

Lump Breakers



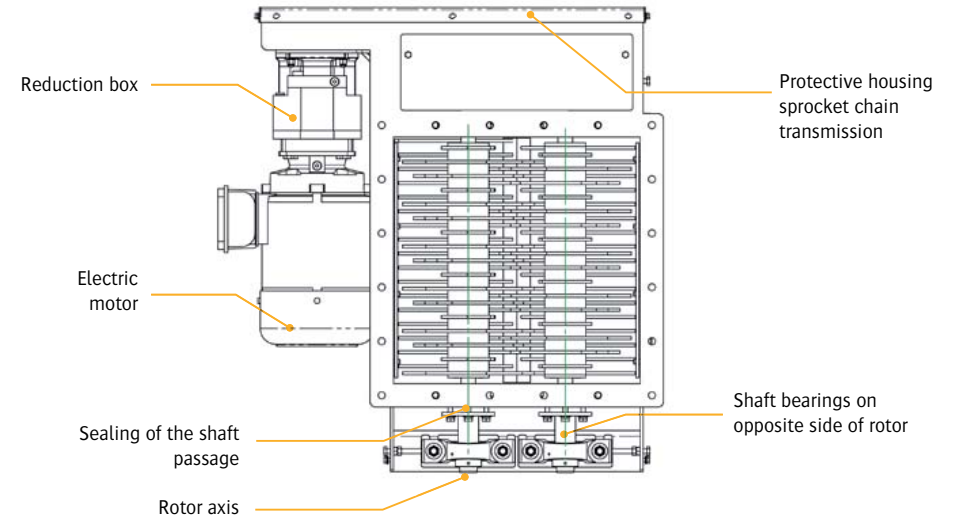
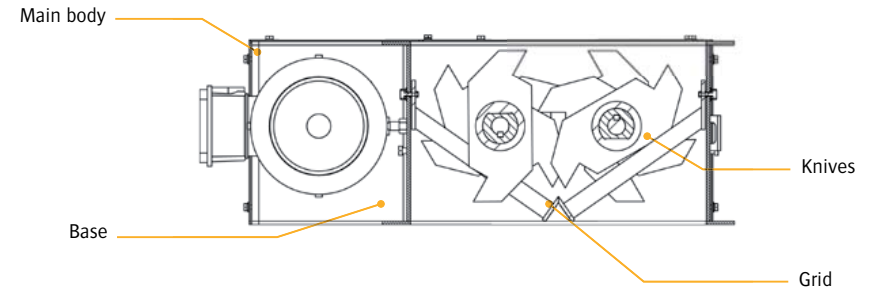
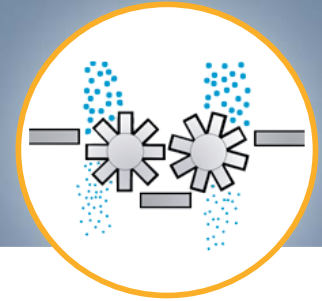
Lump breaker range

3 standard models: EC35 EC50 EC70

CRUSHING, LUMP BREAKING, GRANULATING

OPERATING SEQUENCE

The opposite rotation of the two knife shafts allows to obtain high flow 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	25 à 35	375 x 375	3	445 x 445
EC50	180	40 à 50	525 x 525	5,5	600 x 600
EC70	180	50 à 80	700 x 700	8	800 x 800

* The speed is adjustable according to the characteristics of products and ATEX properties.
 ** On density 1 product

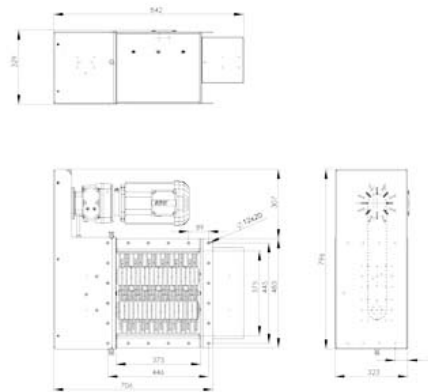
The lump breaker is the perfect solution for crushing materials that tend to form lumps. The device allows to break clods that are formed during the production process. The rapid rotation of knives through a fixed grid provokes lump crumbling. The presence of two rotors provides high flow rates.



