



Feed factories
GENERAL CATALOGUE



Presentation

Efficiency in feed production will be in the coming years one of the major challenges in the sector to meet the growing demand for animal production. This efficiency will be based on the improvement of the technological solutions made during the manufacturing process.



We implement the most efficient technological solutions in each of the processes involved in the preparation of the feed: reception of raw materials, storage, grinding, dosing, mixing, granulation, sieving, transportation and distribution.

We offer different solutions and machinery for all types of projects, from small facilities to complete “turnkey” factories.

All our products have been designed and manufactured to fit the business model that its company needs with a high operating autonomy and easy integration.

We have facilities with over 6,000 m², and we manufacture a high-quality technology product, with an agile and efficient service. We offer customised 2D and 3D designs, which offer the best service and confidence, by adapting them to the needs of our clients.



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Feed factories for feeding livestock



Complete projects

We design, plan and supply all kinds of facilities for the manufacture of feed for productions ranging from 300 Kg/hour to 80tn/hour in finished feed.

The power in the mill range from 7.5 to 300 hp. and with designs of all types (floor, tower, various sections, etc.).

Whatever the size of the facilities, it will always be manufactured to last, for this purpose we look for maximum robustness and maintenance that is simple and economic.

We carry out all types of feed factories

- Aquaculture feed
- Pet food
- Cattle feed
- Beef
- Chicken
- Sheep
- Porcine
- Multifeed
- Premixes and concentrates



Hammer mills



Cylindrical grinding chamber, determined by a perforated plate sheet or sieve, with multiple holes and an upper opening, through which the product to be ground is introduced, which comes from a feed tank located above the feeder.

The rotor is inside the grinding chamber, which holds the hammers that hit the grain against the sieve, transforming it into flour or feed.

The mill is provided with a partial shutter that determines a quench inlet that, due to the Ventury effect, facilitates both the product inlet and that said intake is performed in favour of the rotation of the hammers.

The screen is mounted by simply supporting its edges on circular guides in the lids, which close their ends with the grinding chamber, fixing said sieve through fastening devices.

Floating rotor on ball bearings and SAMIFLEX elastic coupling.

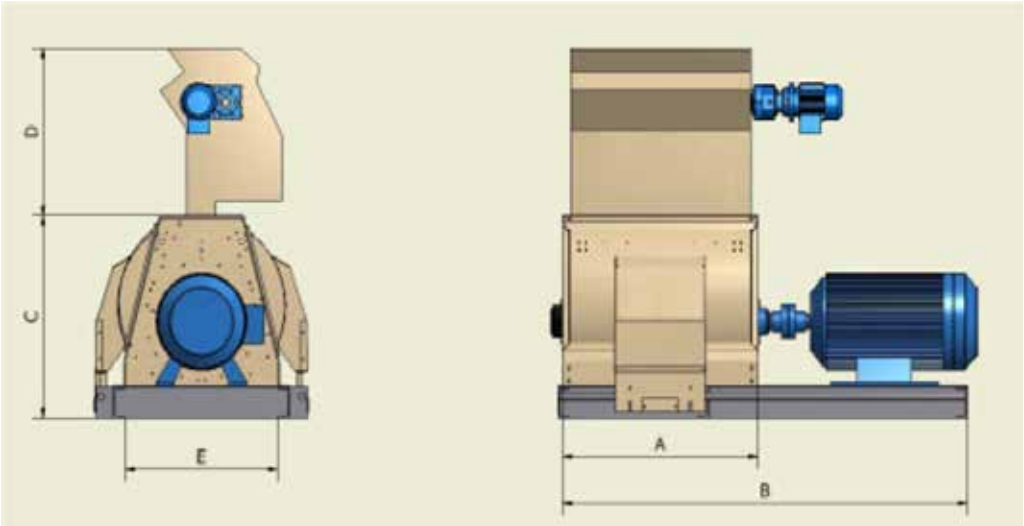
Electric motor equipped with thermal probes that disconnect it in case of temperature rise.

