COMPRESSED AIR & GAS TREATMENT

CoolPro

Compressed air and gas aftercoolers
(air and water-cooled configurations)

Purifying your compressed air,
increasing your efficiency.

MTA®

Cooling, conditioning, purifying.

CoolPro

The Aftercooler market has gone through a profound change in recent years, with an ever increasing list of specific applications within both the air and gas fields requiring ever more sophisticated cooling solutions. MTA has fully met these elevated requirements, offering an extensive range of individual solutions to all User needs. And all this with MTA's trademark quality and technical expertise.

Robust industrial design

Only the highest quality materials are used, attentively selected and generously dimensioned to ensure years of trouble-free operation in even the harshest conditions. All models feature protective treatment and high quality painting processes. Air-cooled models include sturdy supporting legs.

Configurations for all needs

All material grades are offered, both for the air and water circuit, as are numerous configurations according to specific User requirements. Individual specifications as to operating pressures, temperatures and approvals can be catered for. Low pressure drop configurations are available.

Matching Separators

MTA Aftercoolers can be supplied either with or without matching Separators. As per the Aftercooler, so the Separator is also offered in numerous configurations and materials to cover all User needs, including models for higher pressures. High separation efficiencies are ensured, within an extremely reliable design.

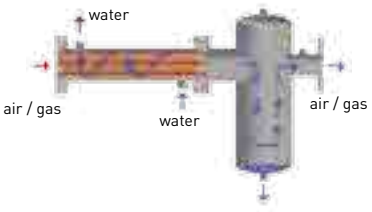
Matching Drains

MTA offers an extensive range of Condensate Drains covering all User needs. Choose between mechanical zero-loss, electronic zero-loss, timed and manual drains, all featuring high grade materials and elevated peace of mind. All drain types can also be supplied in high pressure configurations.

Cooling, conditioning, purifying.

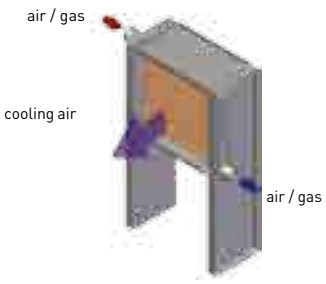
WE / WF operation

Hot compressed air/gas passes through the tubes. Cooling water passes around the tubes in counterflow, guided by baffles which increase the cooling effect. The air/gas cools and liquid condensate is formed. The condensate is efficiently removed by a Separator downstream of the Aftercooler.



AF operation

Hot compressed air/gas passes through the tubes. Ambient cooling air is forced across the tubes by the fan, with the fins increasing the cooling effect. The air/gas cools and liquid condensate is formed. The condensate is efficiently removed by a Separator downstream of the Aftercooler.



Water-cooled Aftercoolers:

Features:
- Fixed (WF) or removable (WE) tube bundle.
- Threaded and flanged models.
- Horizontal and vertical configurations available.
- Performance enhancing ribbed tubing fitted as standard (straight tubing available for low pressure drop applications).

Materials:
- Carbon steel vessel with copper tubes (standard configuration).
- Carbon steel vessel with stainless steel AISI304 or AISI316 tubes.
- Completely in stainless steel AISI304 or AISI316.
- Completely in Cupro-nickel.

Operating limits:
- Max. pressure: standardly 16 or 10 bar(g) depending on model, optionally up to 250 bar(g).
- Max. temperature: standardly 200 °C, higher on request.

Approvals:
- PED, ASME, TEMA; others on request.

Air-cooled Aftercoolers:

Features:
- Generous heat exchanger dimensioning for increased efficiency.
- Threaded and flanged models.
- Protective grilles.
- Robust casing and legs.
- Low noise lubricated fan.

Materials:
- Cooling coil with copper tubes and aluminium fins.
- Casing and legs in painted and galvanized steel.

Operating limits:
- Max. pressure: 16 or 10 bar(g) depending on model, 40 bar(g) range also available.
- Max. temperature: 200 °C.

Approvals:
- PED; others on request.

Separators:

Features:
- Near 100% separation efficiency with low pressure drops.
- Threaded and flanged models.
- Horizontal and vertical configurations available.
- Various condensate drains available.
- Thermometer supplied from 27,0 m^3/min.

Configurations:
- Centrifugal (standard configuration).
- Double or single demister (in stainless steel AISI304).
- Finned pack.

