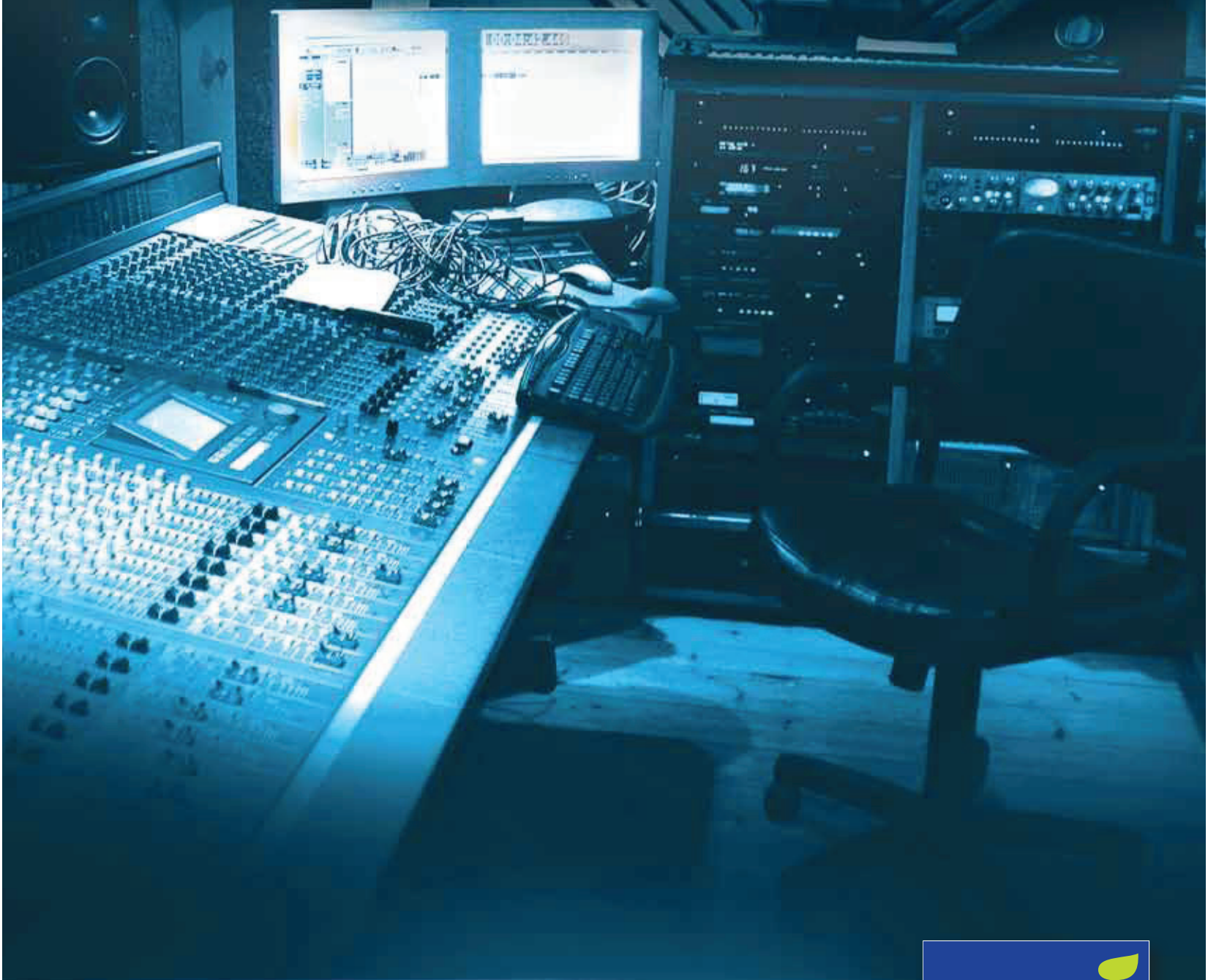


A European expertise  
**in sound attenuation**  
for your buildings







# Aldes Group

## A global partner close to you and involved in all your projects

- A French manufacturer since 1925 employing more than 1300 people.
- A HVAC expert present in over 100 countries throughout a network of 15 subsidiaries and distributors in the Middle East, Europe, America, Asia, Africa and Indian Ocean.
- 5 production sites based globally.

