

European Airvent Technology

**NEVER BEFORE
SEEN**
TECHNOLOGY
ENERGY-EFFICIENT
AND
COST-EFFECTIVE
SOLUTIONS
FOR HVAC-SYSTEMS

GREENER
HEALTHIER
SAFER



DNV-GL APPROVED

ISO 9001 APPROVED

FIREPROOFED



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An investment in our coating and cleaning technology is a small cost with a fast return on investment and a high profitability. Within a few years, our customers save money.

Henning Jacobsen, Head of Sales, E-AT

”

WHAT IS IN IT FOR YOU?

REDUCED OPERATIONAL COSTS AND A GREENER PROFILE

► **Fast return on investment**
Save money after just 2-3 years

Our coating technology reduces the operation costs of your HVAC-system by sealing and coating the pipes and reducing leakages. Based on most cases, you will save money after just a few years. Our coating technology comes with a low cost and a fast return on investment, promising a long-term profitability.

► **Efficient energy consumption**
Coat your pipes and lower your costs

Our coating technology will reduce your overall operating cost due to lower and more efficient energy consumption. By coating your pipes, you reduce leakages, meaning you save 15-25% on heating/cooling of your ship, resulting in lower fuel costs. Coated pipes are about 500 times better isolated than non-coated pipes.

► **On board implementation**
You can keep your ship in operation

It is easy and quick to clean and coat your pipes while the ship is in operation. Simply by closing down one section at a time, you can keep operating your ship while using E-AT's technology. 1-2 hours after the implementation, you can turn on the ventilation system as our technology is free of chemical- and toxic fumes.

► **Low maintenance, less manual labor**
Our robots increase longevity of ducts

Our technology is cost-effective, as we avoid many of the traditional costs of materials and labor. Our robots will clean the ducts, reducing the manual labor. Furthermore, our coating prevents and stops corrosions, resulting in an extension of your ventilation ducts with at least 20 years.





Save money while increasing the health and safety of your staff

► **Greener footprint**
Increase your green image and profile

At E-AT, we care about the environment and continue developing sustainable solutions. With our technology, you save the environment for tons of CO² every year, as your vessel become more energy efficient, without the use of any toxins and chemical vapors. Our coating's volatile organic compounds belong to the best category of indoor air quality.

► **Healthier working environment**
Keep your staff healthy and safe

Our coating technology is fire resistant and helps prevent and stop corrossions. It also reduces the spread of smoke and fire, increasing the safety of all employees on board. Additionally, as our coating seals leakages in the ventilation system, it also reduces the spread of virus and bacteria, improving the overall air quality.

FIRE RESISTANT

Approved as fire resistant in accordance with DS/EN 1361-1 2013 and DS428 (fire technical precautions in ventilation ducts)

Acts as a protective barrier between the metal and the corrosive environment, stopping future corrosion.

TOXIN RESISTANT

Suitable for use in environments where the ventilation is exposed to chemical fumes, such as maritime environments.

Tested in accordance with DS/EN ISO 2812-3, 2012

BRAND NEW TECHNOLOGY

A SIMPLE TWO-STAGE ROCKET TECHNOLOGY

We have developed our own technology, never before seen on the market, using robotics to clean and coat the ducts. It has never been easier to maintain your ventilation systems. We are the first on the market to offer coating of the pipes and we are also the first on the market using robots.

ECO Dust Finder™ Cleaning Robot

ECO dust finder™ is a cleaning robot, specially designed for use in ventilation systems. The robot comes as a set of two robots, safety wire, control unit, compressed air hose and filter. The robots have specially developed brushes to ensure that the robot delivers a uniform, high quality result so that the surface is free of flakes, rust, lint, gravel, dust and dirt before the coating process.

VentGuard SC50 Coating™

Our coating technology consists of a high performance sealant that closes holes and leakages in the duct system, reducing energy consumption and increasing longevity of the ducts. It is super binding with stretching capacity.

Our coating robot will apply a thin layer of sealant inside the pipes, which will make the inside surface of the pipes smooth, making it difficult for viruses, bacteria and dust to get stuck.

Coating Robot

The coating robot is a robot used to coat the pipes after the cleaning process. Coating inside ventilation systems require specialized equipment to ensure accurate results and a smooth surface throughout the coated area. Therefore, E-AT has developed brushes and nozzles that can be used on most of the popular application robots.

Did you know

that our **coating sealant** also **reduces** the layer of **grease covering** the **cooker hood**, resulting in a **lower risk** of **galley fires?**

Read more about our coating on our webpage: www.e-at.dk



BENEFITS OF OUR ROBOT

Great adaptability:

Can be adapted for use in all standard channels (round, oval, square, rectangular, etc.) from 80mm to 1250mm.

Cost-effective:

Can be implemented in existing channels, avoiding replacement costs, reducing downtime and disruption of daily operations.

Great stability:

Can work in both vertical and horizontal channels.

Security:

There is no need for scaffolding or for staff crawling in the canals. The operator can control our robot from a safe place.

Documentation:

Inspection, footage and quality assurance.



