

i.COOL SHEETFED

EFFICIENT WASTE HEAT MANAGEMENT:

Cooling Solutions for Heat Removal from Sheetfed Printing Presses.

www.cofely.de



BUILDING SERVICES

ENERGY SERVICES

FACILITY SERVICES

REFRIGERATION

OPTIMAL USE OF ENERGIES.

COFELY
GDF SUEZ

i.COOL SHEETFED

SPECIALIZED SYSTEMS FOR EFFICIENT HEAT REMOVAL FROM SHEETFED PRINTING PRESSES.

"The quality of our objectives determines the quality of our future." Josef Schmidt

More than three decades of experience in the printing industry combined with trend-setting expertise in systems and building technology have made it possible for Cofely to develop specialized systems for efficient heat removal from printing presses. These systems create the perfect working climate for people, materials and production processes in printing works. For many years we have been particularly committed to reducing energy consumption and environmental impact.

In line with these economic and environmental concerns, Cofely's i.Cool® systems provide constant temperatures during the printing process. They also help to guarantee the productivity of the entire process. Cofely assumes total responsibility for eliminating the heat from your printing process, starting with the design of the system, through to ensuring long-term operation and the lowest possible life cycle costs.

SUPERIOR SERVICE FOR MAN AND MACHINE

"Upgrade your press" is the slogan that epitomises the efficiency of the i.Cool® systems and services: Cofely will look after your equipment all over the world for its whole service life.

- You will receive detailed feasibility and ROI reports right from the design phase.
- Our technical service ensures totally efficient operation thanks to regular preventive maintenance and telemonitoring.
- Cofely Service is at your service 24/7 so that your equipment is always operating in a safe, economical and environmentally-friendly way.



Cofely gets involved with the creation of the perfect working environment for people, material and production processes in printing works.

i.COOL® SHEETFED – Solutions with System

i.COOL® AQUACENTER

Water for energy-saving cooling of printing presses. Ensure efficiency, reliability and top quality in your operations.

i.COOL® LEANAIRCENTER

Perfect ambient conditions for people, materials and machinery, at an attractive price. Flexible, modular assembly and low energy consumption.

i.COOL® VARIOAIRCENTER

Adjustable ventilation system for all production areas in your printing works. Optimum air changes, reduced dust and energy-saving heat recovery are standard. And we'll tailor the system to suit your particular requirements.

i.COOL AQUACENTER



AN OPTIMIZED CONCEPT

In recent years, the i.Cool® AquaCenter has become a classic in the field of waste heat removal from printing presses. Thanks to continual quality improvements it provides the perfect combination of economy and ecology. It is also extremely reliable. With the i.Cool® AquaCenter you can relax in the knowledge that your business will continue to enjoy top quality in the future, as it is always compatible with other Cofely products.

EFFICIENT AND UNIQUE

You will soon notice how using the i.Cool® AquaCenter lowers your production costs. By using water for heat removal, you can eliminate up to 50% of the

printing press waste heat from the periphery. Our i.Cool® systems work in a closed circuit, totally free of corrosion and contamination. Two independent refrigerators also provide fail safety. With this Twin Chill Concept (TCC) we guarantee a unique product.

PROVEN QUALITY

All components of the i.Cool® systems are set and tested for you before delivery. Under production conditions our highly-qualified engineers and technicians put the systems into operation. This quality management ensures that the system is tuned precisely to your printing press. In this way your print products are reproducible and print costs are significantly lowered.

Water for energy-saving cooling of printing presses. Make sure your operations are efficient, reliable and top quality.



i.COOL® AQUACENTER – Characteristics

TWIN CHILL CONCEPT (TCC)

- Lowers operating costs by up to 70 %
- Redundancy - two independent cooling circuits for increased operational dependability
- Hermetic dual-circuit refrigeration engine
- Reduced refrigerating agent content
- Connection pipelines between the separate components conduct water only

COLD WATER STORAGE TANK

- Longer lifetime of all components as refrigeration engine needs to be switched on less often
- Refrigeration engine operates at a consistent and optimum level

MAXIMUM EFFICIENCY

- Extremely low operating costs
- Compact dimensions
- Clean cooling tower with reduced water consumption due to conductance-controlled blowdown
- Long life cycle

AXI.COS® HIGH-TECH CONTROL

- Precise regulation and control
- Telemonitoring
- Remote service
- Control panel connection (optional)

OPTIMUM OPERATIONAL DEPENDABILITY

- International service organisations

i.COOL LEANAIRCENTER

PERFECT CLIMATE IN THE PRINT ROOM

The i.Cool® LeanAirCenter has been designed to maintain perfectly constant temperatures and optimal ambient conditions in the print room and post press. It offers the ideal solution to all the climate-related requirements of the printing process.

