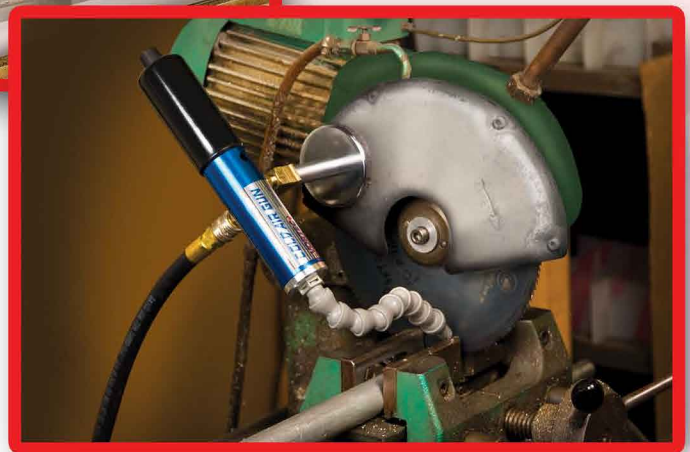


VORTEC

Cold Air Guns



The VORTEC Advantage

- Increase dry machining speeds up to 36%
- Extend tool life by 50%
- Eliminate the mess, expense and safety concerns of liquid coolant
- Reduce waiting or normalization time by cooling parts faster
- Eliminate the potential for burning and scorching
- Avoid secondary parts cleaning after machining
- Creates cold air up to 100 F° (56 C°) below inlet air temperature
- Uses only compressed air - no Freon
- Adjustable temperature and flow rate
- Highly reliable with an industry leading 10 year warranty
- Quiet operation - meets OSHA noise specifications

www.vortec.com



Cold Air Gun

Overview

Vortec Cold Air Guns use filtered compressed air and vortex tube technology to produce sub-zero air for industrial spot cooling applications. With no moving parts to wear out, the internal vortex tube converts compressed air into a cold air stream, producing temperatures down to -30°F (-34°C).

Benefits

- Increase dry machining speeds up to 36%
- Extend tool life by 50%
- Substantially increase feed rates
- Eliminate heat-related part growth
- Hold tight part tolerance

Features

- Create cold air up to 100 F° below inlet air temp
- Adjustable temperature and flow rate
- Eliminate the mess and expense of liquid coolant
- Avoid secondary parts cleaning after machining
- Highly reliable with no moving parts

Applications

- Metalworking operations
- Surface Grinding
- Drill and tool sharpening
- Plastic, composite and wood machining
- Any application where cooling is needed

Specifications

Frost Free	Standard	Dual Nozzle	Air Consumption		Cooling Capacity	
			SCFM	SLPM	BTU/hr	kCal/hr
	680	682	8	227	400	101
611	610	612	15	425	900	227
621	620	622	25	708	1500	378
631	630	632	35	991	2500	630

* Models come with air filter and magnetic base

** For gun only, add -1 to the model number

Available in Frost Free

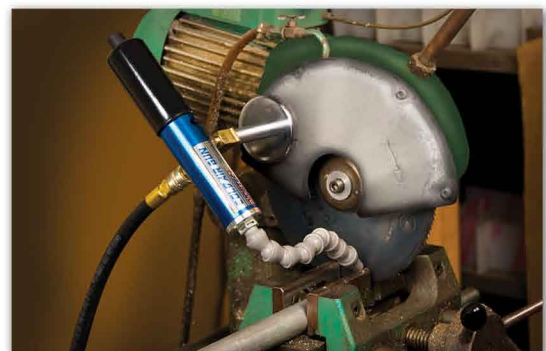


The Frost Free Cold Air Gun eliminates the mess associated with condensation and frost arising from continuous use of a Cold Air Gun. A must have for sensitive applications such as fabrics, wood, cardboard and paper; as well as standard metalworking applications.

Mini Cold Air Gun



The Mini Cold Air Gun is the perfect solution for applications where the Cold Air Gun is too big or where lower flow rates are needed





Cold Air Pistol

Overview

The Vortec Cold Air Pistol offers an ergonomic, easy to use and more mobile alternative to the Cold Air Gun for intermittent spot cooling. The lightweight pistol features an integral trigger mechanism for an on/off squeeze action that can be aimed at the target site; and provides cool air as low as 0 deg F at a flow rate of 9 scfm. The cold air pistol cools parts quickly and with no liquid mess so that jobs can be started and completed faster.