Materials:
- AS: aluminium (anodization and passivated).
- MS: - carbon steel (standard configuration).
  - stainless steel AISI304 or AISI316.

Operating limits:
- Max. pressure: standardly 16 or 10 bar(g) according to model, optionally up to 250 bar(g).
- Max. temperature: standardly 65 °C, higher on request.

Approvals:
- PED, ASME; others on request.

Cooling, conditioning, purifying.

Leading Aftercooler Technology

The Aftercooler market is changing; once strictly associated with the cooling of compressed air downstream of the Air Compressor, today the list of applications for Aftercoolers has grown significantly.

Many of these applications are very sophisticated in nature, and as a direct consequence the role of the Aftercooler itself has become ever more critical. The result is that a "standard" Aftercooler is no longer adequate to cover these elevated needs.

MTA, with over 30 years of experience in Aftercooler technology, has been a pioneer within this changing Aftercooler market. MTA is a supplier to many of the premier industries within numerous Aftercooler market sectors, working closely with its partners to satisfy their varied and individual needs.

So where does MTA Aftercooler technology excel?:

Application knowledge - Whatever your application, MTA can lead you to the optimum individual solution to your needs.

High quality design - At MTA no compromises are made when it comes to ensuring fail-safe design.

Advanced grade materials - Only the highest quality materials are utilised, both inside and out.

Precise manufacturing - Product quality is ensured thanks to MTA's manufacturing processes and expertise.

Flexibility to individual needs - As if the vast standard range were not enough, MTA is able to cater for all individual needs concerning materials used, configurations, and working limits.

Water Chillers

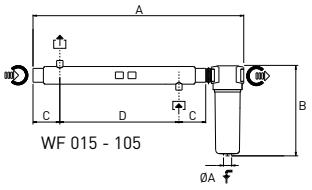
In many cases the (water-cooled) Aftercooler also requires water cooling equipment, in the form of water chillers or water coolers. MTA is a world leader in chillers specifically for industrial applications. Consequently MTA is able to select and supply chiller/ aftercooler packages according to specific customer requirements.

Aftercoolers for all your individual applications

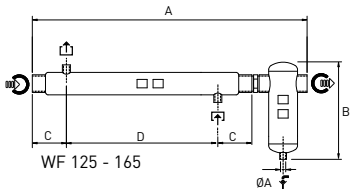
Typical technical gas applications:
- Oxygen (O2)
- Hydrogen (H)
- Nitrogen (N)
- Methane (CH4)
- CO2
- Helium (He)
- Acetilene (C2H2)
- Ethylene (C2H4)
- Argon (Ar)
- Biogas
- CO
- Ethane
- Ammoniac
- Propane
- Other gases

Examples of other Aftercooler applications:
- Air compressors
- Intercoolers
- Portable Aftercoolers
- Pneumatic transport
- Turbine cooling
- Filter pre-cooling
- Adsorption dryer pre-cooling
- Low pressure drop dryers
- Plastics (PET / PEN)
- Shipbuilding
- Railways
- Truck cooling
- Glass industry
- Other applications

