

Lump Breakers

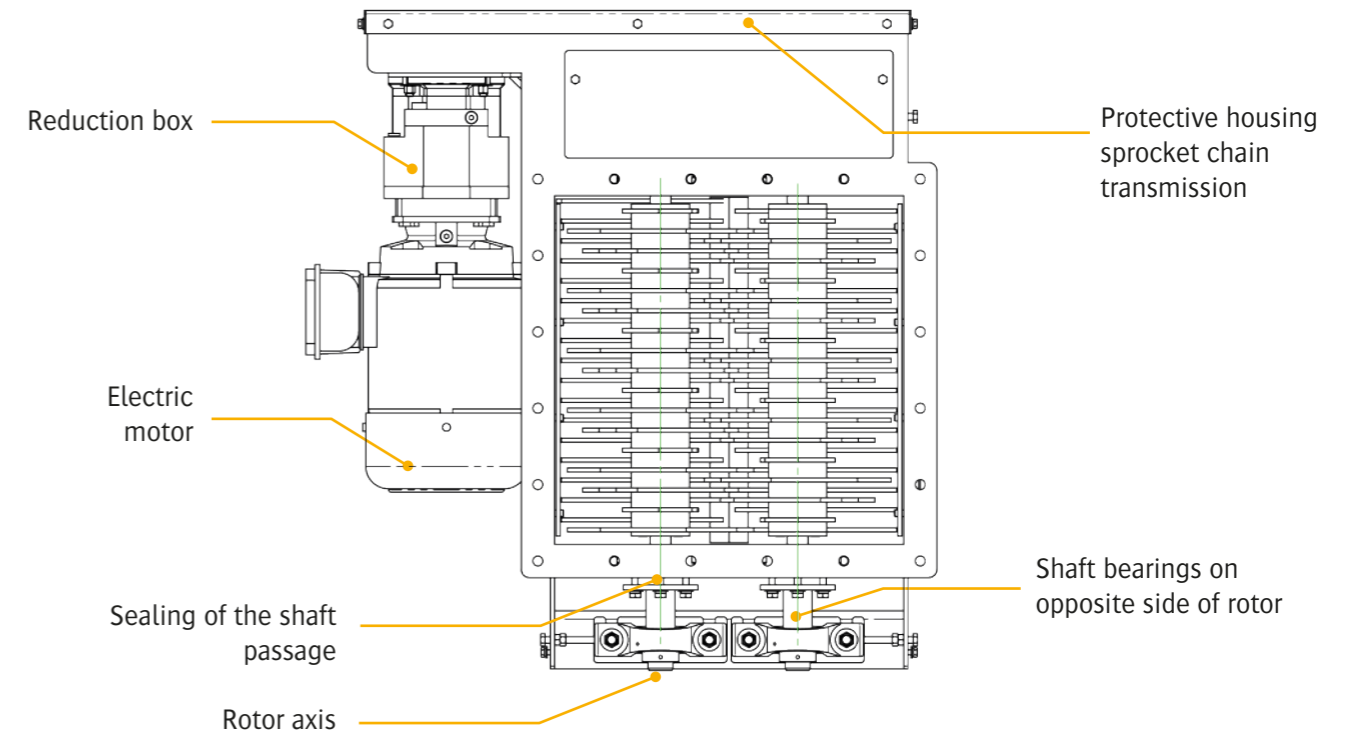
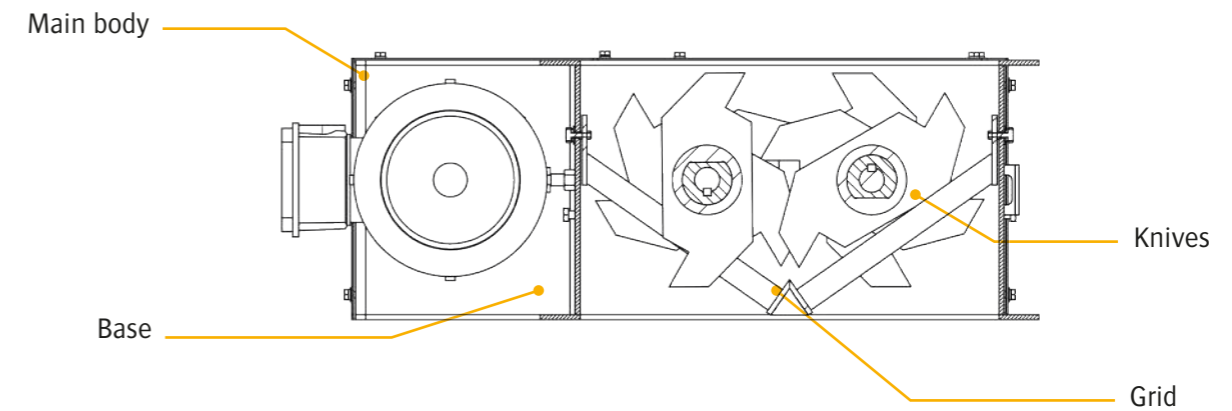
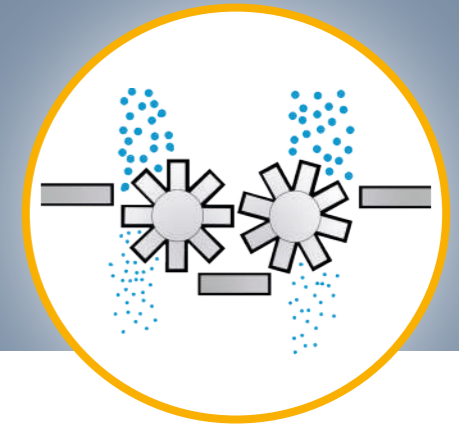


