ilmed IMPIANTI

40 cooling towers since 1981

Since 1981

ACCREDIA L'ENTE ITALIANO DI ACCREDITAMENTO

FROM 200 TO 1000 KW	FROM 1000 TO 4000 KW	FROM 1000 TO 4500 KW	FROM 1000 TO 5000 KW
T SERIES	GTP SERIES	NC/ST SERIES	GT SERIES

> *Corrosion free*

> *Full plastic construction*

> *Pultruded FRP frame*

FACTORY **ASSEMBLED**

WATER COOLING **TOWERS**

ILMED GTP SERIES

Film filling & Hybrid Splash
Pultruded FRP construction
Capability from 1000 to 4000 kW

> No maintenance
> Higher reliability
> Strong and simple structure
> Longlasting fiberglass reinforced polyester
> Top quality materials

FEATURES

When the water to be cooled is polluted or aggressive, when the environment is severe, when high quality of materials is expected, when corrosion resistance is a must, the **GTP water cooling towers** have to be considered.

The cooling tower structure should be designed as to remain completely efficient in case of:

- *Acid, saline and aggressive water*
- *Biocide and oxidant chemical treatments*
- *Aggressive environment*

The answer of ILMED IMPIANTI to these problems is the **GTP cooling tower**, specially designed for the industrial heavy applications.

STRUCTURE

Each module is made of a main unit which is composed by the cooling section and by one or two ventilation units, totally pre-assembled and joined through bolts. The module can be completed with the air inlet section and with the cooled water collection basin.
The reticular structure is made of strong **pultruded FRP profiles**, and the casing is composed by sandwich FRP panels.
No metal profiles are used for the structure.
The cold water basin is manufactured from high performance **fiberglass reinforced polyester**.

> DESIGN FEATURES

The GTP water cooling towers are derived from a common standard and are supplied pre-assembled, since their dimensions are compatible with transportation by road, without the need of separating the cooling body from the ventilation group.

> FAN UNITS

The ventilation is operated by induced draught, characterized by fans in drawing position.
The electric motors are equipped with all the special protections for the operation in presence of water droplets and high humidity; the fan is assembled directly on the motor shaft and the whole group is assembled on a monolithic structure which can be easily disassembled. The fans have an high efficiency wing profile. The ventilation duct is protected by a safety metal grid.

> DISTRIBUTION SYSTEM

The water to be cooled enters into the module through a single flanged connection. The nozzles are assembled through a threaded connection and their dimensions are proportional to the water flow, in order to avoid any risk of blockage.

> FILM FILLING

The filling system, which works on the “film” principle, is made of many layers of PVC or PP elements with cross-fluted or vertical ducts, in order to form a thermal exchange system characterized by a high surface - volume ratio. Depending on the working conditions, different configurations of the elements with different geometrical shapes can be supplied.
ILMED IMPIANTI has designed and developed a new FILLING package made in PVC that is very effective and with an exclusive design; the GTP water cooling towers are equipped with these new package.

> HYBRID SPLASH FILLING

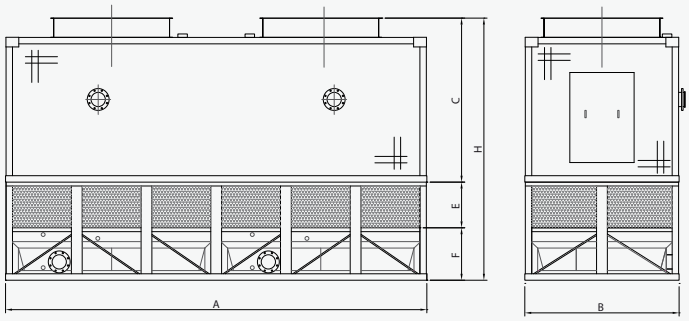
The new filling system TRUST (Tridimensional Ultimate Splash Type) consists of modular elements made of high thickness polypropylene copolymer (PP) "SPLASH" type; it is specially developed by Ilmed Impianti to be used in and to cool water in cooling towers with dirty industrial water and high levels of suspended solids. The modular characteristics of the filling system facilitate its handling and cleaning during maintenance phases, in order to prolong the functional and performance life of the component. The TRUST system is the natural evolution of the traditional grid system, setting new high levels of robustness, installation easiness, performance and durability.

> DRIFT ELIMINATORS

The drift eliminators are made of PVC/PP sheet modular elements.
The efficiency of the eliminator is very high and it limits the water leaks due to dragging to less than 0.005% of the circulating range.




