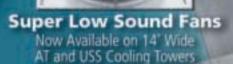
# ADVANCED TECHNOLOGY ON SOUND SOLUTIONS



NE









ENERGY EFFICIENT Cooling Towers, Closed Circuit Coolers & Evaporative Condensers





ince its founding in 1976, EVAPCO, Inc. has become a world-wide leader in supplying quality cooling equipment for thousands of customers in both the commercial and industrial markets.

EVAPCO's success has been the result of a continual commitment to product improvement, quality workmanship and a dedication to providing unparalleled service.

Our emphasis on research and development has led to many product innovations – a hallmark of EVAPCO through the years.



The ongoing R & D Program enables EVAPCO to provide the most advanced products in the industry – technology for the future, available today.

With 14 facilities in seven countries and over 160 sales offices in 42 countries worldwide, EVAPCO is ready to assist in all your equipment needs.

# Advanced Technology LOW SOUND SOLUTIONS



## **Solutions for Sound Sensitive Applications**

Evapco's induced draft counterflow product lines are now available with four (4) equipment options to reduce the overall sound generated from the side or top of the unit. Each option provides various levels of sound reduction and can be used in combination to provide the lowest sound level. Consult EVAPCO's Selection Program for unit sound levels. If a detailed analysis or full octave band data sheet is required for your application, please consult your EVAPCO Sales Representative.

NOTE: These low sound options may impact the overall installed dimensions and weight of the unit.

©2005 EVAPCO, INC



### The Newly Expanded Family of *Super* Low Sound Fans!

9 – 15 dB(A) Reduction versus Standard Fan!

The Super Low Sound Fan offered by EVAPCO utilizes an extremely wide chord blade design available for sound sensitive applications where the lowest sound levels are desired. The fan is one-piece molded heavy duty FRP construction utilizing a forward swept blade design. The Super Low Sound fan is capable of reducing the unit sound pressure levels **9 dB(A) to 15 dB(A)**, depending on specific unit selection and measurement location. The fans are high efficiency axial propeller type and are CTI certified **G** on the AT, USS and REP Cooling Tower Product line.

The Super Low Sound Fan is now available on **ALL** AT, USS and REP Cooling Towers, ATW, ESW Closed Circuit Coolers and ATC Evaporative Condensers.



#### Low Sound Fan - 4 - 7 dB(A) Reduction!

The Low Sound Fan offered by EVAPCO is a wide chord blade design available for sound sensitive applications where low sound levels are desired. It is aluminum blade construction with a steel fan hub. The Low Sound Fan is capable of reducing the unit sound pressure levels **4 dB(A) to 7 dB(A)**, depending on specific unit selection and measurement location. The fans are high efficiency axial propeller type and operate with no loss of thermal performance.

The Low Sound Fan is available on 12 ft., 14 ft., 24 ft. and 28 ft. wide AT Cooling Towers, ATW and ESW Closed Circuit Coolers and ATC Evaporative Condensers.



#### Fan Discharge Sound Attenuation - Up to 10 dB(A) Reduction!

The discharge attenuator is a factory assembled straight sided discharge hood designed to reduce overall discharge sound levels at full fan speed **5 dB(A) to 10 dB(A)**, depending on specific unit selection and measurement location. It is constructed of G-235 galvanized steel as standard (options available for Type 304 stainless steel) and includes insulated walls and a low pressure drop baffling system that is acoustically lined with high density fiberglass. The discharge attenuator is supported entirely by the unit and is shipped as an assembled section for easy mounting in the field. The discharge attenuator is covered by a heavy gauge hot dip galvanized steel fan guard to prevent debris from entering the attenuator.

The discharge attenuator will have a minimal impact on unit thermal performance (0%-2% derate depending on specific unit selection).

The Discharge Attenuator is available on ALL standard AT Cooling Towers, ATW and ESW Closed Circuit Coolers and ATC Evaporative Condensers. It is also available on 12 ft., 14 ft., 24 ft. and 28 ft. wide AT, ATW, ESW and ATC Models with the Low Sound Fan option.

(Note: The Fan Discharge Attenuator Option is NOT available on models provided with the Super Low Sound Fan.)



Water Silencer – Reduces Water Noise in the Cold Water Basin up to 7 dB(A)!