Lump breaker range
3 standard models: EC35 EC50 EC70

CRUSHING, LUMP BREAKING, GRANULATING

OPERATING SEQUENCE

The opposing rotation of the two drive shafts provides higher throughput performance rates.



Models	Rotor speed in rev./min.*	Theoretical throughput in t./hr**	Flange dimension for connection in mm	Engine power in kW	Fastening flange in mm
EC35	200	9 to 12	375 x 375	3	445 x 445
EC50	180	14 to 17.5	525 x 525	5,5	600 x 600
EC70	180	17.5 to 28.25	700 x 700	8	800 x 800

* The speed is adjustable according to the characteristics of products and ATEX properties.
** Depending on the density of the material

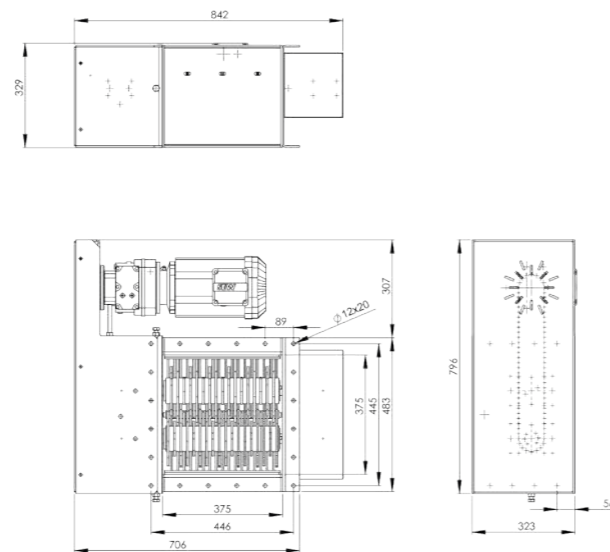
The lump breaker is the perfect solution for crushing materials that tend to form lumps. The device allows the de-agglomeration of materials that have flow issues during the product process. The rapid rotation of the grinding medium through a fixed grid breaks up lumps to promote material flow. The use of two rotors allows for higher flow rates.



3 standard models:
EC35 - EC50 - EC70

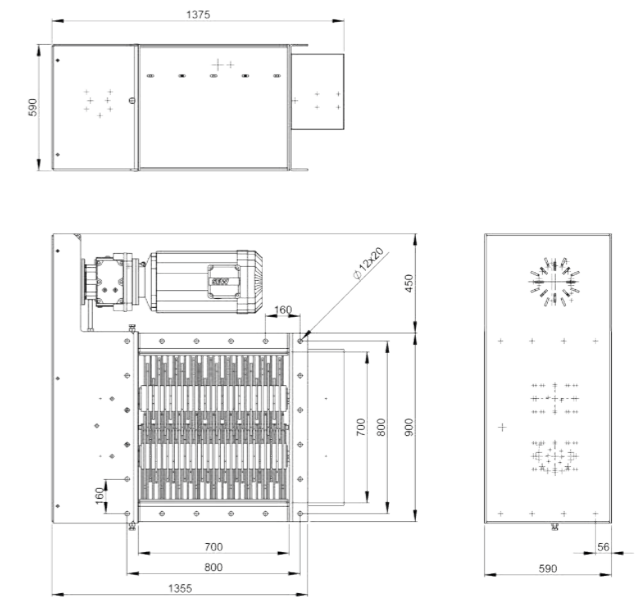
LUMP BREAKER EC35

Model	EC35
Rotor speed in rev./min.	200
Theoretical throughput in t./hr.	25 to 35
Flange dimension for connection in mm	375 x 375
Engine power in kW	3
Fastening flange in mm	445 x 445



