

THE WORK OF EUROVENT

If you do not trust a supplier's performance data, how can you design building services to perform to requirements? Eurovent certification provides the answer.

What's in Eurovent?

By guaranteeing that a wide range of air-conditioning products will perform according to their specification, Eurovent certification benefits the whole industry — explains Jacques Benoist.

**EUROVENT
CERTIFIED PERFORMANCE**



Eurovent/CECOMAF has member associations in 11 European countries.

Belgium:	.....FABRIMETAL
Finland:	.....AFMAHE, FREA
France:	.....UNICLIMA
Germany:	.....FG ALT im VDMA
Great Britain:	.....FETA
Italy:	.....COAER, ANIMA
Netherlands:	.....NKI, VLA
Norway:	.....NVEF
Spain:	.....AFEC
Sweden:	.....KTG, SWEDVENT
Turkey:	.....ISKID

Austria, Portugal and Turkey.

In common with other Eurovent programmes, the AHU programme provides a common basis for the rating of air-handling units using existing ISO and CEN standards for determination of structural, aerodynamic, thermal and acoustic characteristics. Air-handling units can now be selected with the assurance that claimed performance data is accurate.

However, the AHU programme has yet to be adopted by UK manufacturers — in contrast to the programmes for air conditioner, close-control units and chillers, which are enthusiastically supported by British producers.

Participating manufacturers entering a certification programme present performance and construction data for all products or selected ranges within the scope of the programme. This data is then evaluated by the Eurovent Certification Company, and a number of products are selected for independent testing.

If the results of the testing procedure are,

within well-defined limits, comparable with the claims made by the manufacturer, the products are listed in the Eurovent 'Directory of certified products'.

"All products are subject to regular random testing to ensure that products continue to conform to catalogue data"

If, however, the test results do not uphold the claims made by the manufacturer, the participant will be required to re-rate not only the tested model, but all models within the same basic product range. Alternatively the product may be withdrawn from the market.

All products are subject to regular random testing to ensure that products continue to conform to catalogue data.

The testing procedure verifies a number of characteristics at standard rating conditions for units within the various programmes. For comfort air conditioners the principle characteristics under scrutiny are the following.

- Total cooling capacity for all units and heating capacity for reverse-cycle units
- Effective power input in

both cooling and heating modes

- A-weighted sound power for both indoor and outdoor non-ducted units
- A-weighted sound power radiated from the duct of ducted units.

The close-control programmes include total cooling and sensible cooling capacities together with effective power input and A-weighted sound-power measurements.

The fan-coil programmes include total cooling and heating capacity, water pressure drop, fan-power input and A-weighted sound power.

"The Eurovent certification programmes were developed to encourage healthy competition within the European Union"

The chiller programme includes the following characteristics.

- Net cooling capacity and effective power input in cooling and heating modes
- Water pressure drop at evaporator and condenser in cooling and heating modes
- A-weighted sound power level for air-cooled chillers
- Net heating capacity for reverse cycle units.

Eurovent certification offers benefits to many

groups.'

'End-users can buy' with confidence knowing that the chosen system will operate in accordance with the design specification in terms of energy efficiency, running costs and return on capital investment.'

'Manufacturers benefit through the establishment of a level playing field for competition, based on comparable data which has been verified by the standardised testing procedures.'

Finally the image of the HVAC industry is enhanced as Eurovent testing builds confidence between manufacturers and specifiers. Consultants, specifiers and end-users are spared the task of carrying out detailed comparison and performance qualification testing, and can now select products in the knowledge that manufacturers' catalogue data is accurate.

Commitment

But perhaps more than anything the Eurovent certification programmes represent a commitment to customers which says a manufacturer has voluntarily joined a system of independent testing which offers the customer a guarantee that products included in the directory will match the published performance data.

Jacques Benoist is director of certification with Eurovent Certification Company, 15 rue Montorgueil, 75001, Paris.