The water silencer option is available for all AT models and is located in the falling water area of the cold water basin. The water silencer will reduce the high frequency noise associated with the falling water and is capable of reducing overall sound levels **4 dB(A) to 7 dB(A)** measured at 5 ft. from the side or end of the unit. The water silencers reduce overall sound levels **9 dB(A) to 12 dB(A)** (depending on water loading and louver height) measured 5 ft. from the side or end of the unit when water is circulated with fans off.

The water silencers are constructed of lightweight PVC sections and can be easily removed for access to the basin area. *The water silencer will have no impact on unit thermal performance.* 

The AT Water Silencer is available on ALL AT Cooling Towers, ATW Closed Circuit Coolers and ATC Evaporative Condensers.

# Advanced Technology Low Sound Solutions Suggested Specifications

#### Super Low Sound Axial Propeller Fans

Units shall be provided with **Super Low Sound Fans** in order to assure a maximum sound pressure level not to exceed \_\_\_\_\_\_ dB(A) measured 5 feet above the fan discharge cylinder during full speed operation.

Fans shall be high efficiency axial propeller type with non-corrosive FRP hub and blade construction. The one-piece molded heavy duty fan construction shall utilize a forward swept blade design for superior sound quality. Each fan shall be statically balanced and installed in a closely fitted cowl with venturi air inlet for maximum fan efficiency. The fan cowl shall be covered with a heavy gauge hot dip galvanized (or Type 304 stainless) steel fan guard.

There shall be no performance derate when utilizing the Super Low Sound Fan.

#### Low Sound Axial Propeller Fans

Units shall be provided with **Low Sound Fans** in order to assure a maximum sound pressure level not to exceed \_\_\_\_\_\_ dB(A) measured 5 feet above the fan discharge cylinder during full speed operation.

Fans shall be high efficiency axial propeller type, with aluminum wide chord blade construction. Each fan shall be statically balanced and installed in a closely fitted cowl with venturi air inlet for maximum fan efficiency. The fan cowl shall be covered with a heavy gauge hot dip galvanized (or Type 304 stainless) steel fan guard.

There shall be no performance derate when utilizing the Low Sound Fan.

#### Fan Discharge Sound Attenuation

The unit shall be provided with a factory assembled straight sided discharge sound attenuation package designed to reduce overall discharge sound levels. The discharge attenuator shall be supported entirely by the unit and shipped as an assembled section for easy mounting in the field. It shall be constructed of G-235 galvanized steel (or Type 304 stainless steel) and include insulated walls and baffles acoustically lined with high density fiberglass. The discharge attenuator shall be covered by a heavy gauge hot dip galvanized steel (or Type 304 stainless steel) fan guard to prevent debris from entering the attenuator.

#### Water Silencer

The unit shall be provided with water silencers located in the falling water area of the cold water basin. The water silencers shall be constructed of lightweight PVC in easily handled sections for ease of removal and access to the basin area.

 System Requirements:

 You must have Windows Media

 Player installed to view the video.

 If you do not have Windows Media

 Player installed, please obtain a

 free download of the Media Player

 software from www.microsoft.com.

Note to Windows Users: If you are operating on Windows 95 system or higher, you should already have Windows Media Player installed. Super Low Sound Technology Presentation

#### Instructions:

٦

- Insert CD into drive
- Presentation will start automatically
- Follow directions on screen

World Headquarters Research/Development Center

**EVAPCO, Inc.** P.O. Box 1300 Westminster, MD 21158 USA Ph: 410-756-2600 Fax: 410-756-6450 E-mail: marketing@evapco.com



#### **European Headquarters**

=

EVAPCO Europe, N.V. Heersterveldweg 19 Industriezone, Tongeren-Oost 3700 Tongeren, Belgium Ph: (32) 12-395029 Fax: (32) 12-238527 E-mail: evapco.europe@evapco.be

#### Asia/Pacific Headquarters

EVAPCO Asia, Ltd. Suite D, 23rd Floor, Majesty Building 138 Pudong Ave. Shanghai, China 2001120 P.R. China Ph: (86) 21-5877-3980 Fax: (86) 21-5877-2928 E-mail: marketing@evapcochina.com

EVAPCO U.S.A. - http://www.evapco.com EVAPCO EUROPE - http://www.evapcoeurope.com EVAPCO ASIA - http://www.evapcoasia.com