# HEC High efficiency horizontal cooler

**The HEC range of coolers is the ideal solution for all manufacturing needs in the field of rigid or plasticized PVC DRY-BLEND.** Available with **standard capacities of up to 8.500 liters**. The development and optimization of the coolers of mixing plant is the latest PLAS MEC innovation, **today it is a straightforward task to cool over 8 batches per hour of U-PVC from 120°C to 40°C**.

The new water circuit design increases cooling efficiency enabling a significant increase in the productivity of the cooler and, therefore, the mixing plant. The new cooling interspace can withstand a working **pressure of 2.5 bar**, a typical pressure of factory closed circuit chillers. This, in addition to increasing the efficiency of heat exchange, solves many critical issues typical of closed circuit chillers.

The **HEC** cooler stands out for its great and proven cooling efficiency, allowing **excellent throughput and high standards of quality**. **Material can be stored at lower temperature** because it is cooled not only superficially but also at the core and thus has no thermal inertia that will cause packing.

**Cleaning and maintenance times are reduced** to a minimum thanks to total opening of the lid, which allows easy access to all internal parts. Applicable to any type of turbomixer and can be built in special versions and/or with larger capacities to meet specific customer needs.

## FEATURES

### HORIZONTAL COOLING VESSEL

- Built entirely of stainless steel as regards the parts in contact with the material, features a double or triple jacket for circulation of cooling water.

### MIXING TOOL

- Made of stainless steel
- with axial and radial mixing effect, designed to optimize distribution of the hot material on the cooling surfaces.

### TEMPERATURE CONTROL

- By means of thermocouple located at the side on the lateral wall of the cooling vessel.

### LID

- Opens along the entire length of the cooling unit, equipped with double jacket for water circulation. Intrinsic safety opening system with lead screw type mechanic or automatic actuator.
- Safety device only allowing the lid to be opened after the mixer has stopped moving.
- Safety limit switch that shuts down the motor on opening.

| Type | Total capacity Lt. | Motor power kW | |
|---|---|---|---|
| | | Standard | Boost |
| HEC 1000 | 1000 | 7,5 | 11 |
| HEC 1500 | 1500 | 11 | 15 |
| HEC 1800 | 1800 | 18,5 | 22 |
| HEC 2500 | 2500 | 22 | 30 |
| HEC 3500 | 3500 | 30 | 37 |
| HEC 4500 | 4500 | 45 | 55 |
| HEC 5500 | 5500 | 55 | 65 |
| HEC 6500 | 6500 | 75 | 90 |
| HEC 8500 | 8500 | 75 | 90 |

NOTE: The data in the table are given merely by way of example and will have to be confirmed by PLAS MEC.

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# Accessories - Optionals

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### PLUG OR SEMI-SPHERICAL DISCHARGE OUTLET

Closure plug suited the internal shape of the vessel, to be used according to the type of production and/or formulation.

### ADDITIONAL INLETS FOR MATERIAL

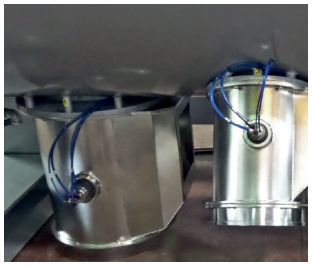
Dual batch technology, loading regrind, etc.

### SAMPLING VALVE

Allows mix quality control.

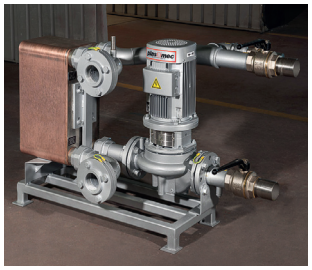
### DOUBLE DISCHARGE OUTLET

Discharge of material to a second user.



### HEAT EXCHANGER FOR COOLING WATER CIRCULATION

Keeps the water supply circuit separate from the cooler jacket, preventing material/calcium carbonate/dirt from depositing inside the jacket.

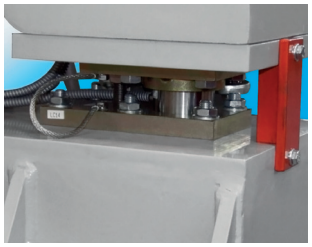


### FILTER SYSTEM

Self-cleaning filters for powder suction.

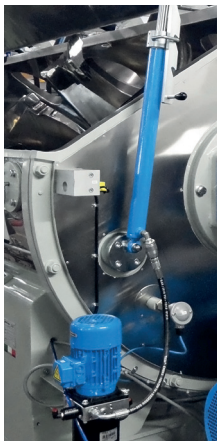
### CHOPPER

Elimination and reduction of any lumps in the mix.



### INSTALLATION ON LOAD CELLS

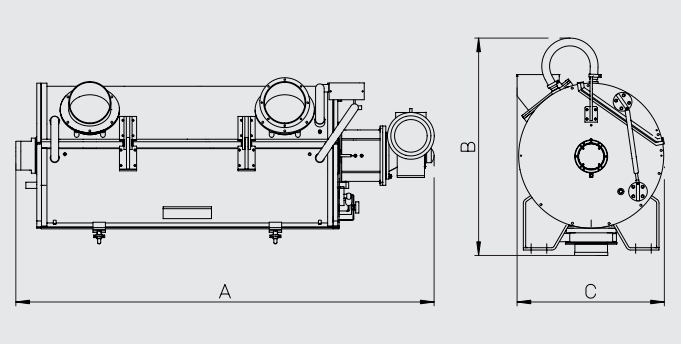
Used to determine the amount of material in the cooler.



### AUTOMATIC LID OPEN

Allows a more comfortable and safety opening of the lid and avoid physical efforts.

| Dimensions | A | B | C |
|---|---|---|---|
| HEC 1000 | 2685 | 1400 | 950 |
| HEC 1500 | 2895 | 1550 | 1100 |
| HEC 1800 | 3270 | 1650 | 1200 |
| HEC 2500 | 3480 | 2050 | 1300 |
| HEC 3500 | 3750 | 2100 | 1400 |
| HEC 4500 | 4150 | 2250 | 1625 |
| HEC 5500 | 4600 | 2250 | 1625 |
| HEC 6500 | 4800 | 2250 | 1800 |
| HEC 8500 | 6000 | 2250 | 1800 |




PVC DRY BLEND, POWDER COATINGS, MASTERBATCH AND PIGMENTS, THERMOPLASTIC RUBBERS, WOOD PLASTIC COMPOSITES AND MORE...

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100% MADE IN PLAS MEC

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