

# AUTOMATED FEED PRODUCTION PLANTS WITH REPEATING CYCLES



CONTROLLED BY COMPUTER OR PLC

## VERSION WITH GRAVITY-FED GRINDING MILL

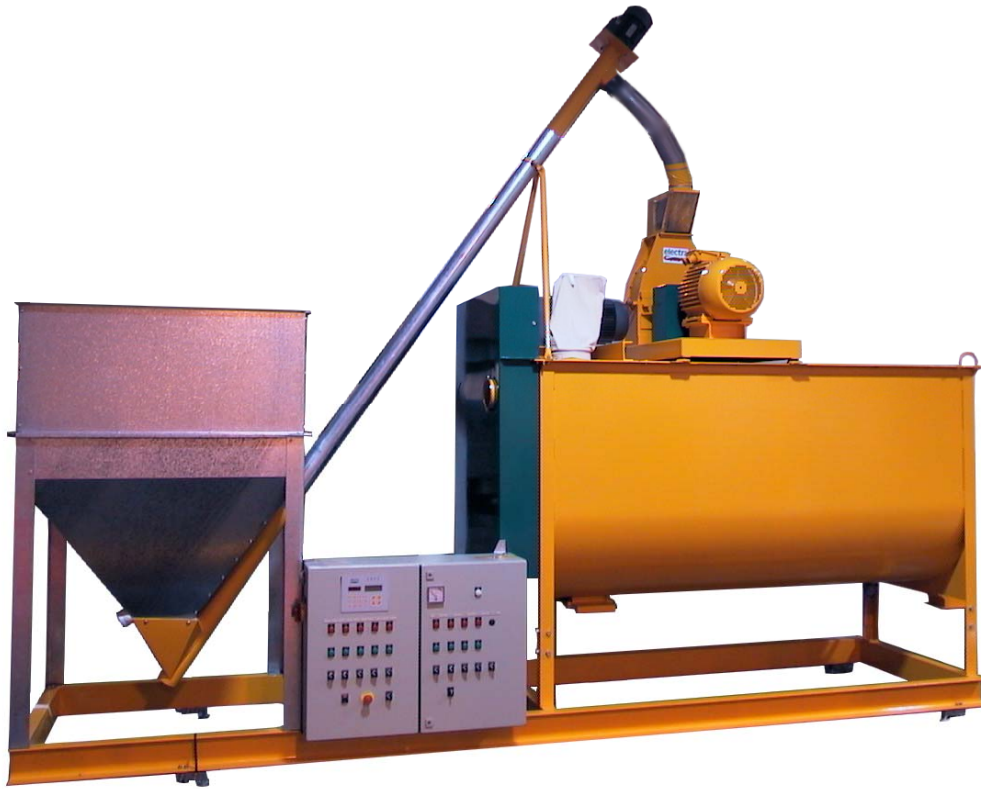
<b>FEED SILO</b>	Galvanised silo, capacity 800 litres Grinding mill automatically stopped by timed electronic level detector mounted on the silo
<b>GRINDING MILL FEED AUGER</b>	Lifting auger with 0.75kW (1 HP) direct drive motor-gearbox unit in the head Controlled by speed controller for automatic regulation of the flow rate slaved to the current consumed by the grinding mill
<b>GRINDING MILL WITH HAMMERS</b>	F6 "N" 15 kW (20 HP) Grinding mill Interchangeable wear plates, 2000 to 4500 rpm Transmission by pulleys and V-belts under housing 24 mobile hammers, inlet box with magnetic shielding 2 grids Ø6 and Ø8 with chain tensioning system.  Options: 22kw (30 HP) motorisation to replace the 15 kW Electronic speed controller
<b>HORIZONTAL BLENDER</b>	Air decompression bag, Sliding discharge valve located under the tank with electric actuator <ul style="list-style-type: none"> <li>MH 1000 Mixer: 1000 litres, 3 kW (4 HP) motor-gearbox unit</li> </ul> <b>or</b> <ul style="list-style-type: none"> <li>MH 3000 Mixer: 2200 litres, 7.5 kW (10 HP) motor-gearbox unit</li> </ul>
<b>WEIGHING FRAME</b>	Supports the whole plant: silo, auger grinding mill and mixer
<b>ELECTRONIC WEIGHING</b>	Version III/4, 4 sensors, Storage of 8 formulas for 5 products Execution of repeating cycles (max 99) of weighing, milling, mixing and discharging. Milling can be programmed during weighing Additives (oil, probiotics, etc.) can be weighed during mixing Delayed starting of weighing by built-in clock. Sequence for uniform filling of the mixer Tare, reset, programming of various items of data: flight weight, time delay, etc.
<b>CONTROL PANELS</b>	1 Grinding mill, mixing box: automatic y-delta starter for the grinding mill, contactor and thermal cut-outs for grinding mill, mixer and grinding mill feed auger. 1 Handling box: contactors and thermal cut-outs for 5 product augers, 1 discharge auger and actuator under the mixer 1 5/8 PLC box with auto-manual buttons



