



SYSTEMS AND SOLUTIONS
INDIVIDUAL COMPLETE SOLUTIONS

INDUSTRY SOLUTION

Industry:

Digital printing machines for cans and tubes

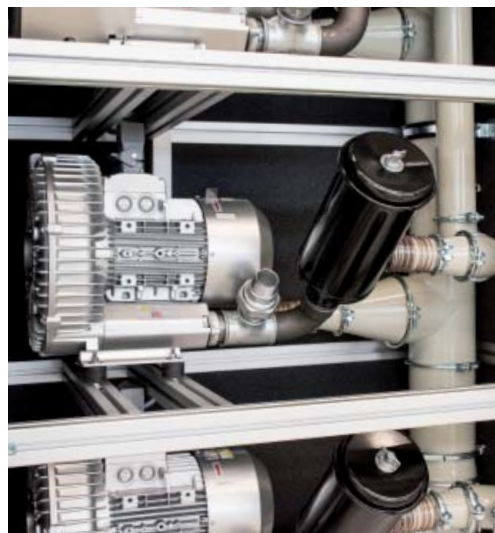
Project:

Development of a project-related system solution for a central air supply both on the suction and the pressure side.

The result is a compact and separate air cabinet that provides an assembly-ready electrical ventilation technology connection. The advantages here are the reduction of heat development and noise emission as well as easy maintenance possibilities.

Elektor's performance:

- Design of individual devices that meets the respective requirements
- Construction of the air cabinet
- internal pipeline design
- Execution and placement of the electrical and ventilation-related interfaces
- Cooling air calculation
- Complete "plug-and-play" delivery
- Approval of the air cabinet with measurements on site at the client's premises



AIR CABINET

Content of the air cabinet:

- Low-pressure ventilator 2D 052
- Medium-pressure ventilator RD 10
- High-pressure ventilator HRD 1 T FUK - 105/1.1
- Side channel blower 1SD 710 - 50/4.0
- Side channel blower 1SD 810 - 50/5.5
- Side channel blower 2SD 520 - 50/4.0

Technical data:

- Vacuum/pressure -355 mbar up to +500 mbar
- Volume flows 3.8 m³/min to 30 m³/min
- Power output 0.56 kW up to 5.5 kW



"Machines and plant manufacturers are no longer only looking for individual components. They are looking for a complete ventilation technology solution for their application."

Rainer Balle, Product Management



INDUSTRY SOLUTION

Industry:

Cleaning systems

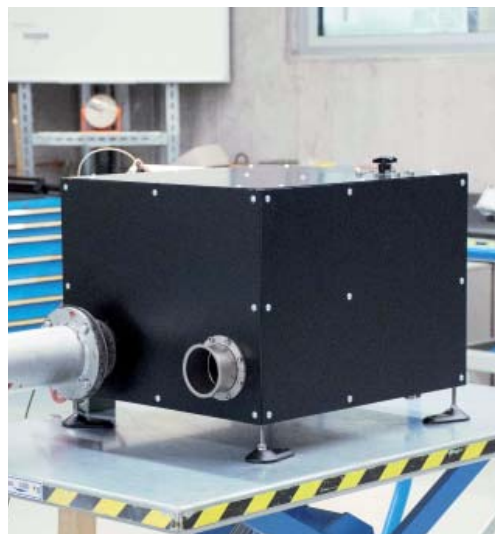
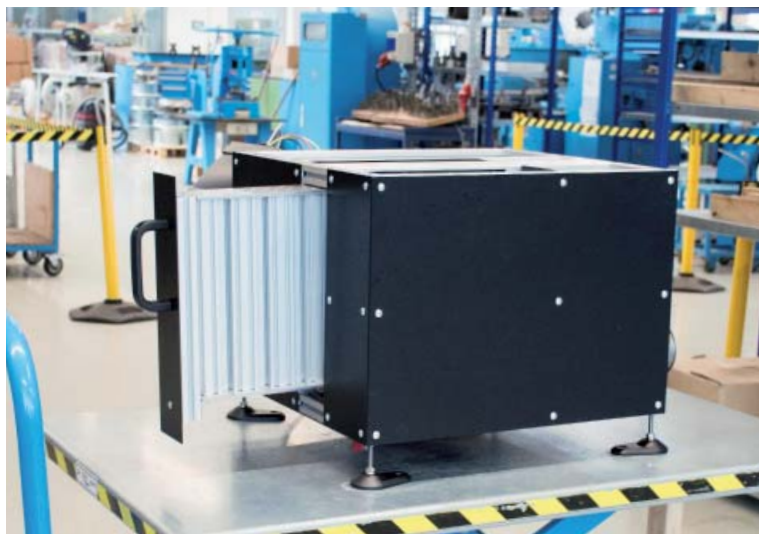
Project:

Development of a module used for the drying of parts.

