



MILLING REVOLUTION



Plansifter  
**Galileo**

DATA SHEET



2-4-6-8-10 sections for each machine  
30 nominal sieves per section  
Sifting net surface: 0,31 mq. each sieve



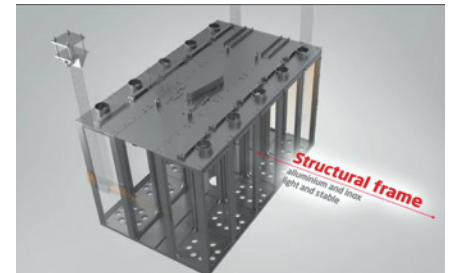
## TECHNICAL FEATURES

### Machine consisting in:

- Central supporting framework made of fabricated sheet steel, hanging by means of flexible canes, complete with drive shaft and counterweight supported by two oscillating double row spherical roller bearings;
- Two sifter section assemblies bolted to the central framework, made of extruded aluminum alloy beams: perimeter walls are insulated to avoid condensation in INOX sieve sections;
- Perfectly air-tight doors made of INOX-reinforced insulated plastic, and fixed with screws to the sieve sections;
- Aluminum sieves;
- Aluminum interchangeable sieves complete with special cleaning and expulsion pads.

### Machine completes with:

- Fiberglass hanging canes;
- Products inlet and outlet sleeves;
- Inlet and outlet boards with suspensions;
- Inox steel or plastic material joints according to the flow sheet;
- Sieve cleaning pads and products expellers.



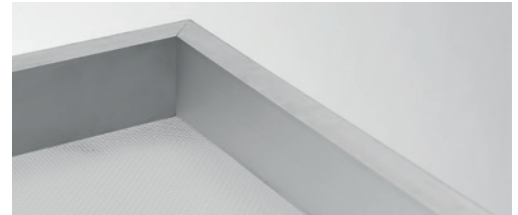
Side structures with structural frame in solid anodised aluminium profiles and double plate stainless steel panels, with a 25 mm gap filled with polyurethane foam.

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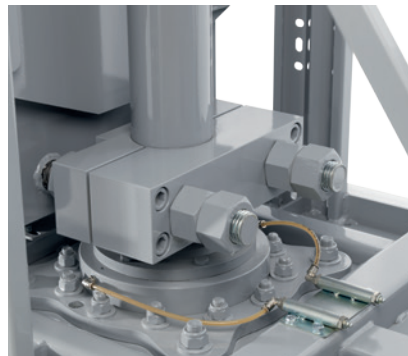


**MAIN COMPONENTS**

Patented flour frames in solid anodised aluminium and stainless steel trays, with no welding and extremely clean corners. Then the reduced encumbrance creates a larger sieving surface, with no paragon (0,339 mq each or 0,42 mq for XL size)



Reduced maintenance with centralised greasing systems, easily lubricating all rotating parts of an ample size making them really long-lasting!



Solid suspension system, balanced by glass fiber rods. A set of oversized bolts, directly threaded on the structure, ensuring reliability over the years.





## GALILEO DEW POINT FREE

Flours only come into contact with noble materials remaining unaltered organically and not contaminated by pollutants. Wall insulation drastically reduces internal condensation.

### AVOID DUE POINT

- Air temperature, relative moisture and contact surface temperature are affecting the dew point.
- At 30°C the air can hold up to 31,7 grams H2O per M3 (100%)
- Assuming that the technological air is 28°C with average of 80% moisture the dew point is 25,3°C. (Molier)
- How can this temperature be maintained when room temperature inside the mill is 12-15°C only?
- With a proper design of the sieves box insulation ...

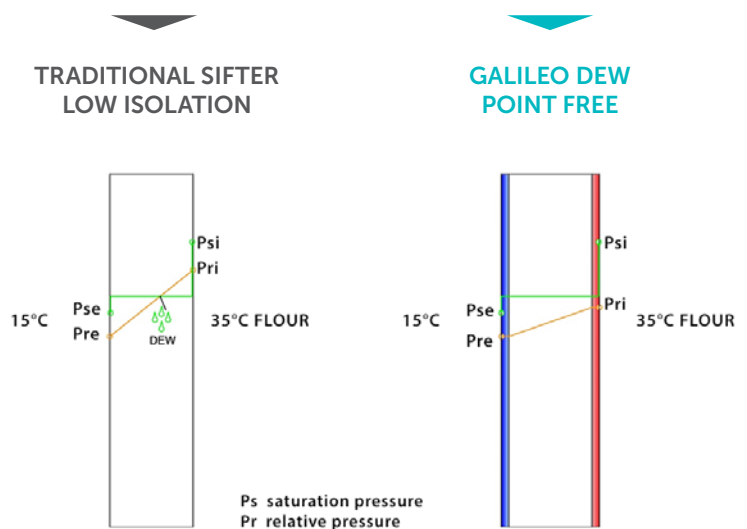


### THE RIGHT INSULATION

- Knowing that the heat generated by flour is:  $Q = Kg \text{ flour} \times C_{\text{flour}} (T_1 - T_2)$
- And that the Flour specific heat is:  $C_{\text{flour}} = 0,42 \text{ Kcal} / \text{Kg } ^\circ\text{C}$
- The thickness of insulation is obtained by:  $d = \frac{K \times S (T_1 - T_2)}{Q}$
- We come to the conclusion that in many conditions that safest thickness is 25 millimeter

### GLASER DIAGRAM

The ambient air contains a certain amount of suspended water vapour which quantity depends on the inter-related temperature and pressure conditions. To each temperature and pressure condition corresponds a maximum value of water vapour, once reached a saturation condition is obtained. The picture above shows the Glaser diagram: the left hand side shows the plansifter with non-insulated walls, while the right hand side shows the "GALILEO" technology with insulated walls. The green lines indicate the saturation pressure development; with 100% vapour saturated air, meanwhile the orange lines represent the relative pressure with less than 100% of vapour saturated air. The indexes "i" and "e" mean the inner and outer surface of the plansifter wall. Please note the difference between the saturation points for the conventional plansifter and "Galileo", which allows avoiding the problem with condensation in a very efficient way.