95 dB and 70 dB noise level at the foot of the machine in the control booth (measurements made in an AR-6/100 hp grinder with a RION NL-18 noise level calibrated according to Directive 89/336 / EEC. SMC, UNIVER Pneumatic operation.



Hammer mill models

| Model | cv / kw | r.p.m. | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Weight |
|-----------|---------|--------|--------|--------|--------|--------|--------|--------|
| AR - 2 | 20/15 | 3.000 | 250 | 1135 | 1040 | 862 | 978 | 425 |
| AR - 3 | 30/22 | 3.000 | 350 | 1235 | 1040 | 862 | 978 | 590 |
| AR - 4 | 40/30 | 3.000 | 465 | 1455 | 1040 | 862 | 978 | 790 |
| AR - 5/P | 50/37 | 3.000 | 705 | 1865 | 1040 | 862 | 978 | 1150 |
| AR - 5/G | 75/55 | 3.000 | 705 | 1865 | 1040 | 862 | 978 | 1180 |
| AR - 6/P | 100/75 | 3.000 | 1010 | 2170 | 1040 | 862 | 978 | 1750 |
| AR - 6/G | 150/110 | 3.000 | 1010 | 2170 | 1040 | 862 | 978 | 1750 |
| AR - 7 | 220 | 3.000 | 1200 | 2370 | 1040 | 862 | 978 | 2025 |
| AP/BV - 6 | 150/110 | 1.500 | 1000 | 2364 | 1504 | 1012 | 1804 | 2120 |
| AP/BV - 7 | 180/132 | 1.500 | 1000 | 2364 | 1504 | 1012 | 1804 | 2180 |



Mixers



Circular trough-track made of 4 mm steel plate sheet. electro-welded, with large filling and emptying gates and straight section for application of injectors for the incorporation of liquids.

The steel shaft dimensioned according to UN/EN/ISO standards, supported on bearings at its ends where press sets are applied for total leak-tightness.

In the MZ model, the mixture is made by two countercurrent coils of robust construction, whereas in the MZP model the mixture is with 8 adjustable metal blades oriented at 120° , in which the time taken for the mixture is about half that of the MZ model. In both cases, the mixture is homogeneous at the given time.

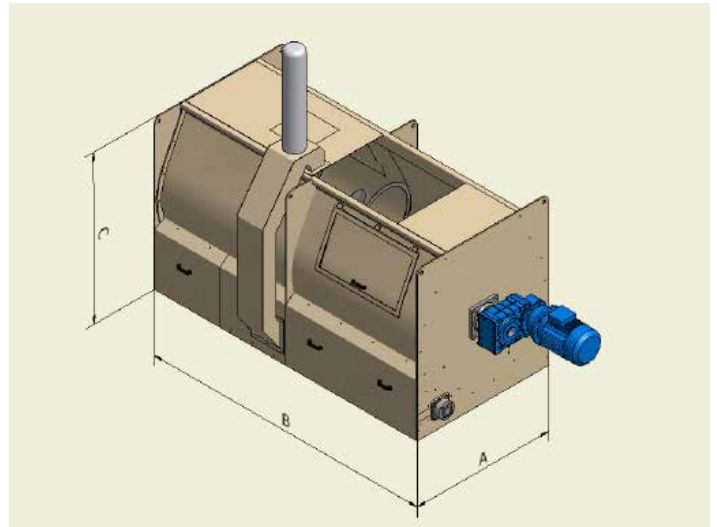
The frontal part of the machine is detachable and made of 10 mm thick steel plate.

Quick-fill and longitudinal drainage dampers with full opening or through skimmers totally sealed to the dust outlet.



Safety mechanism that prevents access to the interior of the trough-track while the motor continues to rotate even if the interior is inaccessible in a normal assembly.

Working speed of 25 rpm transmitted by a geared motor to the shaft, which requires minimum maintenance and provides long life to its parts. Noise level at the foot of 45dB machine (measurements taken in a mixer MZ-2000/C/12.5 hp with RION NL-18 Sound Level meter calibrated according to Directive 89/336 / EEC.