An air heater is used to achieve a circulating air temperature of 170°C, which then dries the products using aerosol precipitation. The advantages of our solution lie in the energy and cost savings. The required heating capacity is minimised through the use of a closed circulation system. Thanks to its compact construction, the drying module can also be used in systems in confined spaces without a problem.

Elektor's performance:

- Design of the ventilator that meets the respective requirements
- CFD flow simulation
- Aerosol precipitator
- Construction air box
- Measurement in the lab
- Complete "plug-and-play" delivery
- Approval of the air box on site at the client's premises



DRYING MODULE

Content of the drying module:

- High-pressure ventilator HRD 1 T FUK - 105/0.75
- Tube air heater
- Aerosol precipitator

Technical data:

- | | |
|-------------------------|-----------------------|
| ■ Pressure | 5,500 Pa |
| ■ Volume flows | 9 m ³ /min |
| ■ Temperature of medium | 170°C |
| ■ Output | 0.75 kW |
| ■ Heat output | 8.5 kW |



"Whether you're looking for heat, ATEX or energy savings – Elektor offers solutions in a one-stop shop!"

Rainer Balle, Product Management



SYSTEMS AND SOLUTIONS

If the ventilator or side channel blower is installed correctly, you will enjoy energy savings and improved performance of the unit. That's why it is all the more important to install the ventilator into the existing system intelligently, so that it can provide maximum performance.

The factors influencing this performance are the pipes' diameters and lengths, bends and other resistance impacting the flow. Just like in an orchestra, each component of a system must be perfectly coordinated to the parts of the system carrying the air. The experts at Elektor have specialised in the optimal design and calibration of the components in such a system. The Elektor-specific knowledge regarding the construction and design of ventilation systems led to the decision to create the "Systems and Solutions" department.

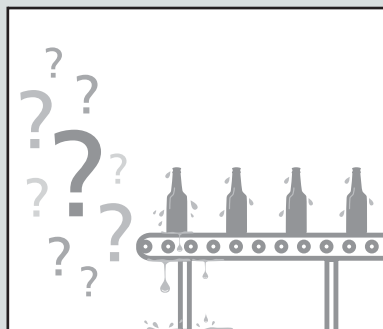
The objective is to create installation-ready and individual complete solutions that are coordinated to the system according to relevant requirements, based on decades of experience and close collaboration with customers in all industries and applications.

We handle all of the design and construction all the way to the installation-ready delivery of the complete systems and modules.

Whether you require installation-ready drying modules or an air cabinet ready for connection and equipped with various devices and functional units: The variance and the challenges associated with that are as versatile as the construction of machines and systems. Let us handle your ventilation projects in our hands and you will receive an energy-efficient system.

THE PRINCIPLE

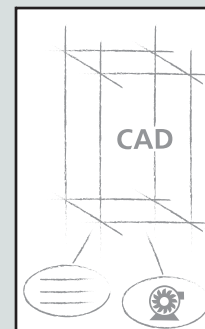
Step 1: PLANNING THE SYSTEM



Step 2: COORDINATION WITH THE ELEKTOR EXPERTS



Step 3: ROUGH PLANNING AND BUDGET



YOUR ADVANTAGES

The advantages of a system solution:

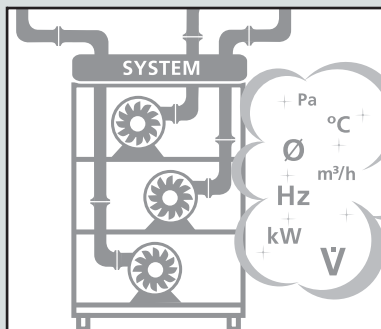
- „Plug-and-play“:
Installation-ready complete solution
- Individual:
Custom-tailored design of the system
- Cost-efficient:
Energy and cost savings
- Reliable:
We look after your ventilation technology
- „All-in-one“:
Solutions from a one-stop shop
- Professional:
Decades of practice in design and construction



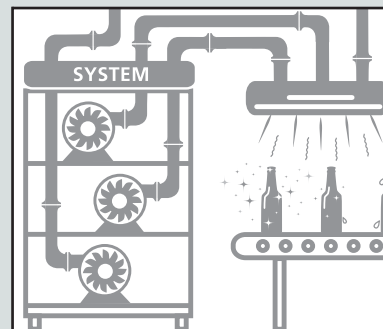
“No matter how highly efficient your ventilator may be, in the end it is all for naught if the air flow in the system has to be forced through pipes that are dimensioned insufficiently or past sharp edges.”

Stefan Dieterich, Product Management

Step 4: ENGINEERING AND MANU- FACTURE



Step 5: INSTALLATION-READY DELIVERY



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