When designing this system, Cofely focused on achieving excellent energy efficiency thanks to heat recovery, simple installation, small size and weight and low noise levels. An unobtrusive air humidifying system is also available as an optional extra.

LOW ENERGY CONSUMPTION

For the i.Cool® LeanAirCenter range we use only components which meet international quality standards and state-of-the-art technology in order to ensure optimum efficiency and best possible reliability. Among the options is the user-friendly Eco-Mode, which allows the equipment to be automatically switched on and off.

HEAT RECOVERY

The optional Heat Recovery Pack allows surplus waste heat from the printing process to be used to heat the surrounding air. This can significantly reduce your heating costs and helps to protect the environment. Using the i.Cool® LeanAirCenter reduces the carbon footprint of your print processes.

Energy efficiency as a competitive advantage; compared to conventional technologies you can reduce your energy consumption up to 50% by using the waste heat from your printing press.





i.COOL® LEANAIRCENTER – The clean Solution

YOUR BENEFITS

- Increased productivity
- Lower operating costs
- Minimal maintenance costs
- Avoidance of reduced pressure
- Below MAK limits
- Space-saving
- Simple installation
- Attaches to the press
- Independent of the building
- User-friendly

COMPACT & EFFICIENT

The compact cabinet construction makes large air-conditioning plants superfluous. Air is fed in via the multi-functional air supply duct. This feeds in conditioned air without draughts and is based on our many years experience in the printing industry. All major components are located on the front of the machine in order to reduce the space needed for installation and maintenance. This means maintenance can be carried out very quickly. All functions are monitored and controlled by a microprocessor.

i.COOL VARIOAIRCENTER



CLEAN SOLUTIONS

The i.Cool® VarioAirCenter offers a professional remedy for all the typical ventilation problems to be found in printing works. Whether around the printing press or in the post-press area, our solutions always guarantee the perfect production conditions for people, machinery and products.

The modular components can be combined to suit every need.

PERFECT CLIMATE

Heat build-up and exposure to solvents and dust are things of the past. Cooling of supply air and circulating air adapted to your needs, optimised air changes and large filter surfaces ensure uniform operating conditions. This means you can increase your productivity, reduce costs and minimise fluctuations in product quality.

UNIVERSAL USE

The modular construction means that the system can be used in all print production areas. Your i.Cool® VarioAirCenter can be adapted to suit any location or technical requirements and its system components, primary air columns and Temcoil devices mean that it is re-usable at any time.

COST REDUCTION AND PROTECTING THE ENVIRONMENT

Care for the environment is one of our company's fundamental values. Alongside the responsibility we bear towards our generation and the generations to come, we are committed to developing products which meet our customers' needs. Using an i.Cool® VarioAirCenter will save you money because of its low energy consumption compared to conventional machines. Minimal loss of pressure due to short air ducts, the use of thermal updrafts to transport the air and waste heat from the machinery for heating in winter – all these are good for both your pocket and the environment. The i.Cool® VarioAirCenter can be combined with the i.Cool® AquaCenter.

i.COOL® VARIOAIRCENTER

ECONOMICAL AND ENVIRONMENTALLY-FRIENDLY

- Increased productivity
- Up to 50% savings on energy costs thanks to innovative solutions
- Reduction of printing costs on every run
- Meets all legal requirements
- Energy recovery by using production heat to heat the surrounding air
- Selective Air Supply (SAS) of primary air columns and Temcoil devices as required
- Healthy working climate for both man and machine

SPACE-SAVING AND FLEXIBLE

- Compact, stand-alone primary air columns and Temcoil devices
- Can be retrofitted
- Modules can be expanded or repositioned

CONSTANT, OPTIMUM OPERATING CONDITIONS

- Optimum ventilation, even for complex machinery or difficult locations
- Draught-free air intake
- Specially developed to meet the ventilation requirements of printing works
- Uniform conditions throughout all working and production areas
- Dust reduction and guarantee of perfect print quality

EASY ASSEMBLY

- Simple installation of components
- Short connection air ducts
- Can be installed by local technicians

AXI.COS® HIGH-TECH CONTROL

- Precise regulation and control
- Telemonitoring
- Remote service
- Control panel connection (optional)



Air for removal of heat from printing press. Circulating air for reduction of dust and heat recovery.