## GENERAL PRINCIPLE

Intended for all types of livestock breeder (pigs, poultry, ducks, cattle, etc.) these production plants produce quality feeds making use of the cereals produced on the farm. Their features include:

- The electronic weighing of all products in bulk: cereals, soya, bran, minerals, oil, etc.
- Fully automated production: weighing, milling, mixing and discharging in repeating cycles of 0.5 or 1 tonne.
- Computer management of recipes, stocks, calculation of cost prices and traceability of manufactured feeds.
- Storage of finished feeds in bulk for mechanical or air-operated distribution.



## OPERATING PRINCIPLE

This type of unit optimises the yield of the grinding mill by using all the power for milling while reducing environmental pollution: noise, dust, vibrations. Using a frequency converter, it is possible to adjust the rotation speed (from 2000 to 4500 rpm) to vary the grain size.

Depending on the products used, the ideal combination of grid size and speed may be chosen. In this way, a flow rate of 5 t/h may be achieved depending on the formulas while limiting the quality of fines. The removal of the fan and therefore the filter bags on the mixer keep the throughput to the maximum.

These units can be coupled to a pneumatic transfer system able to feed a number of silos with end products up to 200 metres away.

As an option, with the FEEDO 2000 software package, it is also possible to program the manufacture of different formulas and transfer them to the receiving silos connected to the production plant by pipes with electro-pneumatically controlled direction switching.

The transfer is either carried out at the end of the cycle (emptying phase) or during the cycle (in background mode) by means of a buffer silo, in order to increase the throughput of the installation.

## OPTIONS

### FOR THE PLANT

#### Mineral auger:

Ø100 mm, 1.5 kW (2 HP) indirect-drive motor.  
 Leaktight connection on mixer with inlet Ø125 and translucent flexible connecting pipe  
 Conical loading hopper, capacity 150 litres  
 Protection grid, flow regulation flap with slide.  
 Supplement for stainless steel hopper to ensure flow.



#### Oil dosing system:

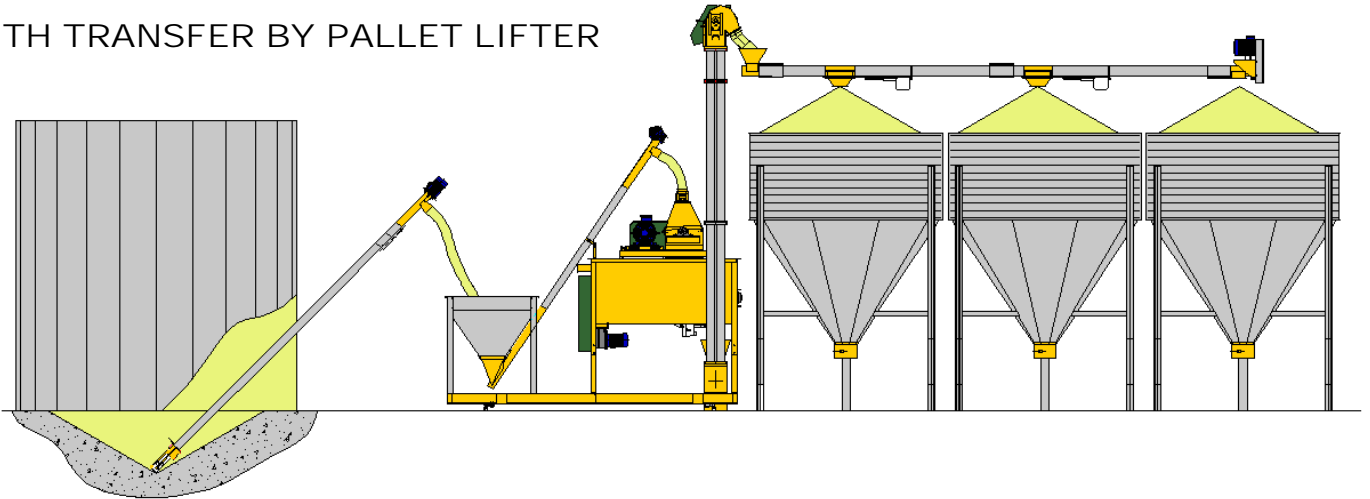
With centrifugal priming pump, 0.37 kW (0.5 HP) motor  
 PVC pressure pipes with elbow and fittings.

