



TAT series offers open circuit cooling towers, with a wide range of thermal potentials from hundreds of kW to very respectable sizes over 10 MW. All models apply a modular concept and are fully factory pre-assembled to minimize on-site installation costs. Each model can be customized with dimensions and characteristics based on project needs and in order to respect environmental constraints with reduced acoustic and energy impact. Regarding this, special executions are provided for ATEX environments ("EX" versions), for low temperature environments ("SN" versions), or for low noise emissions ("LN" version).

This series is used in all sectors in civil and industrial field (steel industry, manufacturing, oil & gas, power, chemicals, food, HVAC, programmed snow making) and it is characterized by a continuously welded structure in painted steel according to ISO 12944-5:2007 standards with SCAMBOND/HYB-C3M surface protection treatment (C4M or C5M on request) diversified anti-corrosion on internal and external surfaces, sandblasted with SA 2.5 grade with ISO 8501-1 quartz or metal grit. The main features of these open circuit evaporative towers are the following:

EXOSKELETON / MONOLITHIC ENCLOSURE (body, fan stack and collection basin).

Elements entirely made of carbon steel, structurally self-supporting, painted with epoxy-based resin.

Each diffuser can be walked on, and has a truncated pyramid shape to uniform the air crossing speeds in the lower section of the tower, improving the overall efficiency of the machines.

The tower body can be inspected thanks to the inspection hatch (one for each cell), allowing the operator an easy entry.

The collection basin, complete with all necessary connections for normal use, can be made on request in a weight-saving "self-draining" EU version in line with current European anti-legionella guidelines.

BOLTS are supplied as standard on this model in STAINLESS STEEL or even DUPLEX on request.

VENTILATION UNIT

The direct drive ventilation unit consists of:

SCAM T.P.E.



- High efficiency SCAMAIR / ST axial fan with asymmetrical "NACA" type profile of aeronautical derivation, designed for maximum efficiency and durability in compliance with the strictest acoustic standards. The components are of absolute quality such as the extruded aluminium hub to reduce vibrations to a minimum and allow the assembly of one blade at a time, for simplified and quick maintenance;
- Electric motor SCAM T.P.E. three-phase multivoltage (230/400 - 400/690) and multi-frequency (50-60 Hertz) specific for cooling towers, result of the experience gained in this sector since 1956;
- Abnormal vibration switch wired in an IP67 junction box located outside the ventilation conduct only to be plugged;
- SS304 fan protection grid.



WATER DISTRIBUTION SYSTEM

In TAT series, distribution is made by means of pipes and fittings in painted steel unified DIN or ASME with flanged connections, and composed by a main manifold with lateral branches equipped with "SCAM / NZ-RT" dynamic spray nozzles or "SCAM / NZ" static spray nozzles, both in PP.

Our SCAM / NZ-RT rotating nozzles are highly efficient, work at low pressure, and allow for significant energy and economic savings. They are anti-clogging, equipped with interchangeable internal inserts, allowing them to be adapted in the event of variations in flow rate, if you were to work with a work pattern other than the design one.



DRIFT ELIMINATORS

They are mainly used to retain water droplets dragged vertically in the flow of humid air exiting the evaporative tower. Our technology has achieved exceptional goals in separation efficiency, making available two different designs SCAM/DRF-DW180 (DW-180 line) in PP / PVC.

AIR INLET LOUVERS

They are placed in the intake air flow entering the cooling towers. They not only retain unwanted elements (such as foliage and debris), but also prevent water from splashing outside, which could cause ice formation during winter season. In addition, the windows are a barrier, limiting the sunlight entering the basin, thus hindering the growth of algae and microorganisms inside it. They are available in the SCAM / NET65 version in PP / PVC, customized in treated steel.



FILLING (OR HEAT EXCHANGE PACK)

It is placed inside the tower body, and provides the heat exchange surface necessary to guarantee the heat exchange between the flow of hot water, properly atomized by our nozzles and the flow of cold air coming from the outside going up against the process water. Depending on the quality of circulating water, and therefore depending on the suspended solids present in the cooling circuit, the filling is available in different PP / PVC materials and FILM, HYBRID and SPLASH systems.

For further information on the products, please visit the *** section of the site.

SCAM T.P.E.