3 standard models:
EC35 - EC50 - EC70

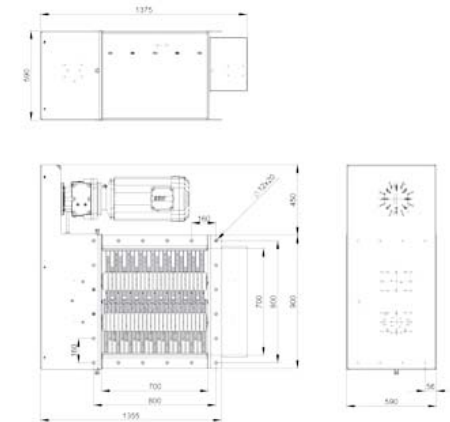
▶ LUMP BREAKER EC35

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



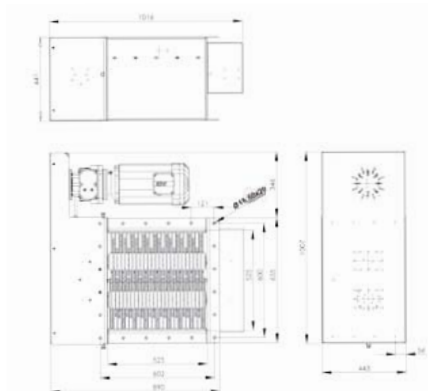
▶ LUMP BREAKER EC70

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 provides you with equipment that perfectly meets your dimensional constraints and use.



Lump Breakers

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

TECHNICAL CHARACTERISTICS

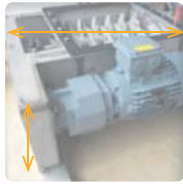
The objective of the lump breaker is to ensure feeding of the process with deagglomerated materials. Lumps must go through a deflector. The lump breaker includes two pin shafts. This model is recommended in case of friable lumps, without moisture absorption.

The lump breaker consists of a square section body with an upper and lower flange, 2 horizontal parallel shafts, a mesh for big sizes, 4 shaft bearings with adjustable shaft seal and an appropriate drive unit with transmission.

Advantages



Fixed grids



Small dimensions



Chain drive



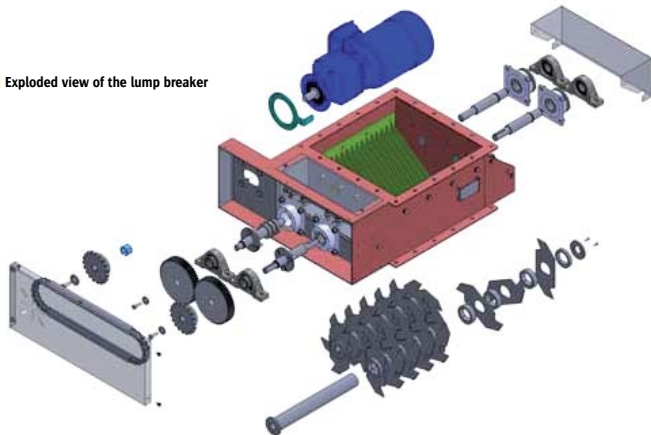
Shaft passage sealing

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

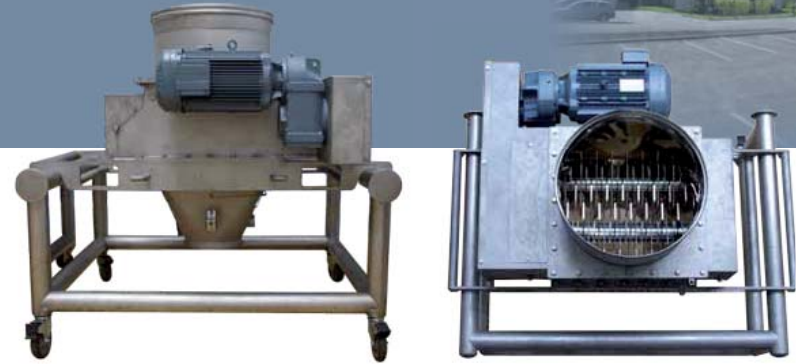


Test Plant Laboratory for powders



MATERIALS HANDLED

Boric acid, Critic acid, Clay, Glucose, Ammonium nitrate, Nitrate, Barite, Sodium nitrate, Smoke black, Salt, Sugar, Magnesium Sulfate, Talc, Urea, Sewage sludge, Milk powder...



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



Equipment
TEST CENTER
Available

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