The European market for air-conditioning and refrigeration products is accessible to manufacturers based inside and outside Europe. There has been, and to some degree there still exists, a situation where some manufacturers deliberately make exaggerated claims about the performance of their products. This penalises reputable manufacturers and leads to unfair competition, dissatisfaction amongst end-users and distortion of market forces.

Healthy competition

The Eurovent certification programmes were developed to encourage healthy competition within the European Union, enabling manufacturers to compete on a like-for-like basis. This was achieved by creating a common set of criteria for rating products — irrespective of their country of origin.

The 13 certification programmes form the basis of Eurovent testing procedures, which are carried out at eight independent laboratories across Europe. All testing is

performed by third parties and governed by international standards including EN, ISO and Eurovent.

"Some manufacturers deliberately make exaggerated claims about the performance of their products"

Product categories covered by the certification programmes include comfort air conditioners, close-control air conditioners, liquid-chilling packages, fan coils, air coolers and condensing units, dry coolers, heating and cooling coils, cooling towers, fans and air-handling units.

The recently established programme for air-handling units now includes 26 manufacturers from a variety of European countries — including Sweden, Denmark, Norway, France, Germany,

Views from Europe

How does a multi-national air-conditioning company that is committed to manufacturing and selling throughout Europe view the importance of Eurovent certification and specification?

With several hundred models listed in the Eurovent directory of certified products, Carrier has demonstrated its commitment to progressing the performance certification of air-conditioning equipment. Indeed, Carrier employees chair three compliance committees. Georges Mauer and Jean-Pierre Huguet, who are based in Carrier's manufacturing plant in Montluel near Lyon in France lead the AHU and chiller committees, respectively, whilst Antonio Galante, who operates from the Villasanta plant in Italy is focused on fan-coil units.

Vision

All three agree vehemently that no

reputable manufacturer could possibly argue with the stated vision of Eurovent — to improve the relationship between supplier and customer by independently verifying published performance data. The aim is to help consultants, specifiers and installers compare the relative performance of competitive products, secure in the knowledge that they are comparing like with like and that the selected equipment will deliver what it claims.

Participating manufacturers submit technical data for all relevant products. This data is evaluated and units tested in independent laboratories. Subject to satisfactory performance, it can be included in the

directory and be eligible to carry a Eurovent label. If tests do not accord with the published figures, the unit/range has to be derated by the manufacturer or he be removed from the Eurovent directory.

Challenge

Great progress has been made over the last few years. However, one challenge remains, and that, according to Galante, is to give the Eurovent label real status in the eyes of the customer. If the customer — end-user, specifier or installer — does not understand what the Eurovent 'badge' means in terms of integrity, how can the Eurovent-certified manufacturer compete with the claims of

a manufacturer that is not! He explains, 'Our selling companies have reported that it is sometimes difficult to convince the customer that an impartial, reputable organisation certified our units while he has no guarantee on the performances of the other manufacturer. Sometimes the uncertified supplier claims a huge 20% advantage of performance — nonsense but a very attractive proposition for the buyer.'

"In Europe the countries most committed to Eurovent specification are in the south"

Colleague Jean-Pierre Huguet adds, 'It does not help anyone for all 25 Eurovent compliant manufacturers to sit around patting each other on the back and telling ourselves how upright we are. The whole purpose of the exercise is to enhance

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... Continued from page 13 the reputation of the industry and help our customers.'

