800	TICM 1000	TICM 1300	TICM 1600
Drive mill (kW)	75	100	160	250
Drive classifier (kW)	5.5	11	15	37
Filter system				
Filter area (m ²)	70	102	158	214
Air volume (m ³ /min)	96	150	240	380
Fan drive (kW)	90	110	160	250
Grinding capacity (Reference values for typical fish feed recipes with max. 8 % fat incl. rework, deviations possible depending on the recipe)				
Fineness 98 % < 100 µm, d ₉₈ (t/h)	0.75	1.2	1.9	3
Fineness 98 % < 200 µm, d ₉₈ (t/h)	2	3.5	5	8.5
Fineness 98 % < 300 µm, d ₉₈ (t/h)	3	5	7.5	11.5
Fineness 98 % < 400 µm, d ₉₈ (t/h)	4	6	9	14.5

A Grinding

The feed material is pneumatically transported into the grinding zone. It hits the grinding disc, which is equipped with special grinding tools. The combination with special impact plates ensures an optimal particle size reduction.

B Air Intake

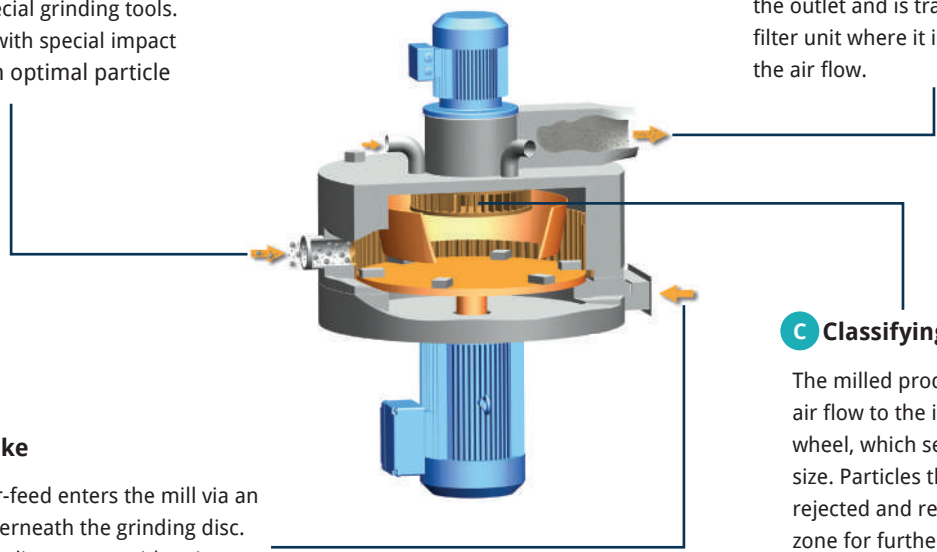
The main air-feed enters the mill via an air inlet underneath the grinding disc. The grinding disc rotates with a tip speed of 70 to 120 m/s.

D Fine Product

The fine product exits the mill through the outlet and is transported into the filter unit where it is separated from the air flow.

C Classifying

The milled product is transported via air flow to the integrated classifier wheel, which separates the particles by size. Particles that are too coarse are rejected and returned to the grinding zone for further size reduction. The fineness can be adjusted by the speed of the classifier wheel.



The Tietjen Ultra Fine Grinding System as a Complete Solution