## Committed from design to production

An engineering and design approach for all Aldes products:

- A Research & Development department.
- Development of innovative and integrated products based on market requirements and end-user needs.
- **Sound attenuation products designed and manufactured in the Middle East.**

## The Aldes testing facilities

A complete range of facilities to carry out real-life tests or numerical simulation:

- **An acoustics laboratory.**
- A fire protection laboratory.
- An air diffusion laboratory & numerical simulation laboratory for CFD analysis.
- A ventilation laboratory with fan test bench.

## The power of a manufacturer

- High capacity and reactivity.
- **About 1000 non-standard sound attenuators supplied per year in the UAE.**
- **20000 passive circular sound attenuators produced per year in Europe.**
- Production sites in Europe and in the Middle East.
- A large industrial capacity to meet all kinds of projects.





# Aldes ME

## **A sustainable group for a sustainable presence in the Middle East**

- Based in the Middle East for more than 20 years.
- A local manufacturer investing with long term perspectives.
- Manufacturing facilities that meet European standards and processes.
- An 8000m<sup>2</sup> production site with state-of-the-art production facilities in the UAE.
- A proactive sales team available when you need, with full technical support.

## **A large range of solution adapted to all situations**

- A perfect match between Aldes products and UAE requirements.
- A wide range of sound attenuators to ensure acoustic comfort by reducing the noise level to meet noise criteria
- Performance for optimal on-site integration.

## **Choose a product suitable for your project**

Aldes ensures an accurate selection of the right product according to the size and type of your building.

### **\* General catalogue & website**

For an overview of Aldes ME offer and general product selection: [www.aldes.ae](http://www.aldes.ae)

**Aldes invents, designs and manufactures innovative products to improve Comfort, Indoor Air Quality & Safety inside buildings all over the World.**





# How to deliver an acoustic comfort

## Sound attenuators in design stage

Functionality and aesthetic are the primary focus while designing a building, but acoustics also represents another key factor that designers take into consideration.

Acoustical requirements are defined according to the type of building (offices, classrooms, conference rooms...), but several common **noise problems** affect these occupancies:

- Too much noise outside the building entering the space.
- Too much noise from adjacent spaces.
- Lack of sound control in the space itself.



Noise in these occupancies is usually not at a high enough level to be harmful to human hearing. But noise definitely distracts from concentration on work or study, resulting in less productivity.

## Sound attenuators in HVAC system

HVAC system should be designed to ensure acceptable noise level as per the type of building. In ventilation systems, noise stems from a variety of components such as fans or fire dampers. To comply with a **specified noise level, sound attenuators** are installed at suitable locations in the ventilation system. The selected sound attenuator should have adequate silencing capabilities, low air resistance and should be as compact as possible.

Efforts to control noise and vibration in a wide range of mechanisms and devices inevitably require the use of passive acoustical materials. To achieve the greatest performance requires a correct understanding of the sound attenuators' application, as well as a right selection and installation.

## Your indoor environmental quality through an acoustic control

# A COMPLETE RANGE OF SOLUTIONS

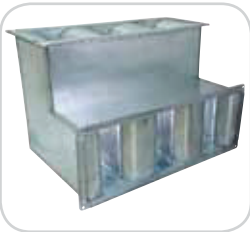
## FAN NOISE REDUCTION INSIDE DUCTS

### RECTANGULAR PASSIVE



Aldes is able to manufacture customized rectangular passive sound attenuators (with two different kinds of baffles) to meet the acoustic requirements of all types of buildings. These sound attenuators are used to attenuate noise of fan / AHU propagating through air supply or air exhaust ductwork to meet the noise criteria of the critical area. These are highly effective at medium and high frequencies of octave band.

### BEND TYPE



Similar to rectangular sound attenuators, bend type sound attenuators are used to attenuate noise of fan / AHU propagating through air supply or air exhaust ductwork to meet the noise criteria of the critical area. These are designed for vertical or horizontal installation.

### CIRCULAR PASSIVE



Aldes proposes customized circular passive sound attenuators (with or without central pod and with low pressure loss) to meet the acoustic requirements of all types of buildings. These sound attenuators are used to attenuate noise of fan / AHU propagating through air supply or air exhaust ductwork to meet the noise criteria of the critical area. Installations with spigot or flange type connection are available.

### CIRCULAR ACTIVE



Aldes provides circular active sound attenuators with advanced technology to meet the acoustic requirements of all types of buildings, especially when space availability is a constraint. These sound attenuators are used to attenuate noise of fan / AHU propagating through air supply or air exhaust ductwork to meet the noise criteria of the critical area. These are highly effective at low frequencies of octave band, and have an integrated self-test.