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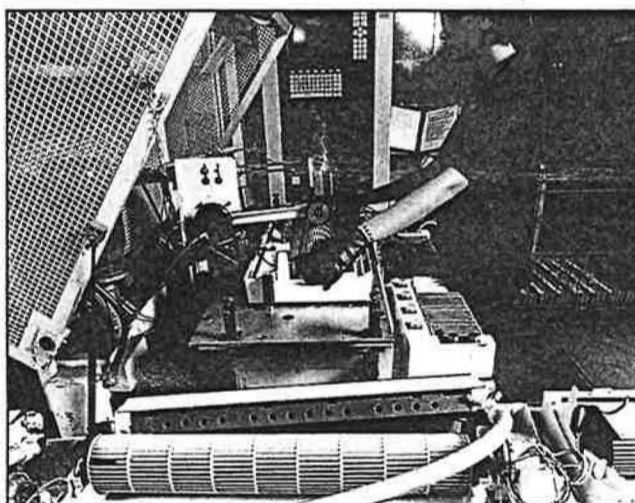
To complete this weak link in the supply chain, Galante sees the need for further investment by participating manufacturers in a promotional drive to educate the market to the benefits of Eurovent. His colleagues all agree with him that once customers really understand what it means, they will always

decide in favour of certified products in the future, and this additional investment will be repaid many times over.

Another Eurovent objective should be the harmonising of accepted 'tolerances' where differences exist between standards, manufacturing tolerances and individual unit performance tolerances, particularly for equipment that has been on the market for some time.

'Whatever its weaknesses, we are seeing more and more consultants' specifications asking for Eurovent-specified products, not only in Europe but also in the Middle East who traditionally work with the ARI standard', comments Georges Mauer. 'We must strive to achieve a parallel status that declares "if you are not in the Eurovent Directory, you are not in the market".'

'In Europe the countries most committed to Eurovent specification are in the south — Italy and Spain are the leaders' reports Jean-Pierre Huguet. 'We must not forget that it is a relatively young organisation and the ramp up is gaining momentum. Participation is not yet mandatory, but we hope that it will be by the year 2002, for equipment below 750 kW.'



Carrier has major manufacturing plants at Montluel in France (top) making air-handling units and at Villasanta in Italy, where fan-coil units are produced.

New roles for Eurovent

Alan Duttine sees Eurovent's sphere of influence growing — both geographically and commercially.

Over the past decade Eurovent/Cecomaf has made significant achievements — achievements so numerous that it is impossible to list them all in our present context.

There are, however, a number of areas where Eurovent/Cecomaf has excelled, and these are worthy of special mention.

United stance

Perhaps the single most important outcome of Eurovent/Cecomaf's work is the manner in which it has forged a united stance amongst the major manufacturers operating within the European markets for air-conditioning and refrigeration products.

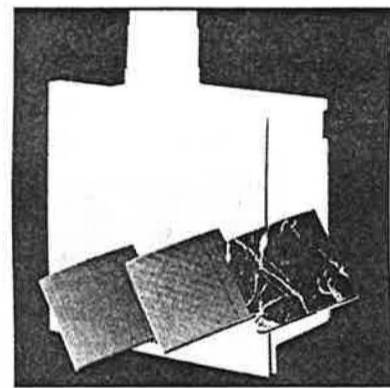
The certification programmes have been voluntarily embraced by enlightened manufacturers

who can see the need to ensure that products perform in a manner consistent with the claims being made in sales and technical brochures. The enthusiasm for the Eurovent certification programmes has raised standards throughout the entire industry by providing a common purpose amongst the hundreds of companies participating in the 13 programmes.

Active

Eurovent/Cecomaf has also been very active in building relationships with other industry groups throughout the rest of the world. The relationship with the American Refrigeration Institute is an excellent example of two bodies with similar goals and interests sharing

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A NEW FACELIFT

The revolutionary new QuietVent concept from Helios Ventilation Systems combines lowest noise levels within a truly brilliant design. The QuietVent is available in either flush or surface mounting casings with the added advantage of choosing a fascia to meet any colour co-ordination requirement.

These new fascia plates are available in stunning yet subtle colours including various marble effects.

The QuietVent is very easy to fit with simple bolt-free connection of the fan unit, simply press in and fix using bayonet plugs. The slim fascia has no openings in the front panel and the innovative 3" centrifugal fan operates at sound levels below 3 dBA at one metre on the 60m³/h flush-fitted model.