Mixer models

| Model | Engine HP | Load (l.) ² | Load (kg) ³ | A (mm) ⁴ | B (mm) ⁴ | C (mm) ⁴ |
|----------------|--------------|------------------------|------------------------|---------------------|---------------------|---------------------|
| MZ - 100 | 1 | 100 | 100 ⁽¹⁾ | 600 | 800 | 660 |
| MZ - 200 | 2 | 200 | 200 ⁽¹⁾ | 600 | 1400 | 660 |
| MZ/MZP - 500 | 1/3/5.5 | 500 | 250 | 850 | 1150 | 950 |
| MZ/MZP - 1000 | 5.5/7.5/12.5 | 1000 | 500 | 850 | 2500 | 950 |
| MZ/MZP - 2000 | 12.5/20/20 | 2000 | 1000 | 1080 | 3000 | 1190 |
| MZ/MZP - 3000 | 20/30/30 | 3000 | 1500 | 1375 | 3000 | 1450 |
| MZ/MZP - 4000 | 25/50/40 | 4000 | 2000 | 1475 | 3000 | 1550 |
| MZ/MZP - 6000 | 40/60/60 | 6000 | 3000 | 1650 | 3500 | 1850 |
| MZ/MZP - 8000 | 60/75/75 | 8000 | 4000 | 1900 | 3500 | 2100 |
| MZ/MZP - 10000 | 75/100/100 | 10000 | 5000 | 2100 | 3500 | 2300 |

(1) Exclusive version for correctors

(2) Feed mixture motor power, for correctors and blades in both versions (in this order)

(3) In the corrector version, the load in kg depends on the density (approximately double)

(4) Dimension in millimeters

| Mixing time | |
|-----------------------------|----------------------------------|
| Model MZ with double spiral | Model MZP with adjustable blades |
| 4 minutes | 2,5 minutes |

Cells



Constructed in special folded “ZIG-ZAG” plate at 60° of inclination.

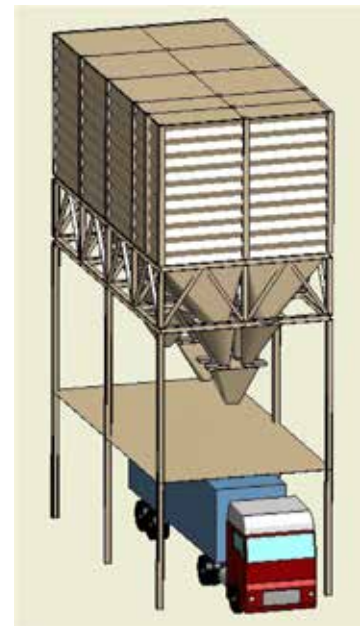
Provided with cones and counter-cones.

Pillars in the proper profile of hot rolled steel grade A-42b, calculated to support weights, vertical forces, wind, snow and seismic moments depending on the location.

Provided with support plates at the top of the pillar, gussets, etc.

3/5 mm thick normalized treadplate sheet roof.

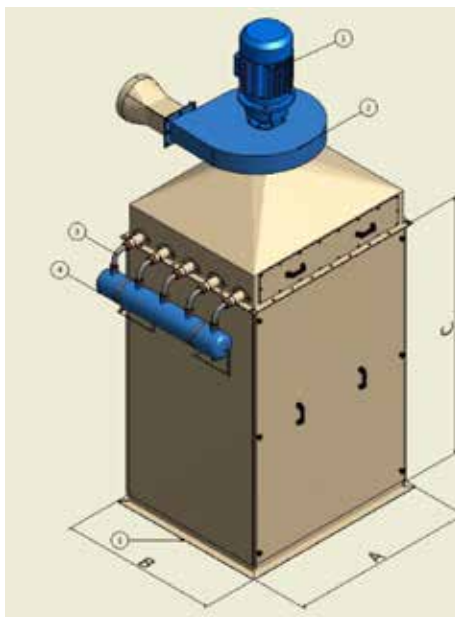
Inspection gate manhole.