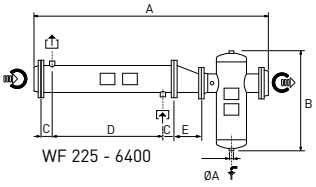
Model	Nominal airf low (*)		Matching separator	Connections				Dimensions (mm)					Weight (kg)	
	m³/min	m³/h		Air in/out no sep.	Air out with sep.	Water in/out	Cond. (ØA)	A	B	C	D	E	solo WF	WF + sep.
WF015	1.5	90	AS035	1"	1/2"	3/8"	1/2"	894	260	103	600	/	3.4	4.5
WF027	2.7	162	AS080	1 1/2"	1"	1/2"	1/2"	941	263	108	600	/	6.3	9.1
WF042	4.2	252	AS080	1 1/2"	1"	1/2"	1/2"	941	263	108	600	/	7.1	9.9
WF074	7.4	445	MS105	2"	2"	3/4"	1/2"	1.087	385	135	600	/	12	17.5
WF105	10.5	630	MS105	2"	2"	3/4"	1/2"	1.087	385	135	600	/	13	18.5
WF125	12.5	750	MS165	2 1/2"	2 1/2"	1"	1"	1.782	685	200	1.100	/	25	45
WF165	16.5	990	MS165	2 1/2"	2 1/2"	1"	1"	1.782	685	200	1.100	/	28	48
WF225	22.5	1.350	MS270	DN80	DN80	1"	1"	1.999	685	205	1.100	/	40	64
WF270	27	1.620	MS270	DN80	DN80	1"	1"	1.999	685	205	1.100	/	44	68
WF350	35	2.100	MS450	DN125	DN125	1 1/4"	1"	1.859	835	100	1.100	/	52	100
WF450	45	2.700	MS450	DN125	DN125	1 1/4"	1"	1.859	835	100	1.100	/	57	105
WF570	57	3.420	MS800	DN150	DN150	1 1/4"	1"	1.959	1.000	100	1.100	/	70	140
WF800	80	4.800	MS800	DN200	DN150	1 1/4"	1"	2.144	1.000	100	1.100	175	93	163
WF1030	103	6.180	MS1250	DN200	DN200	1 1/4"	2"	2.083	1.240	100	1.100	/	121	225
WF1250	125	7.500	MS1250	DN250	DN200	1 1/4"	2"	2.311	1.240	100	1.100	200	140	244
WF1800	180	10.800	MS1800	DN300	DN250	2"	2"	2.513	1.600	100	1.100	225	181	355
WF2500	250	15.000	MS3800	DN350	DN300	DN65	2"	2.638	1.930	125	1.050	350	252	507
WF3800	380	22.800	MS3800	DN450	DN300	DN80	2"	2.697	1.930	125	1.050	400	356	611
WF5200	520	31.200	MS6400	DN500	DN400	DN100	1"	3.039	2.420	125	1.050	530	450	880
WF6400	640	38.400	MS6400	DN600	DN400	DN100	1"	3.094	2.420	125	1.050	530	560	990



WF 015 - 105

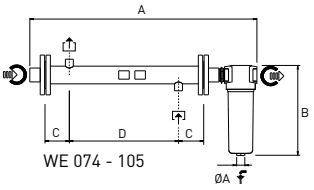


WF 125 - 165

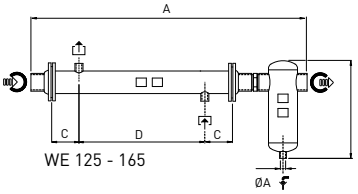


WF 225 - 6400

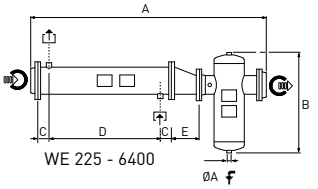
Model	Nominal air flow (*)		Matching separator	Connections				Dimensions (mm)					Weight (kg)	
	m³/min	m³/h		Air in/out no sep.	Air out with sep.	Water in/out	Cond. (ØA)	A	B	C	D	E	only WE	WE + sep.
WE074	7.4	445	MS105	2"	1 1/2"	3/4"	1/2"	1.120	385	104	520	/	29	34,5
WE105	10.5	630	MS105	2"	2"	3/4"	1/2"	1.120	385	104	520	/	30	35,5
WE125	12.5	750	MS165	2 1/2"	2 1/2"	1"	1"	1.750	685	127	1.050	/	45	65
WE165	16.5	990	MS165	2 1/2"	2 1/2"	1"	1"	1.750	685	127	1.050	/	46	66
WE225	22.5	1.350	MS270	DN80	DN80	1"	1"	1.974	685	217	1.300	/	75	99
WE270	27	1.620	MS270	DN80	DN80	1"	1"	1.974	685	217	1.300	/	76	100
WE350	35	2.100	MS450	DN125	DN125	1 1/4"	1"	1.855	835	125	1.050	/	57	105
WE450	45	2.700	MS450	DN125	DN125	1 1/4"	1"	1.855	835	125	1.050	/	61	109
WE570	57	3.420	MS800	DN150	DN150	1 1/4"	1"	1.955	1.000	125	1.050	/	75	145
WE800	80	4.800	MS800	DN200	DN150	1 1/4"	1"	2.139	1.000	125	1.050	179	96	166
WE1030	103	6.180	MS1250	DN200	DN200	1 1/4"	2"	2.079	1.240	125	1.050	/	128	232
WE1250	125	7.500	MS1250	DN250	DN200	1 1/4"	2"	2.289	1.240	118	1.050	204	146	250
WE1800	180	10.800	MS1800	DN300	DN250	2"	2"	2.180	1.600	118	1.050	229	190	364
WE2500	250	15.000	MS3800	DN350	DN300	DN65	2"	2.694	1.930	158	980	354	274	529
WE3800	380	22.800	MS3800	DN450	DN300	DN80	2"	2.747	1.930	158	980	404	399	654
WE5200	520	31.200	MS6400	DN500	DN400	DN100	1"	3.185	2.420	158	980	534	502	932
WE6400	640	38.400	MS6400	DN600	DN400	DN100	1"	3.189	2.420	158	980	534	613	1.043