The fascia plate features a filter change display indicator clearly showing the degree of dirt in the filter. Easy to remedy, just flip up fascia and replace with a clean filter.

The unit can be fire rated for 90 minutes with the optional two room version and all casings are complete with back-draught shutter that can be fitted in any one of four positions to suit the individual application. Choice of three air volumes 30, 60 and 100m³/h complete with a choice of adjustable run-on timer and dynamic humidity sensor.

The Helios QuietVent is available from a nationwide network of distributors with Helios trained operatives always on hand to discuss customers' 'handling air' problems.

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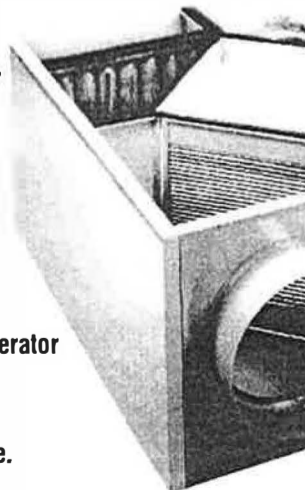
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READER REPLY NO 11

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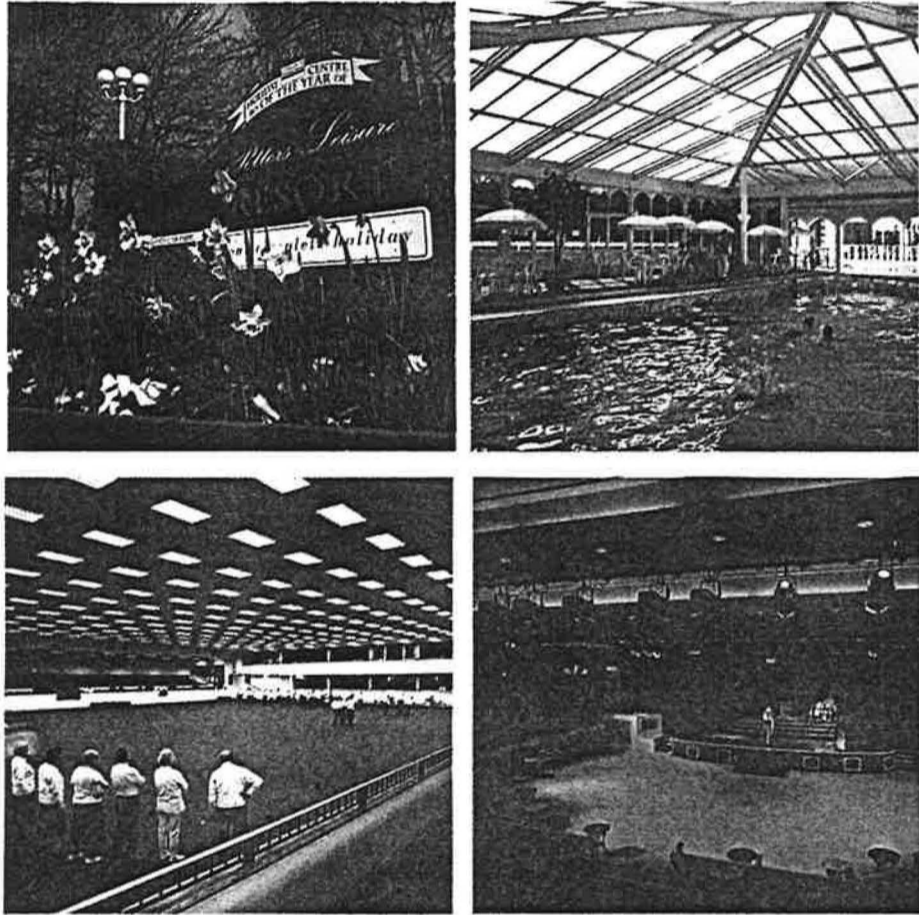
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information and experience to the benefit of both parties.