COFELY – EUROPE'S LEADING BRAND FOR ENERGY EFFICIENCY.

Virtually all areas of life require more efficient solutions when it is about dealing with energy - and this is a decisive factor of a company's competitiveness. Against this background, it makes sense to create service portfolios which are especially designed for this purpose. After the merger of Gaz de France and Suez to GDF Suez, one of the largest energy corporations in the world, Cofely, as European subsidiary, also merges the competencies of both companies in the area energy services and energy efficiency.

Cofely's mission is to be the one-stop shop which provides every customer with the exact kind of energy efficiency which they want and need.

Under the umbrella of the new European brand we now provide efficient technologies for machinery, buildings and refrigeration, along with energy production and distribution, commercial services and technical management. All these come together to create complete, tailored solutions which are good for both our customers and the environment.

The key is to have a breadth of expertise which covers all aspects of energy efficiency and which can justifiably be called unique. This is the foundation for Cofely's contribution towards optimising your business in three different areas:

- **Improving the efficiency of buildings and processes**

Design, construction, installation and maintenance of technology for systems and buildings – with special expertise in areas such as cooling technology, ventilation and equipment or building automation.

- **Solutions for local energy supply and production**

Design, installation and operation of the infrastructure, e.g. cooling and heating networks, combined heat and power plants, regenerative energy production and energy recovery.

- **Integrated services with guaranteed results**

Facility services, technical building management, energy supply contracting and energy procurement.

PROVEN COMPETENCE - TIGHTER NETWORKS – COFELY IN GERMANY.

Cofely has set itself the task of not only utilizing companies' primary and secondary energy in the most economical and efficient way possible, but also of working with our partners in the most energy-saving way possible. A comprehensive portfolio is the best way to run even complex projects in a responsible way, so that we can free up our customer's internal resources for other projects.



SYSTEMS TECHNOLOGY

- Technology for ventilation, cooling, sanitation, measuring, controlling, regulating, building automation, electronics and news, fire protection, energy, heating, pipeline construction
- Clean room and process technology
- Tailored technical infrastructure solutions for particularly complex applications, e.g. industrial manufacturing, laboratories or clinics, hospitals, nuclear power plants

FACILITY SERVICES

- Servicing, maintenance, replacements, warranty/incident/environmental management, technical, infrastructure and commercial building management

ENERGY SERVICES

- On-site energy and media management: production and distribution of steam, compressed air, heat, cooling and electricity
- Full-service contracting: total operations management, maintenance of technical equipment and management
- Energy supply contracting: cost reductions through energy-efficient technology and choice of primary energy suppliers

- Energy-saving contracting: design, financing, construction and maintenance of building technology retrofitting for guaranteed energy savings

COOLING TECHNOLOGY

- Cooling technology for industrial applications, open cold water systems, process cooling and special applications
- Cooling technology products: liquid chillers, cooling towers, heat pumps
- Cooling technology services: servicing, industrial and equipment services, maintenance, refurbishment, cooling equipment rental, training and spare parts

Cofely in numbers

- Representation in 20 countries
- 35,000 employees
- 8 billion euro turnover
- No. 1 in Europe for energy and environmental efficiency



CONTACT US:

www.cofely.de

COFELY DEUTSCHLAND GMBH

DIVISION AXI.PRINT

Zinkmattenstrasse 40
79108 Freiburg
Germany
Tel. +49 761 51003-0
Fax +49 761 51003-10



Head Office

COFELY DEUTSCHLAND GMBH

Duerener Strasse 403-405
50858 Koeln
Germany
Tel. +49 221 46905-0
Fax +49 221 46905-480

COFELY
GDF SVEZ