

**Airblast B.V.**  
 P.O. Box 1075  
 1700 BB Heerhugowaard  
 The Netherlands  
 Tel. : +31 72-5718002  
 Fax : +31-72-5714340  
 E-mail : info@airblast.com

**Commercial Information**  
*The Art of Powerful Cleaning...*

**Version / Date:** 01 / 0903

**Title:** Airblast Air Movers

**OPERATION**

Compressed air or saturated steam is the power source for this air mover. It operates on the venturi principle whereby you take small volumes of high velocity air (from the compressed air source) through the casting and out the nozzle jets, creating a venturi action or pulling action that induces large volumes of low velocity air through the venturi and out the air diffuser. A 1 1/2" hose is recommended from your air supply source to the side inlet connection. The compressor size required can be determined by checking the chart on air consumed at various inlet pressures. Operate this air mover on air or steam lines limited to 140 psi.



**TOTAL AIR FLOW AND CONSUMED AIR AT VARIOUS INLET PRESSURES**

AMERICAN STANDARD MEASUREMENTS							
	Overall Length	Diameter of Base	Diameter Top of Horn	NPT Size	Bolt Circle Diameter	Base Slot Diameter	Net Weight
TX3AMS	16.75"	7.31"	6.0"	1/2"	6.56"	0.4	5.51b
TX3AM	30.5"	7.31"	7.0"	1/2"	6.56"	0.4	8.5lb
TX6AM	44.25"	11.25"	12.5"	1"	10.5"	0.4	22.3lb
TX8AM	46.06"	14.37"	14.25"	1"	13.62"	0.5	36lb
TX9AMB*	47"	17"	15.5"	1"	15.5"	1"	42 lb
TX10AM	48"	17"	15.75"	1"	15.5"	1"	42.06lb

American Standard Measurements  
 Performance Total Air Flow Equals Compressed Air consumed Plus  
 Air Flow Induced

**INLET PRESSURE**

	<b>40PSIG</b>	<b>60PSIG</b>	<b>80PSIG</b>
	<b>Total air flow</b>	<b>Total air flow</b>	<b>Total air flow</b>
TX3AMS	815 CFM	981 CFM	1182 CFM
TX3AM	1017 CFM	1231 CFM	1462 CFM
TX6AM	2385 CFM	2885 CFM	3347 CFM
TX8AM	3152 CFM	4152 CFM	4929 CFM
TX9AMB*	4959 CFM	5780 CFM	6810 CFM
TX10AM	4898 CFM	6182 CFM	7304 CFM
	Air consumed	Air consumed	Air consumed
TX3AMS	36 SCFM	50 SCFM	62 SCFM
TX3AM	35 SCFM	45 SCFM	62 SCFM
TX6AM	73 SCFM	98 SCFM	124 SCFM
TX8AM	114 SCFM	152 SCFM	193 SCFM
TX9AMB	139 SCFM	190SCFM	245 SCFM
TX10AM	154 SCFM	209 SCFM	274 SCFM

\*This particular air mover is designed with a Butterworth flange base. The most common use of this design is in the shipping industry where they have port holes on the ship to accommodate a Butterworth tank cleaning machine. This air mover can be easily adapted to fit any opening as well as all of the other sizes.

Airblast air movers have been tested at an independent laboratory. The free flow ratings listed above are based on tests to AMCA Standard 210. Under identical testing situations, Airblast Pneumatic air movers equalled or exceeded the air flow of competitively manufactured air movers.

**FREE AIR INDUCTION RATIOS AT VARIOUS INLET PRESSURES**

**Dividing total air flow discharged by amount of air consumed.**

	<b>40PSIG</b>	<b>60PSIG</b>	<b>80PSIG</b>
TX3AMS	22.64	19.62	19.06
TX3AM	29.06	27.36	23.58
TX6AM	32 .69	29.44	26.99
TX8AM	27.65	27.32	25.54
TX9AMB	35.68	30.42	27.82
TX10AM	31.80	29.58	26.66

The above free air induction ratio is a measure of efficiency of a venturi type air mover. The ratio is determined by dividing the total CFM discharged by the amount of air consumed. The accuracy of the figures of the free air induction ratio depends again on the accuracy of the method of testing. All free flow ratings of Airblast Pneumatic Air Movers are based on tests to AMCA Standard 210.

## **USAGES OF VENTURI TYPE AIR MOVERS**

### **Petroleum Processing**

#### **Refineries and Chemical**

Turnarounds or shutdowns are performed periodically to refurbish and overhaul units of both chemical plants and refineries. Fumes must be removed that are sometimes poisonous, explosive or noxious from process towers, tanks, large pipes, etc. before men can work effectively in these areas. Air movers can also be used to cool heavy equipment that may be in danger of overheating or that needs to be cooled in order to be worked on. In super-hot areas, sometimes the air movers are used to cool men.

### **Power Plants**

#### **Utilities and Cogeneration Units**

Heavy-duty turbines, both steam and gas, induced draft fans and hot furnaces that may require emergency repairs can be cooled quickly with the use of air movers. To cool enclosed machinery, you can exhaust hot air from one side and use another air mover to move cooler air in from the other side.

#### **Metal Fabrication of Tanks, Towers and Vessels**

Welding in confined spaces creates welding gases that have to be removed in order to have a safe, healthy working environment for greater efficiency and productivity.

#### **Paper and Pulp Plants**

Toxic gases in digester rooms can be removed with air movers. Boilers with induced draft fans can be cooled for maintenance of fans with air movers. Fresh air can then be blown to men working on them.

#### **Shipyards**

Air movers are used many times to remove welding fumes from the welder working in a confined area. Blowing fresh air into confined areas is another use.

#### **Marine Industry**

Any time you need to exhaust volatile fumes after pumping off cargo, you have to use some type of air moving device. Air movers are used many times for this application. Navy ships can use air movers for removal of welding fumes. If there is ever a fire below deck, smoke and fumes created could be exhausted with air movers.

#### **Steel Industry**

Air movers are used to cool hot iron ladles - faster cooling means less downtime - faster routine cleaning and maintenance. Air movers are used to cool heavy equipment.

#### **Manhole Operations**

Air movers can be used to move fresh air into a manhole or to pull polluted air out from a manhole. Uses of the air movers are not limited to a few industries. Wherever you need to disperse fumes, move air into confined spaces, cool men working in elevated temperature conditions, or cool machinery or products with a blast of directed air, then an air mover may find an application.

## **SAFETY PRECAUTIONS**

An electric ground or static ground is attached to the base of all air movers. Any time you are using this air mover in a volatile atmosphere, attach a ground wire to discharge any static electricity, preventing a build-up of static electricity.

Airblast Pneumatic air movers have no moving parts and are ideal for venting hazardous areas. The bases are made from a high quality aluminium alloy. Aluminium scraped across rusty steel can sometimes cause a smear. A heavy smear of aluminium on steel (being struck with some object) can cause an incendiary spark. Take precautions not to drag the base on steel tanks, etc.

While there are no moving parts to the air mover, all of the performance ratings in this brochure are based on a unit that had a clean air reservoir and nozzle jets that are of the proper diameter and not plugged up in any way. Care should be taken to prevent clogging of the nozzle jets and a periodic cleaning with a steam cleaner would be appropriate maintenance. Secure the air mover in place prior to turning on the air supply or it will tend to move from its intended position.