> TECHNICAL DATA



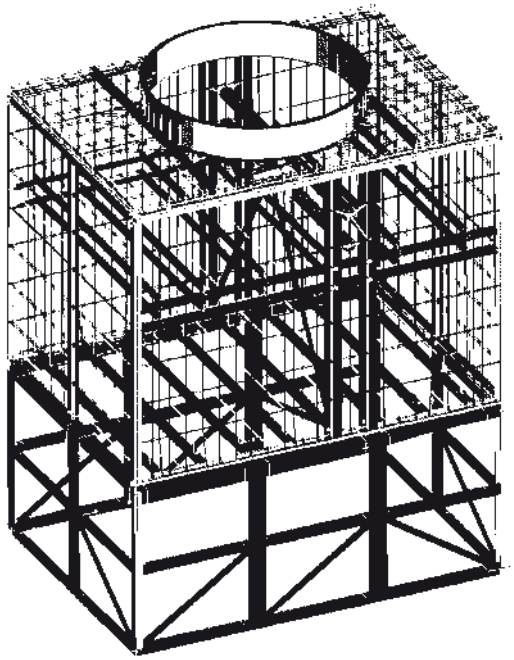
		L1/10	L1/11	N1/10	N1/11
MODULE SIZE	Lenght A (mm)	2.700	2.700	3.000	3.000
	Widht B (mm)	2.400	2.400	2.400	2.400
	Height C (mm)	2.550	2.550	2.550	2.550
AIR INLET	Height E (mm)	650	0	650	0
BASIN	Height F (mm)	550	0	650	0
COMPLETE CT	Height H (mm)	3.750	2.550	3.850	2.550
NOMINAL WATER FLOW RATE	mc/h	140	140	166	166
NOMINAL CAPABILITY	kCal/h	840.000	840.000	996.000	996.000
	kW	977	977	1.158	1.158
MOTOR	N	1	1	1	1
	kW	7,5	7,5	11	11
		P1/10	P1/11	L2/10	L2/11
MODULE SIZE	Lenght A (mm)	3.300	3.300	5.400	5.400
	Widht B (mm)	2.400	2.400	2.400	2.400
	Height C (mm)	2.550	2.550	2.550	2.550
AIR INLET	Height E (mm)	650	0	650	0
BASIN	Height F (mm)	650	0	650	0
COMPLETE CT	Height H (mm)	3.850	2.550	3.850	2.550
NOMINAL WATER FLOW RATE	mc/h	185	185	280	280
NOMINAL CAPABILITY	kCal/h	1.100.000	1.100.000	1.680.000	1.680.000
	kW	1.291	1.291	1.953	1.953
MOTOR	N	1	1	2	2
	kW	11	11	11	7,5
		N2/10	N2/11	P2/10	P2/11
MODULE SIZE	Lenght A (mm)	6.000	6.000	6.550	6.550
	Widht B (mm)	2.400	2.400	2.400	2.400
	Height C (mm)	2.550	2.550	2.550	2.550
AIR INLET	Height E (mm)	800	0	800	0
BASIN	Height F (mm)	650	0	650	0
COMPLETE CT	Height H (mm)	4.000	2.550	4.000	2.550
NOMINAL WATER FLOW RATE	mc/h	332	332	370	370
NOMINAL CAPABILITY	kCal/h	1.992.000	1.992.000	2.220.000	2.220.000
	kW	2.316	2.316	2.581	2.581
MOTOR	N	2	2	2	2
	kW	11	11	11	11

(*) Nominal performances are referred to the following conditions:

- Inlet water 35°C
- Outlet water 29°C
- Wet bulb air 24°C

> MATERIALS

The production range considers different interchangeable and compatible materials to answer every customer requirements and specifications.



COMPOSITION OF THE SUPPLY

ITEM	*STANDARD*	*OPTIONAL*		
COOLING BODY				
MAIN FRAME	PULTRURED FRP			
CASING	FRP			
FAN STACK	FRP			
FAN	LIGHT ALLOY	PP		
BOLTS	AISI 304	AISI 316		
PIPING	PP	PVC		
SPRAYING NOZZLES	PPG			
FILLING	FILMED 15 - PVC	ONDA 13 - PP	FILMED 20 - PVC	ONDA 20 - PP
DRIFT ELIMINATORS	PVC	PP		
LOWER BODY				
AIR INLET FRAME	PULTRURED FRP			
LOUVERS	PVC	PP	PULTRURED FRP	
BASIN	FRP			
BOLTS	AISI 304	AISI 316		

ILMED IMPIANTI SRL
VIALE DEI MARESCHI 15 - 10051 AVIGLIANA (TO) - ITALY
TEL +39 011.932.55.55 - FAX +39 011.936.72.89
EMAIL impianti@ilmed.it - **www.ilmedimpianti.com**
https://it.linkedin.com/company/ilmedimpianti

*Certified Company UNI EN ISO **9001:2015***
*UNI EN ISO **14001:2015***
*UNI ISO **45001:2023***

COMPANY OF **ILMED GROUP.**