



Ion-Jet Super Air-Knife

High Performance Static Elimination with High Velocity Blow-off

APPLICATIONS

- Converting – slitting, sheeting, winding
- Plastics – extruding, forming, molding
- Printing – digital, folding, collating

Model 400T Static Eliminator Bar produces a high positive and negative ion output



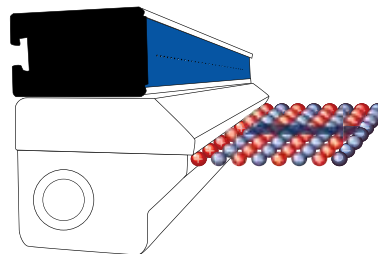
Super Air-Knife's jet air stream distributes the bar's ion output to equipment surfaces and parts

BENEFITS

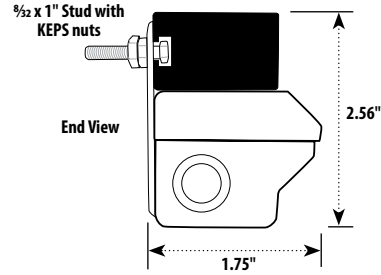
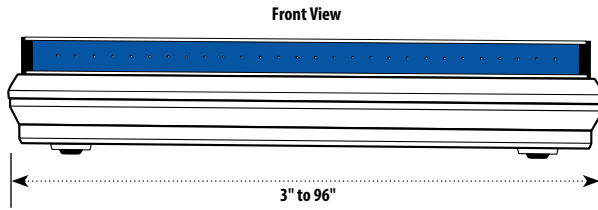
- Increase production speeds
- Increase profits
- Reduce rejects
- Reduce downtime
- Enhance product quality
- Enhance operator safety

The TAKK Ion-Jet Super Air-Knife combines the ultra high positive and negative ion output (from the Model 400T Static Eliminator Bar), with a hard hitting curtain of air (from the Super Air-Knife) for web, sheet and part blowoff. Thus eliminating the costly production problems of static electricity while offering the additional benefit of high velocity air cleaning and prepping of equipment and parts.

- Quiet and efficient way to clean, dry, cool or prep webs, conveyors, sheets or parts
- Utilizes the coanda effect (wall attachment of a high velocity fluid) to create air motion in its surroundings: using a small amount of compressed air as a power source, it pulls in large volumes of surrounding air to produce a high flow concentration of air
- Amplification ratios (entrained air to compressed air) are 40:1
- Air savings of 40% to 90% are achieved compared to "homemade" blowoff devices
- Reduces "windshear" by gradually introducing the entrained air to the ejected compressed air; noise level is typically cut in half



Specifications



DIMENSIONS:

Available lengths: 3" to 12" – 3" increments
 12" to 60" – 6" increments
 60" to 96" – 12" increments

Air-Knives can be ganged for applications requiring longer lengths.

WEIGHT:

Approximately 0.17 lbs per inch

SUPER AIR-KNIFE:

Minimum Air Pressure: 5 PSIG
 Maximum Air Pressure: 100 PSIG
 Air Amplification: 40:1
 Air Fitting: 1/4" pipe size

COMPLETE SYSTEM:

Consists of an Ion-Jet Super Air-Knife with a 6.5 ft. power cable and a power supply. Power supply must be ordered separately.

SUPER AIR-KNIFE PERFORMANCE*

Air Consumption per inch (25mm)		Velocity at 6" (15cm) from target		Sound level at 3' (91cm)	Force per inch (2.5cm) at 6" (15cm) from target	
SCFM	SLPM	FPM	M/S	dBA	OUNCES	GRAMS
17.4	492	11,800	57.9	69	2.5	71

*All measurements taken at 80 PSIG (5.5 BAR); 6" (153mm) Super Air-Knife tested

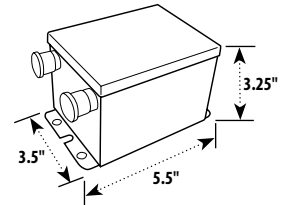
SUPER AIR-KNIFE AIR CONSUMPTION*

Pressure Supply		Air Consumption per Inch (25mm)	
PSIG	BAR	SCFM	SLPM
20	1.4	1.1	31
40	2.8	1.7	48
60	4.1	2.3	65
80	5.5	2.9	82
100	6.9	3.5	99

*with .002 (.05mm) thick shim installed;
 12" (305mm) Super Air-Knife tested

POWER SUPPLY:

115 or 220 volts, 50/60 HZ, AC
 Current: 0.5 AMP
 Weight: 5 lbs.
 Dimensions: 3.5"W x 3.25"H x 5.5"L

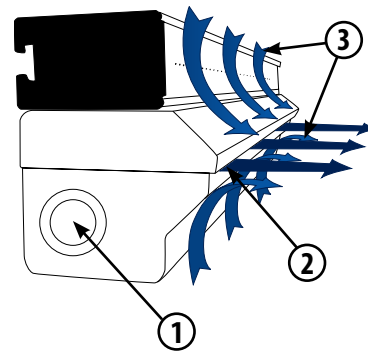


OPTIONS:

Part #2224 – Air Regulator with Mounting Bracket
 Part #2223 – Air Pressure Gauge

SHIM SETS: Standard unit includes a .002" shim. Each optional shim set includes a .001" shim, a .003" shim and a .004" shim.

HOW THE SUPER AIR-KNIFE WORKS



Compressed air flows through the inlet (1) into a plenum chamber of the Super Air Knife.

The flow is directed to a precise, slotted orifice.

As the primary airflow exits the thin slotted nozzle (2), it directs the airflow in a perfectly straight line. This creates a uniform sheet of air across the entire length of the Super Air Knife.

Velocity loss is minimized and force is maximized as the room air (3) is entrained into the primary airstream at a ratio of 40:1.

The result is a well defined sheet of laminar airflow with hard-hitting force and minimal wind shear.

EXPERT TECHNICAL ASSISTANCE • 2 YEAR LIMITED WARRANTY

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