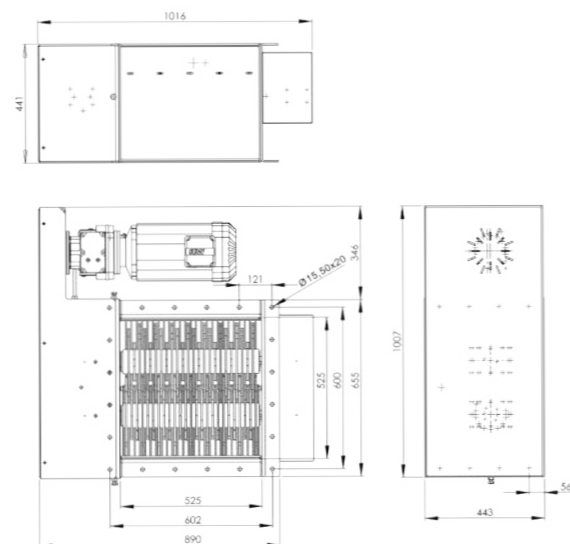
LUMP BREAKER EC70

Model	EC70
Rotor speed in rev./min.	180
Theoretical throughput in t./hr.	50 to 80
Flange dimension for connection in mm	700 x 700
Engine power in kW	5,5
Fastening flange in mm	800 x 800



LUMP BREAKER EC50

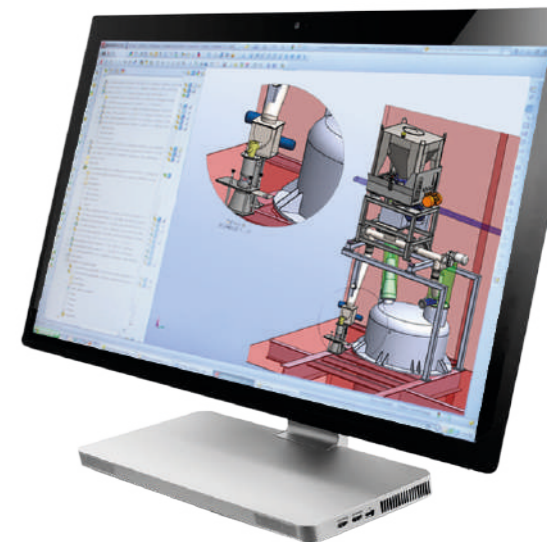
Model	EC50
Rotor speed in rev./min.	180
Theoretical throughput in t./hr.	40 to 50
Flange dimension for connection in mm	525 x 525
Engine power in kW	5,5
Fastening flange in mm	600 x 600



POSSIBLE FEATURES - CUSTOMIZED SOLUTIONS

- ATEX standards 20/21/22
- Shape of the blades depending on the material
- Modular dimensions of the material passage
- Constant or variable speed motorization
- Rotation monitor
- Chain or gear drive
- Stainless steel manufacturing

Our design office can provide you with equipment best suited to meet your production requirements.



Lump Breakers

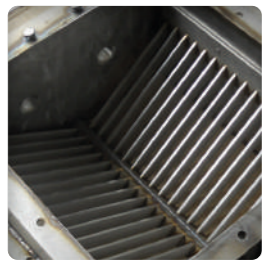
Mild steel, 304L stainless steel and 316L stainless steel manufacturing
Flow rate from 1 to 50 m³/hr.

TECHNICAL CHARACTERISTICS

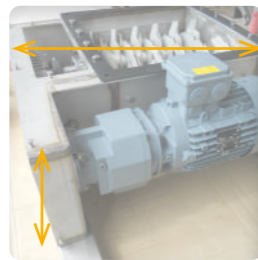
The purpose of the lump breaker is to provide smooth feeding of the production process with de-agglomerated dry materials. Material lumps go through a deflector and encounter two drive shafts with crushing medium.

The lump breaker consists of a square housing with upper and lower flanges, two horizontal shafts, a fixed grid for better lump control, four bearings with adjustable shaft seals and an a drive unit with transmission.