PRODUCT SPECIFICATIONS

VentGuard SC50 Coating

Voc: 5g/l

Surface dry: 20°: 2 hours

Recommended film thickness:

Wet film \pm 215 μ m

Dry film: \pm 120 μ m

UV-C light resistance:

100% resistant. Can work together with UV-C light, ensuring a complete system against bacteria and viruses.

PH resistance:

Tested in environments with a pH ranging from 3-12, our coating shows no degeneration or reduction in longevity. However, estimated coating performance will vary depending on type of chemical, concentration of fumes, their temperature, exposure duration and amount of moisture.

Please contact us for more information.

ECO Dust Finder Cleaning Robot

The standard model is adapted for use in all types of ventilation ducts (rectangular, round, oval, square, etc.) from 80mm to 315mm. The robot is also equipped with a spring system that allows the machine to pass up to 90° bending at even very small duct dimensions.

The ECO Dust Finder:

- Can reach up to 45 meters into the canal with no cleaning element
- Clean up to 5 meters per second (depending on conditions)
- Works equally well in vertical and horizontal ventilation ducts

Cleaning speed and cleaning power can be adjusted during operation.

Types:

ECO dust finder A080160:

Cleaning pipes from diameter 80 – 160mm

ECO dust finder A160315:

Cleaning pipes from diameter 160 – 315mm

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We do not use any toxic chemicals in our coating and cleaning technology, which makes it a healthier and a more environmentally friendly solution for our customers.

Jens Theilgaard, Head of Research and Development, E-AT

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BEST QUALITY GUARANTEE

With E-AT, you will always be in professional hands as our team consists of certified service engineers. We record the state of the ventilation system both before and after the process of cleaning and coating to ensure the best quality.

Our technology is an effective quality assured solution that is DNV-GL approved, ISO 9001 approved as well as fireproofed by The Danish Institute of Fire and Security Technology, ensuring that we live up to international fire standards and regulations. Furthermore, our technology is developed in cooperation with The Danish Technological Institute, who has performed a “stress test” of our coating:

They estimate a lifetime of more than 50 years - we guarantee 10 years.



Read more
about our products
on our webpage:
www.e-at.dk

CUSTOMER REFERENCES

WHAT OUR CUSTOMERS SAY ABOUT US

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Working with ventilation, we have seen the most. Recently, we came across E-AT; an eco-friendly company with revolutionary technology, long-lasting products and services with a fast return on investment.

E-AT's revolutionary and eco-friendly technology and coatings will be of great benefit to both our customers and the environment.

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**Dennis Christensen, President,
Dantech Group**

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Before coating our process pipes with E-AT's SC50, we usually had to shut down production and replace the pipes every two years due to corrosion, as parts of our production include chemicals such as acid and lye.

Now, we have been able to reduce the need for replacement to every 5 years, which is a major cost saving on materials and the re-qualification on equipment.

Besides the economic benefits, it also result in a healthier working environment due to less exposure to chemicals.

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**Lars Diedrichsen, Ventilation Engineer,
Xellia**

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Our client's pool ventilation system was undergoing heavy corrosion in the suction ducting due to premature failure of the original protective coating. E-AT was invited onboard and carried out extensive testing with both in-situ coating and pre-coated ducts, during the vessel's normal operation.

The testing was followed up several months later with excellent results and it was decided to pre-coat the pipes off site with SC50 to limit the interference with the passenger vessel's operation. A total of 300mtr and near 1000 accessories was coated and installed.

E-AT was exactly the partner we needed for this job: Proven quality, in-depth industry knowledge, quick turn around and very flexible.

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**Rune Markus Maltesen, Field Director,
LCL Engineering**



Check out
our YouTube
channel to **see**
our **robots** in
use

OUR VISION

TO ALWAYS CREATE UNIQUE VALUE PROPOSITIONS

At European Airvent Technology, our vision is to continue developing cost-effective, sustainable and environmentally-friendly solutions for renovating ventilation shafts, including fire resistant proofing.

With our technology, we aim to reduce the manual labor and hours, increasing the welfare, health and safety for crews on board all ships.

We have many years of experience in cleaning, sealing and coating ventilation shafts and technical installations, and we strive to become the global leader in the industry by applying cutting-edge technology and robotics with sophisticated chemical and nano solutions, always creating unique value propositions for all stakeholders.

WANT TO KNOW MORE?

Do you want to know more about our innovative, cost-effective and energy-efficient airvent technology?

Give us a call or send us an e-mail, we are more than happy to answer any questions.

GET IN TOUCH

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Website: www.e-at.dk

FOLLOW US





European Airvent Technology

European Airvent Technology is one of the world's leading creators of cost-effective solutions in cleaning, sealing and coating technology for air vent ducts.

E-AT consists of a team of well-trained technical specialist, who have more than 35 years of industry-specific experience.

With a clear strategic focus on the following core growth areas: Offshore and maritime, production facilities, residential buildings and office space.

Do you want to know more about E-AT technology? Feel free to contact us or go to our website.