

## Machine Tool Cooling System (Tool Coolers)

AIR-MTC tool coolers are used for dry machining applications - replaces polluting and often toxic mist systems to improve dry machining operations. No mess, no residue and low in cost. AIR-MTC tool coolers are made of durable stainless steel and the Vortex tubes inside of them, are also of stainless steel with brass generators. No pieces made of plastic! It can be used in high temperature environments.

AIR-MTC tool coolers can improve dry machining operations and assist in pot cooling applications for a variety of industrial machining processes by increasing machining rates and extending tool life. AIR-MTC tool coolers can often replace costly mist coolants and certainly improves the quality and output of all types of dry machining operations from metals to plastics. Unit is low cost, no electricity, with no moving parts and is essentially maintenance free.

The **tool cooler** is available in various capacities 15, 25, 30 and 40 in addition, there are two versions, a single exit point and double exit point system. Our **tool coolers** use a strong integrated magnetic base.

We recommend using the inlet air-pressure of 5 to 7 Bar

### Application

- Tool sharpening
- Grinding
- Milling
- Drilling
- Band sawing
- Plastic machining
- Routing & Chill Roll Cooling

### Working

AIR-MTC tool coolers uses a vortex tube to produce cold air at one end. Hot air is exhausted as waste at the muffled hot end. The cold air is also muffled and exits through the flexible hose, which is used to direct the air to the spot where cooling is required. A magnetic base allows for portability and easy mount of the unit to the machine.

### Using AIR-MTC

Always use clean, dry compressed air. An Air Filter is supplied with every system to insure dry air. If oil is a major problem in the compressed air line, an oil removal filter is also recommended. The temperature of the air can be controlled by reducing the pressure using either a regulator or manual shut-off valve. A solenoid valve may also be connected into the machine operation to turn the air supply to the cooling unit on-off as it is needed, thereby conserving compressed air usage.

## Model Selection

AIR-MTC tool cooling System are available with either a single point or dual point hose kit. The single point system is used for most drilling and grinding operations where point cooling is required. Milling, band sawing or other operations where the heat is generated over a larger surface area, require a dual point outlet to cover the larger area. To convert a single point system to a dual point system you can simply purchase the dual point hose kit.

According to the Cooling require, we provide different models

Model	Air Consumption	Capacity Watt (BTU/hr)	Sound level
AIR-MTC15	15 SCFM	322 (1100)	73 dB(A)
AIR-MTC25	25 SCFM	527 (1700)	73 dB(A)
AIR-MTC30	30 SCFM	615 (2100)	73 dB(A)
AIR-MTC40	40 SCFM	849 (2900)	73 dB(A)

### Machine Tool Cooler with Single point Hose



### Machine Tool Cooler with Double point Hose



### Machine Tool Cooler





## TOOL COOLING AIR-MTC25

Due to its advanced design, the tool cooling system allows us to adjust the cold air jet to a specific area. The temperature that tool coolers can produce is minus 30 degrees Celsius (-30°C). Increases efficiency and safety by having more control over temperature. The assembly of the cold gun cooling system is very simple, it diminishes heat, prolonging the life of the tool and increasing productivity in machining operations where cooling liquids cannot be used. AIR-MTC tool coolers are made of durable stainless steel and the Vortex tubes inside of them, are also of stainless steel with brass generators. No pieces made of plastic! It can be used in high temperature environments. The tool cooler is available in various capacities 15, 25, 30 and 40 in addition, there are two versions, a single exit point and double exit point system. Our tool coolers use a strong integrated magnetic base. All units are damped for quite a few operations. We recommend using the inlet air-pressure of 5 to 7 Bar. The data below belongs to the AIR-MTC25 model. AIR-MTC cold gun cooling system.



Cooling capacities [Btu/h]	1800 Btu/h
Cooling capacities [Kcal/h]	453 Kcal/h
Cooling capacities [Watts]	527 Watt
Air consumption [l/min]	708 l/min
Sound level at 5 Bar	81 dB(A)
Material	Stainless Steel
Material Generator	Brass
Made of durable stainless steel and metal parts	Yes
Dimensions	251 mm x Ø 45mm
Connection type	1/4" Male BSP
Interchangeable generator	Yes
Adjustable temperature range	Yes
Applications	Cold
Meets the OSHA directives	Yes
Meet the EU machine directives	Yes

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## TOOL COOLING AIR-MTC40

Due to its advanced design, the tool cooling system allows us to adjust the cold air jet to a specific area. The temperature that tool coolers can produce is minus 30 degrees Celsius (-30°C). Increases efficiency and safety by having more control over temperature. The assembly of the cold gun cooling system is very simple, it diminishes heat, prolonging the life of the tool and increasing productivity in machining operations where cooling liquids cannot be used. AIR-MTC tool coolers are made of durable stainless steel and the Vortex tubes inside of them, are also of stainless steel with brass generators. No pieces made of plastic! It can be used in high temperature environments. The tool cooler is available in various capacities 15, 25, 30 and 40 in addition, there are two versions, a single exit point and double exit point system. Our tool coolers use a strong integrated magnetic base. All units are damped for quite a few operations. We recommend using the inlet air-pressure of 5 to 7 Bar. The data below belongs to the AIR-MTC25 model. AIR-MTC cold gun cooling system.



Cooling capacities [Btu/h]	2900 Btu/h
Cooling capacities [Kcal/h]	730 Kcal/h
Cooling capacities [Watts]	849 Watt
Air consumption [l/min]	708 l/min
Sound level at 5 Bar	86 dB(A)
Material	Stainless Steel
Material Generator	Brass
Made of durable stainless steel and metal parts	Yes
Dimensions	251 mm x Ø 45mm
Connection type	1/4" Male BSP
Interchangeable generator	Yes
Adjustable temperature range	Yes
Applications	Cold
Meets the OSHA directives	Yes
Meet the EU machine directives	Yes

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