Filters

Continuous-flow sleeve filter with sequential automatic cleaning by direct injection of compressed air, composed of:

- Sleeves with their support cages and Venturi.
- Aspirator diffuser inlet.
- Electro-aspirator with an electric motor.
- 24 v. Solenoid valves
- Support chassis.
- Electronic trip sequencer



1. Flange motor
2. Aspirator
3. Solenoid valves (2, 3 and 5 units)
4. Boiler

| Model | N° sleeves | Area | A (mm) | B (mm) | C (mm) |
|---------|------------|------|--------|--------|--------|
| F - 8 | 8 | 2,8 | 860 | 520 | 1000 |
| F - 15 | 15 | 10,8 | 1070 | 725 | 2000 |
| F - 25 | 25 | 18 | 1070 | 1070 | 2000 |
| F - 25C | 25 | 18 | 1370 | 1865 | 2000 |
| F - 30 | 30 | 22 | 1280 | 1070 | 2000 |
| F - 45 | 45 | 33 | 1925 | 1070 | 2000 |

Dosing



Dosing of additives or micros is made through hoppers, whose capacity depends on the dose volume.

They can be of round or square construction, with different degrees of inclination in the cone.

They are manufactured in standard steel plate or stainless steel plate. And they can be supported in the structure of the factory or have its own platform and structure.

Dosing is also realised with BIG-BAG sacks, in this case, the supports are placed to hang the bag.



The most used system of hopper loading and BIG-BAG is the Hoist, or Air-Crane.

In some cases, the load is carried out by other methods, such as Elevators, distributors or even manually.



Distributors



With an inclination of 45-60°, constructed in 3 mm steel plate. The top part, in 4 mm plate. The cone in the lower diverter and in 6 mm. The inner rotary duct. Powered by gear motor of 0.25 HP. with brake, which ensures a perfect positioning of the inner duct in the desired throat.

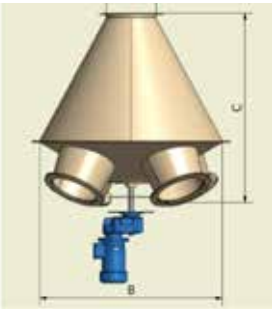
Motorized operation

Manual control

Product to deliver:

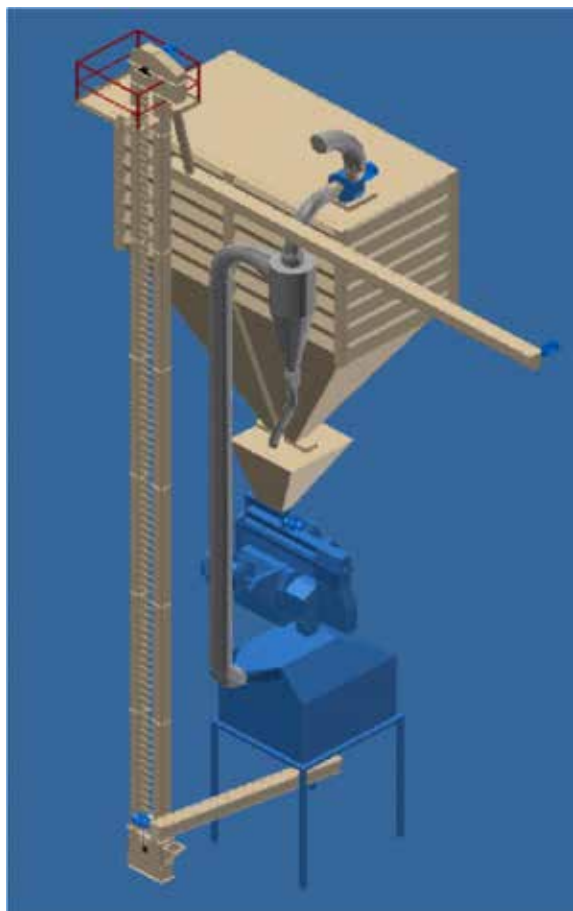
- Cereals
- Flour
- Granules
- Micro-components