# SOLUTIONS FOR SOUND ATTENUATION

## ADJACENT ROOM NOISE REDUCTION

### CROSS-TALK



Cross-talk sound attenuators are designed for in-line duct mounting in HVAC systems where rooms are served by branches of common duct. These are used to reduce transfer of noise in adjacent rooms. Baffles are radiussed at both ends to minimize pressure loss and regenerated noise.

## INDOOR & OUTDOOR NOISE REDUCTION

### ACOUSTIC LOUVRE



Acoustic louvres are designed to provide optimal acoustic performance (noise reduction) with minimal airflow restrictions both for air-intake or air exhaust. For extra noise reduction, it is possible to assemble two back-to-back acoustic louvres.

# How to control noise

## Sound attenuator is not the only solution to control noise:

• **Airflow control solutions** (VAV, VCD, CAR) can generate noise. Therefore, it is important to select the right product with right dimensions and to provide acoustic insulation (whenever required) to keep the noise level low.



• **Grilles & Diffusers** should be well selected to supply and extract the designed airflow.



• **Fans accessories** can control noise, such as anti-vibrating mountings that ensure dampening of the vibrations of a fan or a central unit. Flexible sleeves guarantees a reliable and airtight connection between fan and duct while avoiding noise / vibrations transfer.



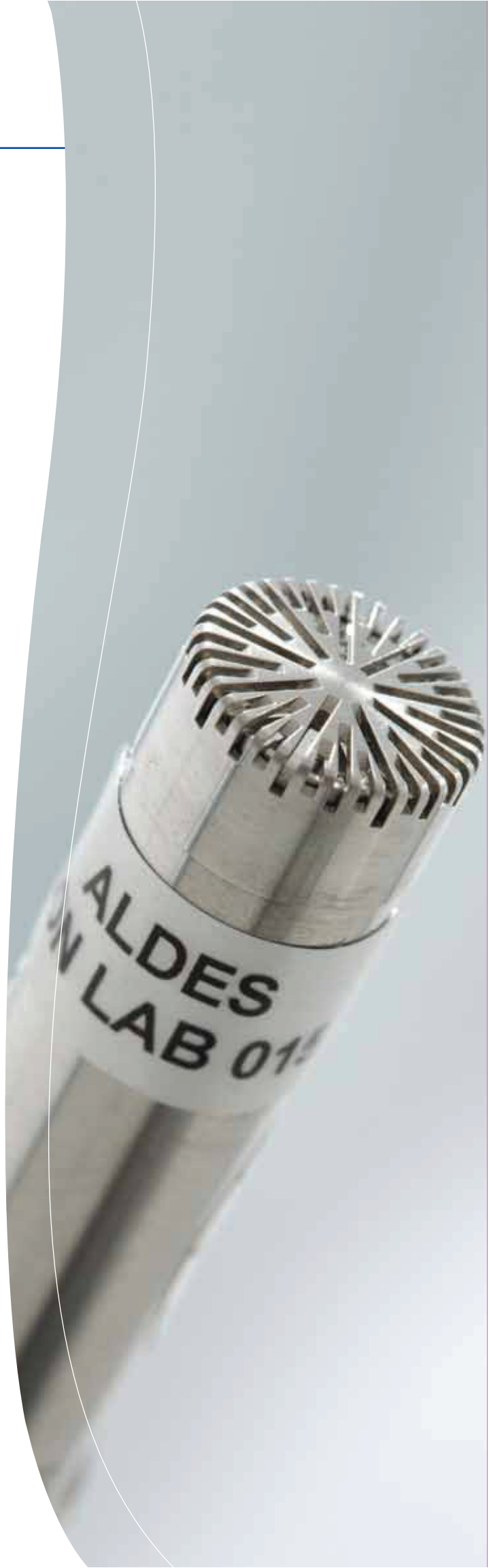
**Sound attenuation**

**+**

**Well-designed controlled  
HVAC system**

**=**

**Acoustic Comfort  
& Better Efficiency**



# Aldes sound attenuation solutions bring comfort to your most prestigious construction projects



**Dubai Library**  
(UAE)



**Doha High Rise Tower**  
(Qatar)



**Abu Dhabi Exhibition Center**  
(UAE)



**Bellepierre Hospital**  
(Reunion Island)



**Dubitech Laboratory**  
(UAE)