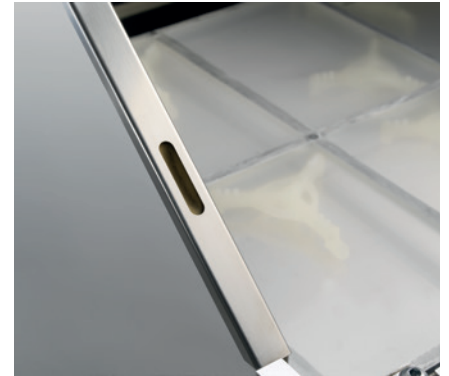
Plansifter

# Galileo



## MAIN COMPONENTS

Doors in stainless steel AISI 304 panels for the inner wall, and shiny polycarbonate for the outer one! The gap is filled with 30mm of polycarbonate foam to increase sieving chamber insulation.

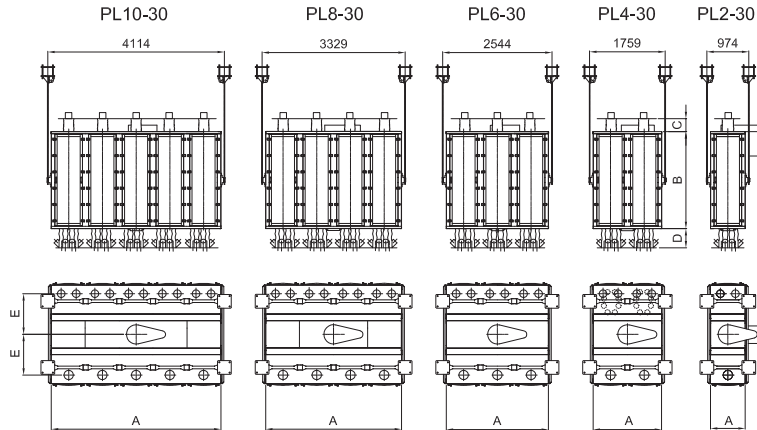


Technological innovation, compliance with health regulations, durability, are all the result of forward-looking, innovative ideas





**"GALILEO" Mod. PL**

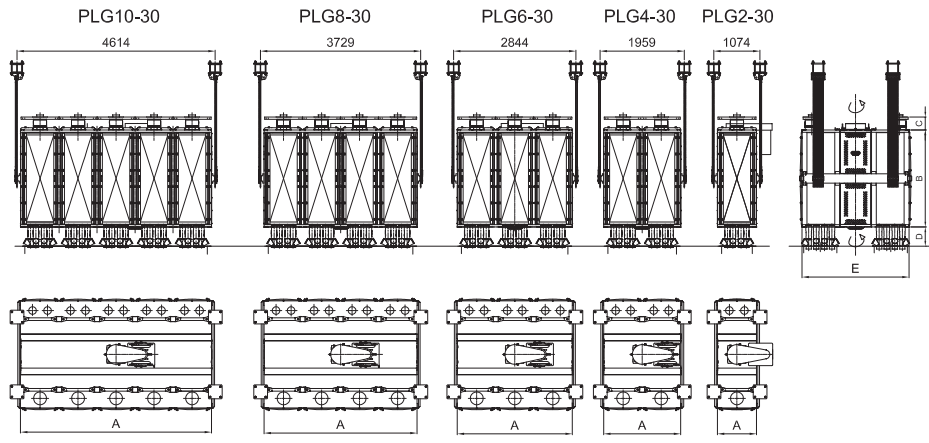


**Mod. PL**

Type	Sections	Dimensions					Power (kW)	Weight (kg)	Sea packing volume (m <sup>3</sup> )
		A	B	C	D	E			
<b>PL2-30</b>	2	803	2258	300	450	946.5	4	2250	5.4
<b>PL4-30</b>	4	1588	2258	300	450	946.5	5,5	3000	8,8
<b>PL6-30</b>	6	2373	2258	300	450	946.5	5,5	3752	13,8
<b>PL8-30</b>	8	3158	2258	300	450	946.5	7,5	4495	17,9
<b>PL10-30</b>	10	3943	2258	300	450	946.5	11	5640	22



**“GALILEO” Mod. PLG**



**Mod. PLG**

Type	Sections	Dimensions					Power (kW)	Weight (kg)	Sea packing volume (m³)
		A	B	C	D	E			
<b>PLG2-30</b>	2	903	2258	300	450	2489	5,5	2833	6
<b>PLG4-30</b>	4	1788	2258	300	450	2489	5,5	3325	10
<b>PLG6-30</b>	6	2673	2258	300	450	2489	7,5	4242	15
<b>PLG8-30</b>	8	3558	2258	300	450	2489	11	5145	20
<b>PLG10-30</b>	10	4443	2258	300	450	2489	15	6635	25

PERFORMANCE  
EVOLUTION  
IN THE ART  
OF MILLING



MILLING REVOLUTION

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