### FOR WEIGHING

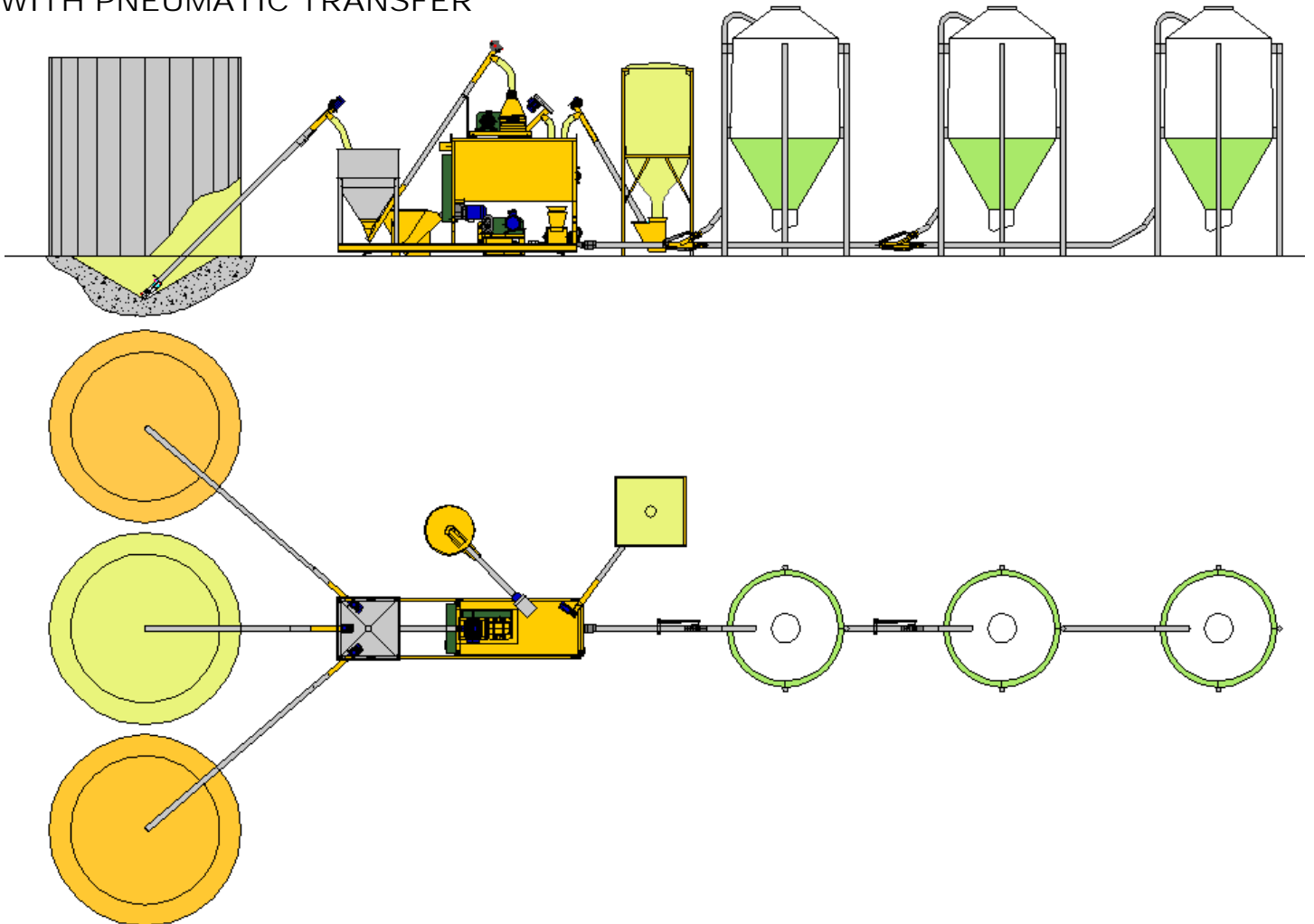
- 400 VA UPS
- Box for 4 additional products with extension card and contactors
- FEEDO 2000 production software (see documentation or demonstration CD ROM).
- Automated distribution to the silos (8 directions)
- Frequency converter for varying the speed of the grinding mill

## EXAMPLES

WITH TRANSFER BY PALLET LIFTER



WITH PNEUMATIC TRANSFER



The technical specifications may be subject to change without notice



**47170 POUDENAS - FRANCE**

Tel.: +33 (0)5 53 65 73 55

Fax: +33 (0)5 53 97 33 05

e-mail: [elevage@electra.fr](mailto:elevage@electra.fr)

Internet: [www.electra.fr](http://www.electra.fr)