Advantages



Fixed grids



Small dimensions



Chain drive



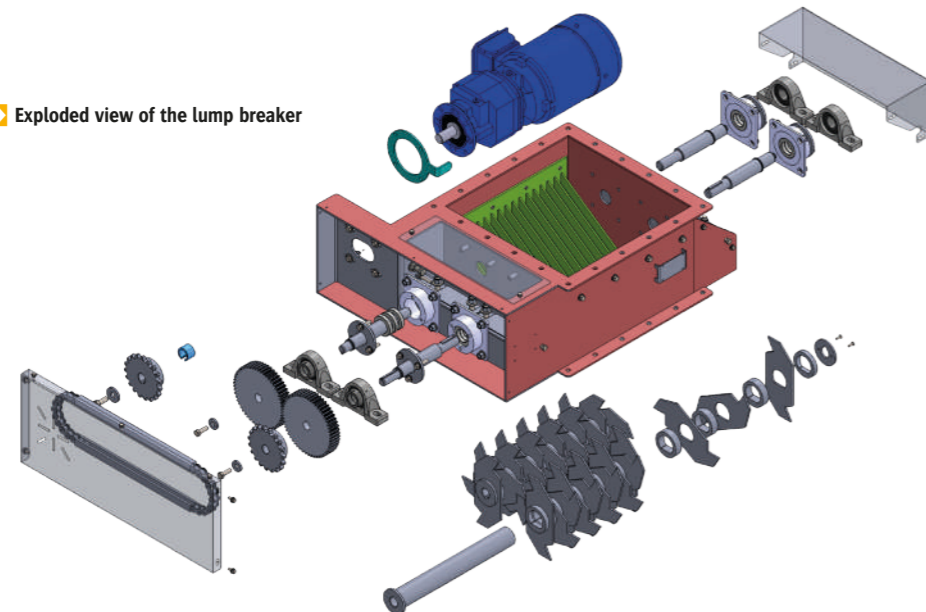
Shaft passage sealing

CONCEPTION

The lump breaker can operate in continuous feed or positioned under a hopper.

- . ATEX standards 20/21/22
- . 3 available standard sizes (25 to 80 m³/hr.) or custom manufacturing
- . Built with 2 rotors with blades for lump breaking and a mesh in order to reduce the passage space
- . Constant or variable speed motorization, chain or gear drive
- . Manufacturing: carbon steel, stainless steel 304L and 316L

Exploded view of the lump breaker

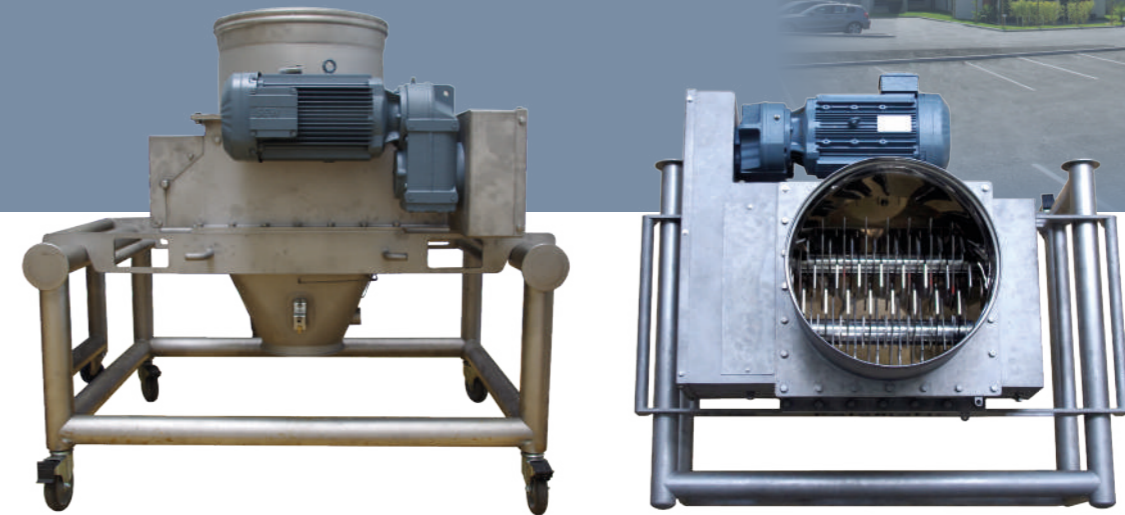


Test Plant Laboratory for powders



MATERIALS HANDLED

Boric acid, Citric acid, Clay, Glucose, Ammonium nitrate, Nitrate Barite, Sodium nitrate, Carbon black, Salt, Sugar, Magnesium Sulfate, Talc, Urea, Dairy powders, and more...



INDUSTRIAL SCALE TESTS & FLEXIBILITY

The lump breaker, available for testing, can be used as a whole unit or integrated into a big bag emptying station, a container or a bag dump station.

EXAMPLES OF TESTS

Carrots



Onions



Brown sugar



Washing powder



See our lump breaker testings in video on our YouTube channel:
www.youtube.com/user/Palamaticprocess