WE 074 - 105

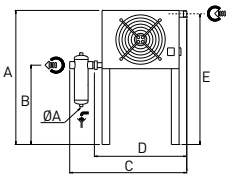


WE 125 - 165

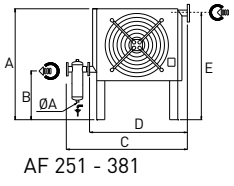


WE 225 - 6400

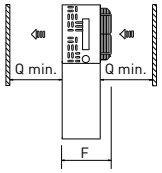
Model	Nominal air flow (*)		Matching separator	Connections			Dimensions (mm)							Weight (kg)	
	m³/min	m³/h		Air in/out only AF	Air out with sep.	cond. (ØA)	A	B	C	D	E	F	Q min.	AF only	AF + sep.
AF007	0,6	36	AS035	3/4"	1/2"	1/2"	769	510	523	435	750	325	500	16	17,1
AF013	1,2	72	AS035	3/4"	1/2"	1/2"	769	510	523	435	750	325	500	18	19,1
AF025	2,4	144	MS042	1 1/4"	1 1/4"	1/2"	870	520	766	600	842	310	700	24	27,5
AF037	3,6	216	MS042	1 1/4"	1 1/4"	1/2"	870	520	766	600	842	310	700	26	29,5
AF055	5,4	324	MS105	2"	2"	1/2"	1.120	529	1.008	770	1.083	330	1.200	39	44,5
AF086	8,5	510	MS105	2"	2"	1/2"	1.120	529	1.008	770	1.083	330	1.200	40	45,5
AF121	12,0	720	MS165	2 1/2"	2 1/2"	1"	1.570	737	1.205	900	1.525	490	1.700	86	106
AF161	16,0	960	MS165	2 1/2"	2 1/2"	1"	1.570	737	1.205	900	1.525	490	1.700	88	108
AF201	20,0	1.200	MS165	2 1/2"	2 1/2"	1"	1.570	737	1.205	900	1.525	490	1.700	90	110
AF251	27,0	1.620	MS450	DN125	DN125	1"	1.501	686	1.879	1.404	1.364	657	1.200	242	290
AF381	39,0	2.340	MS450	DN150	DN125	1"	1.806	685	2.216	1.654	1.663	704	1.200	262	310



AF 007 - 201



AF 251 - 381



- Airflow refers to the following conditions: air FAD 20 °C/1 barA, air inlet temperature 120 °C, ambient temperature 20 °C, air outlet temperature 10 °C above water (air) inlet temperature, pressure 7 bar(g).
- Maximum working pressure: 16 bar(g) (WF015-1030 / WE074-1030 / AF007-251); 10 bar(g) (WF1250-6400 / WE1250-6400 / AF 381); 40 bar(g) (AF007-086 high pressure version).
- WE / WF are supplied with a nipple (WF 015-165 / WE 074-165) or with counterflanges (WF225-6400 / WE225-6400).
- AF power supply: 230V±10%/1Ph/50 Hz (AF007-013); 400V ±10% /3Ph/50 Hz (AF025-201).
- WE / WF supplied with separator includes the connecting kit. The condensate drain must be ordered separately.
- AF supplied with separator doesn't include the matching nipple or counterflanges. The condensate drain must be ordered separately.
- WF / WE versions for vertical installation are available on request.
- All models are CE approved and conform to PED directive 97/23/CE where applicable. Other approvals available on request.

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MTA is represented in over 80 countries worldwide. For information concerning your nearest MTA representative please contact M.T.A. S.p.A.

The data contained herein is not binding. With a view to continuous improvement, MTA SpA reserves the right to make changes without prior notice.

ISO 9001 BUREAU VERITAS Certification
N° 220817

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.

EAC Declaration

MTA®

Cooling, conditioning, purifying.