Benefits

- Speed jobs by cooling parts and welds faster
- Move cooling to the target more easily
- Trigger cooling only when needed
- Airflow clears shavings away from area

Features

- Ergonomic handle and trigger
- Delivers a 0°F cold air stream
- Lightweight and portable, less than one pound
- Low pressure air outlet
- Quiet operation, noise level at 3 feet is 78 dB

Applications

- Cooling welds and solders
- Thermal testing of sensors
- Spot cooling parts and assemblies
- Cooling molds and molded pieces
- Electronics Cooling
- Bearing repair and replacement

Specifications

Model No.	Description	Air Consumption		Cooling Capacity	
		SCFM	SLPM	BTUH	kCal/H
615	Cold Air Pistol	15	425	900	227



Thread Guard Needle Cooler

Overview

The Vortec Thread Guard Needle Cooler was designed specifically for industrial sewing applications. It keeps needles cool to reduce heat-related needle breakage and thread burning. The air stream is especially effective on difficult sewing surfaces such as belt loops and waist bands; or on tough materials like denim or canvas. Cold air temperature and flow rate are preset to 10°F and 4 scfm.

Benefits

- Virtually eliminates heat-related needle breakage
- Can save up to 11-man hours per week per machine
- Eliminate the potential for burning and scorching
- Adapts to any machine
- Increases production speeds

Features

- Easy and quick installation
- Cool clean air, no liquid mess
- Flexible nozzle for positioning
- Low flow rate minimizes air consumption
- Low pressure outlet air

Applications

- Industrial sewing
- Applications where needle cooling is needed
- Material applications where burning and scorching need to be prevented

Specifications

Model No.	Description	Air Consumption		Cooling Capacity	
		SCFM	SLPM	BTUH	kCal/H
424	Thread Guard	8	227	400	101



About Vortec

In 1961, Vortec became the first company to develop technology for converting the vortex tube phenomenon into practical, effective industrial cooling solutions. Since then, Vortec has continued to refine and expand vortex tube applications, as well as develop air amplification products for more efficient use of compressed air in cleaning and conveying applications.

With over 50 years of industry experience combined with the strong global foundation of ITW, Vortec is the preferred solution for compressed air applications around the world.

Accessories Available



5 Micron Air Filter



5 Micron Air Filter



Oil Removal Filter



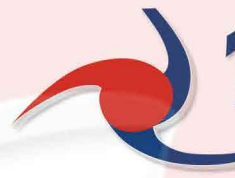
Oil Removal Filter



Magnetic Mounting Base



Dual Outlet Flex Nozzle

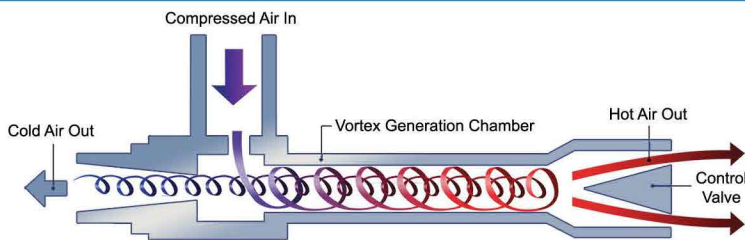


BEST IN CLASS!

10 YEAR warranty

Cold Air Guns

How Cold Air Guns Create Frigid Air



A vortex tube spins compressed air to produce hot and cold air streams, generating temperatures down to 100 F° below inlet temperature

Fluid (air) that rotates around an axis (like a tornado) is called a vortex. A Vortex Tube creates cold air by forcing compressed air through a generation chamber, which spins the air at a high rate of speed (1,000,000 RPM) into a vortex. The high-speed air heats up as it spins along the inner walls of the tube toward the control valve. A percentage of hot, high speed air is permitted to exit at the valve. The remainder of the (now slower) air stream is forced to counterflow up through the center of the high-speed air stream in a second vortex. The slower moving air gives up energy in the form of heat and becomes cooled as it spins up the tube. The chilled air passes through the center of the generation chamber finally exiting through the opposite end as extremely cold air. Vortex tubes generate temperatures down to 100 F° below inlet air temperatures. The control valve located in the hot exhaust end can be used to adjust the temperature drop and rise for all Vortex Tubes.

VORTEC

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