



PROCESS COOLING  
SOLUTIONS

# TWEevo

Water-cooled chillers with hermetic scroll or reciprocating compressors.  
Cooling capacity 6,8 - 169 kW



## The evolution of... perfection.

Technological innovation, absolute reliability and customer satisfaction have been MTA's hallmarks in over 30 years in the industrial cooling market. The TWEevo water cooled chillers, specifically designed for use in industrial applications, are compact units equipped, as standard, with an internal storage tank and pump, offering a tried and tested solution that has received worldwide acclaim. The result of painstaking research and design, TWEevo chillers guarantee EER energy efficiency levels at the top of the category. The use of components sourced from premium manufacturers and extensive factory testing of all units make for highest reliability levels, minimising the risks of unplanned stoppages and increasing productivity levels.



Cooling, conditioning, purifying.

## Water-cooled condensing section

The use of water as the cooling fluid offers optimal EER levels and very low noise operation. The units are equipped with stainless steel plate condensers (TWEevo 015-020), coaxial condensers (TWEevo 031-161), or shell and tube condensers (TWEevo 201-602). A pressostatic water valve allows TWEevo units to function correctly even in the presence of variable cooling water temperatures.

## Easy operation and maintenance

The command and control devices, including the main switch and the microprocessor controller, are easily accessible from the unit front. Comprehensive safety equipment, including phase monitor, pressure switches, antifreeze sensors and level sensors, plus an internal hydraulic bypass circuit, ensure stable and safe operation, minimising the risk of system errors. Easily removable panels provide ready access to all refrigeration and hydraulic circuit components, facilitating maintenance operations.

## Simple and reliable evaporator

The finned coil evaporator, with copper tubes and aluminium fins, is mounted inside the tank. This configuration allows operation with high flow rates and low pressure drops, and is compatible with the presence of contaminated process fluids.

## Scroll compressors

TWEevo chillers are equipped with scroll compressors (from model TWEevo 081), ensuring high efficiency, excellent performance, and energy savings. Thanks to the reduced number of moving parts and the absence of suction and discharge valves, scroll compressors offer reduced maintenance requirements, minimum noise emissions and maximum reliability over time. All the compressors are equipped with crankcase heaters.

## Suited to all industrial needs

The generous standard offering, plus an extensive range of accessories and kits, backed up by the consolidated experience of MTA, allow each TWEevo unit to match the specific customer requirements. TWEevo chillers, expressly designed for industrial applications, are ideal for a range of differing processes including: cooling of plastic processing machinery, machine tools, welding units, and a host of other industrial requirements.

## Non-ferrous hydraulic circuit

The NON-FERROUS version, which features an all-copper evaporator and a stainless steel tank, is particularly suitable for use with water which is aggressive towards ferrous materials, or for applications that call for particularly pure water, as frequently required in the food industry.

All the models are available with a sophisticated microprocessor which can be mounted up to 150 m from the unit.



Reliable and easy to use shell and tube condensers, as fitted on TWEevo 201-602.



The standard pump has a 3 bar head pressure; a 5 bar pump or double pump are also available.



The integral yet removable high capacity water tank ensures very precise water temperature control.



Model TWEevo		015	020	031	051	081	101	121	161	201	251	301	351	402	502	602
Cooling capacity	kW	6,8	8,0	12,9	21,0	28,3	38,5	50,5	57,1	65,0	75,5	84,6	96,1	123	142	169
Total absorbed power	kW	1,9	2,4	3,5	5,5	6,3	8,0	10,8	12,2	14,7	17,5	20,6	25,3	29,4	34,5	40,6
Power supply	V/Ph/Hz	400 ± 10% / 3 - PE / 50														
Noise level	db[A]	44,0	41,1	40,2	48,6	42,6	48,2	49,8	50,5	50,1	51,3	52,9	54,5	53,8	55,3	56,6
Width	mm	560	560	660	660	760	760	760	760	866	866	866	866	1255	1255	1255
Depth	mm	1266	1266	1310	1310	1858	1858	1858	1858	2240	2240	2240	2240	3289	3289	3289
Height	mm	710	710	1265	1265	1310	1310	1310	1310	1927	1927	1927	1927	2050	2050	2050
Working weight (P3 pump)	Kg	182	183	331	345	487	654	661	685	863	937	1029	1045	1637	1657	1722
Tank volume	l	60	60	115	115	140	255	255	255	350	350	350	350	500	500	500
Evaporator water connections	In	3/4"	3/4"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"
Condenser water connections	BSP	3/4"	3/4"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"

All data refers to standard units at the following nominal conditions:

Evaporator water inlet/outlet temperature 20/15 °C, condenser water inlet/outlet temperature 35/40 °C.

Sound pressure level in free field at 10 m from the unit side and 1.6 m from ground.

Data declared according to UNI EN 14511:2011.



MTA is ISO9001 certified, a sign of its commitment to complete customer satisfaction.



MTA products comply with European safety directives, as recognised by the CE symbol.



MTA participates in the E.C.C. programme for LCP-HP. Certified products are listed on: [www.eurovent-certification.com](http://www.eurovent-certification.com)  
Eurovent Certification applied to the units:  
- Air/Water up to 600 kW  
- Water/Water up to 1500 kW



GOST Certification

## M.T.A. S.p.A.

Viale Spagna, 8 - ZI  
35020 Tribano (PD) - Italy  
Tel. +39 049 9588611  
Fax +39 049 9588612  
[info@mta-it.com](mailto:info@mta-it.com)  
[www.mta-it.com](http://www.mta-it.com)



Cooling, conditioning, purifying.