The ARI now has a commercial arrangement with Eurovent for the testing of 50 Hz systems produced in America and destined for European markets. Since American power supplies are based on 60 Hz, access to testing within the 50 Hz region of Europe provides a valuable service to the ARI and its membership.

Merger

The merger between Eurovent and Cecomaf, representing respectively air-conditioning manufacturers and refrigeration equipment manufacturers, brought together two industry groups which shared several important characteristics. The joint

organisation Eurovent/Cecomaf now represents hundreds of producers who face similar challenges, especially in the areas of refrigerant policies, the environment and energy efficiency.

"The certification programmes have been voluntarily embraced by enlightened manufacturers"

Eurovent is an enthusiastic participant in ICARMA (The International Council of Air Conditioning and Refrigeration Manufacturers' Associations) which includes member

associations from America, Japan, China and Canada. ICARMA meets twice yearly to discuss issues such as global warming, refrigerant policy, and energy efficiency and monitors their environmental impact.

Looking to the future, Eurovent/Cecomaf will continue to play a significant role in the maintenance of healthy competition within the European Union. At present there are more than 100 manufacturers from 19 countries participating in the various certification programmes.

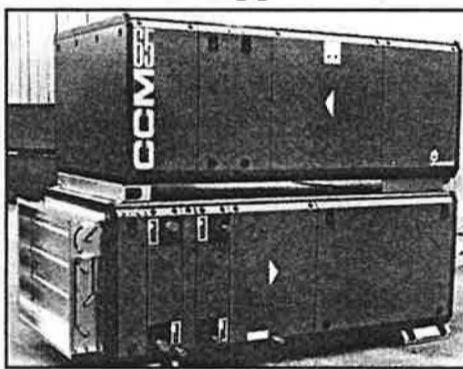
Other countries will be represented as the influence of Eurovent/Cecomaf becomes even more widespread, and the liberalisation of Eastern European economies will

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CERTIFICATIONS COME THROUGH FOR AIR-HANDLING UNITS

Thermal Technology

Hydronic air-handling units certified by Eurovent are available in the UK through Thermal Technology.



Hydronic air-handling units, which are distributed in the UK by Thermal Technology, have been submitted for certification by Eurovent. Hydronic is one of 19 major European manufacturers of air-handling units that is participating in the scheme. A Eurovent directory of certified air-handling units is due for publication by the end of the year. Reader Reply No. 95

PM-Luft

Eurovent-certified performance for air-handling units made by PM-Luft.



PM-Luft AB has become one of the first European manufacturers of air-handling units to have its products tested and certified by Eurovent. The comprehensive test programme encompassed

airflow, acoustics, pressure losses, power consumption, heating, cooling and heat recovery. The certification procedure also includes an annual audit to check and evaluate any design changes.

The company's product range includes the VVVA air-handling unit, the Compact Air system for offices, schools and shops, the economical Gold system and the roof-mounted TA system for factories.

They are available in the UK through PM-Luft UK, whose managing director Graham Barnes says, 'Customers need to know that catalogued performance data is absolutely accurate. By having the performance of our systems checked and verified by an independent resource of the calibre of Eurovent, customers can be certain that performance data we give is absolutely accurate.'

Reader Reply No. 96

ABB Flakt

ABB Flakt's EC 2000 and EU 2000 ranges of air-handling units are among the first to be certified by Eurovent.



Following tests at Eurovent licensed laboratory at

RWTÜV in Essen, Germany, EU 2000 and EC

2000 air-handling units made by ABB Flakt Products have been awarded the Eurovent certificate.

The company explains that this independent test programme assures specifiers that qualifying air-handling units have passed the strictest standards for noise, efficiency and performance — and can be incorporated in building schemes with the utmost confidence.

ABB Flakt also argues that buildings with this accepted level of air-handling equipment will be viewed more favourably by prospective tenants. Reader Reply No. 97