| Model | N° outlets | Gearmotor | A (mm) | B (mm) | C (mm) |
|---------|------------|------------|---------|--------|--------|
| DR - 4 | 4 | 0,18 kw | 200/300 | 660 | 590 |
| DR - 6 | 6 | 0,18 kw | 200/300 | 840 | 770 |
| DR - 8 | 8 | 0,18 kw | 200/300 | 1140 | 1050 |
| DR - 10 | 10 | 0,18 kw | 200/300 | 1150 | 1160 |
| DR -12 | 12 | 0,18 kw | 200/300 | 1400 | 1470 |
| DR- 16 | 16 | 0,18 kw | 200/300 | 1800 | 1820 |
| DR - 32 | 32 | 2 - 1,1 kw | 300 | 2830 | 2680 |



1. Inlet throat
2. Gearmotor
3. Outlet throat

Pelleting equipment



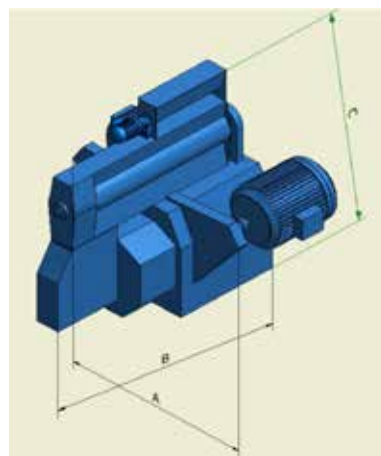
Complete installation of Granulation Lines, with presses, coolers, cyclones, steam boilers, re-greasing, shredding, and adding press liquids.

Shredder with long life casting rollers. Pneumatic handling of the bypass cap.

Fully automatic control of the granulation process.

Feeder and Conditioner (Possibility of double conditioner).

Countercurrent Cooler with 3 sensors: maximum, minimum and overload.



| Model | Power (kw) | A (mm) | B (mm) | C (mm) | T/H | Cooler |
|-----------|------------|--------|--------|--------|-----|--------|
| MGN - 350 | 2X30 | 1710 | 2100 | 1730 | 2,5 | MGCC05 |
| MGN - 420 | 2X55 | 2150 | 2600 | 2150 | 5 | MGCC10 |
| MGN - 520 | 2X75 | 2150 | 2600 | 2150 | 11 | MGCC15 |
| MGN - 650 | 2X110 | 2380 | 3030 | 2530 | 20 | MGCC20 |
| MGN - 800 | 2X160 | 2540 | 3100 | 3025 | 38 | MGCC25 |

Transport machinery

Paddles conveyor

| Model | Perf. ratings | A (mm) | B (mm) | C (mm) |
|----------|---------------|--------|--------|--------|
| TP - 125 | 15-25T/h | 500 | 415 | 130 |
| TP - 250 | 30-50 T/h | 500 | 415 | 250 |
| TP - 320 | 50-75 T/h | 500 | 415 | 320 |



Chain conveyor

| Model | Perf. ratings | A (mm) | B (mm) | C (mm) |
|----------|---------------|--------|--------|--------|
| TC - 220 | 35 T/h | 800 | 347 | 220 |
| TC - 270 | 50 T/h | 800 | 398 | 270 |
| TC - 320 | 100 T/h | 960 | 557 | 320 |
| TC - 420 | 140 T/h | 1100 | 750 | 420 |



Bucket elevators



| Model | Perf. ratings | A (mm) | B (mm) | C (mm) |
|----------|---------------|--------|--------|--------|
| EC - 130 | 20 T/h | 800 | 950 | 200 |
| EC - 160 | 35 T/h | 750 | 975 | 313 |
| EC - 200 | 50 T/h | 860 | 975 | 353 |
| EC - 300 | 100 T/h | 1080 | 1350 | 435 |
| EC - 400 | 140 T/h | 1230 | 1400 | 540 |

Screw Conveyors

| Model | Perf. ratings |
|----------|---------------|
| TR - 220 | 20 T/h |
| TR - 270 | 35 T/h |
| TR - 320 | 50 T/h |
| TR - 420 | 100 T/h |





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