QUENCHING TANKS

DIE-CASTING QUENCHING TANKS
The quenching tanks is a device capable of cooling just moulded pieces, before being sheared or sent to processes of recovery. By taking advantage of the water circuit (tower or cooler), the system is capable to maintain an ideal temperature inside the tank, via the electronic instrument located on the control panel, in order to obtain optimal cooling of the cast for correct shearing.

This system is composed of:

- a stainless steel tank, with dimensions that can be varied according to the cast to be cooled;
- a cooling group;
- a continuous circulating pump between tank water and inside the heat exchangers;
- a remote panel capable of keeping tank temperature and level under control.

The pump, always running, fishes water from the tank and, after passing it through the exchanger, sends it back, creating a cyclone so that a homogenous temperature is reached.

The exchanger is equipped with quite large passages to prevent fast blocking both of the primary circuit (where tank water passes), and the secondary circuit (where tower water passes).

TANK
- Stainless steel AISI 304, 2mm;
- Custom sizes on demand;
- Polished edge anti-corrosion.
- Tailored palletizing;
- Building on design;
- Connection plant positioned on the side;

INTERNAL BASKET
- Stainless steel AISI 304, 2mm;
- Internal reinforcement;
- Extraction hooks with bridge crane.

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**THERMOREGULATION**

a) Circulation Electropump
b) Cooling system by indirect exchange, brazed-welded plate heat exchanger, cooling power up to 200 kW;
c) Electronical thermoregulation control device, type Pixsys ATR 142,
   double display, on remote control panel;
d) Pressure regulating valve;
e) Motorized valve for water inlet;
f) Electrovalve for cooling water inlet;
g) Pressure switch, low-pressure signal (clogged filter)
h) Suction pump filter;
i) Electronic level tank filling;
j) Metal control panel varnished.

### Standard models

<table>
<thead>
<tr>
<th>Quenching tank 800x800x800 (h) - kW 130 cooling*</th>
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<tr>
<td>Quenching tank 1000x1000x800 (h) - kW 130 cooling*</td>
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<tr>
<td>Quenching tank 1200x1200x800 (h) - kW 190 cooling**</td>
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<tr>
<td>Quenching tank 1300x1300x800 (h) - kW 190 cooling*</td>
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*Higher powers and dimensions available on demand.

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OPTIONAL

PNEUMATIC LIFT
Automatic system for the immersion and lifting of the piece inside the tank. The movement is synchronized with the cycle time of the DCM.
AUTOCLEANING FILTER
The tank can be equipped with an auto-
cleaning filter. The removal of internal
waste to the filter cartridge is performed
through blowing of compressed air,
actuated when the delivery pressure of
the pump reaches minimum values.

BELT MIST SEPARATOR
The belt mist separator is a simple
device for recovery of oily residues on
the liquid surface of the quenching
tank. The device is positioned on the
perimeter of the tank through the use of
a tilting bracket to allow the extraction
of the inner basket.
OPENABLE BASKET
To facilitate the elimination of aluminum residues present in the collection basket, this can be equipped with a mechanical system that allows the bottom opening in total safety for the operator.