# DIFFUS'AIR

New high-induction perforated metal ducts

## DIFFUS'AIR

#### Birth of Air Technologies Group

The idea to create AIR'TECHNOLOGIES® – designer and manufacturer of perforated metal ducts – sprang after Guillaume Védy (Technical Director, France) and Ludovic Boulanger (Director, France) felt something was lacking.

Specifically, there were no French manufacturers of perforated metal ducts – a market in full growth in HVAC installations – that could offer solutions to prime contractors, project managers and fitters.

The two directors – both active for many years in their respective positions with a foreign manufacturer – thus decided to team up and create AIR'TECHNOLOGIES®, a French company that groups PULS'AIR® and DIFFUS'AIR®.

The mission of the group and its subsidiaries is to offer customers over 35 years' combined experience and expertise in perforated duct sizing and calculation techniques. PULS'AIR® specialises in air pulsing technologies while DIFFUS'AIR® offers air diffusion solutions.

#### www.diffusair.fr

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### Diffusion

This more classical technology nevertheless offers the best performance and is the most widespread in the diffusion market. It provides the best compromise in terms of installation quality / price ratio. It stems from AIR PULSING technology and rests on the same principle: use of perforated metal ducts. But here, the perforations are adapted to traditional DIFFUSION techniques.

#### SPORTS SHOP

500mm diameter galvanised duct



#### **PHARMACEUTICALS** STORAGE WAREHOUSE

Galvanised duct. Height = 10 m



Diffusion ducts find application in all fields of activity (swimming pools, theatres, multifunction halls, retail outlets, airports, halls, industry, sports centres ...).

Duct dimensioning, length and positioning are typically defined by the ordering customer, consultant or installation engineers. DIFFUS'AIR can also assist you in duct dimensioning.

#### **EXHIBITION HALL**

800 mm diameter duct,

10 m span



SPECIAL PART

(1200 mm diameter T unit)

#### HYPERMARKET, 2500 m<sup>2</sup> FLOORSPACE

Oven-fired epoxy painted duct

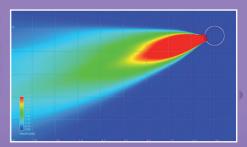




#### **Speed profile along vertical section - Cooling**

#### **NUMERICAL SIMULATIONS:**

With its specific software tool, DIFFUS'AIR can offer on request a computer simulation that evaluates air temperatures and speeds for your project.



#### SIMULATIONS USING GAUSSIAN MODELS:

DIFFUS'AIR computer simulations are based on theoretical models developed by our in-house engineering department.

The mathematical modelling is adapted into a digital tool that can analyse the operating characteristics and properties of a given duct.

#### MULTIFUNCTION HALL

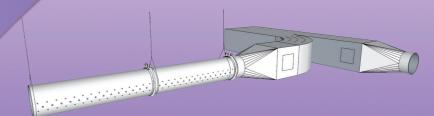
Vertical perforations



#### **COLLECTOR DUCT**

With anti-condensation perforations (no cladding)





#### **MAIN ADVANTAGES:**

Low production costs (nationally based, designed and produced)

Aesthetically pleasing ducts (laser perforations) 30 - 50% assembly time reduction thanks to 1.5m length sections 35 years' cumulated experience in air diffusion and air pulsing Assistance in duct design / configuration / dimensioning Choice of different possible materials and RAL colours • No condensation, no cladding • No take-up circuit required Temperature uniformity No specific maintenance requirement • Energy savings thanks to variable flowrate

