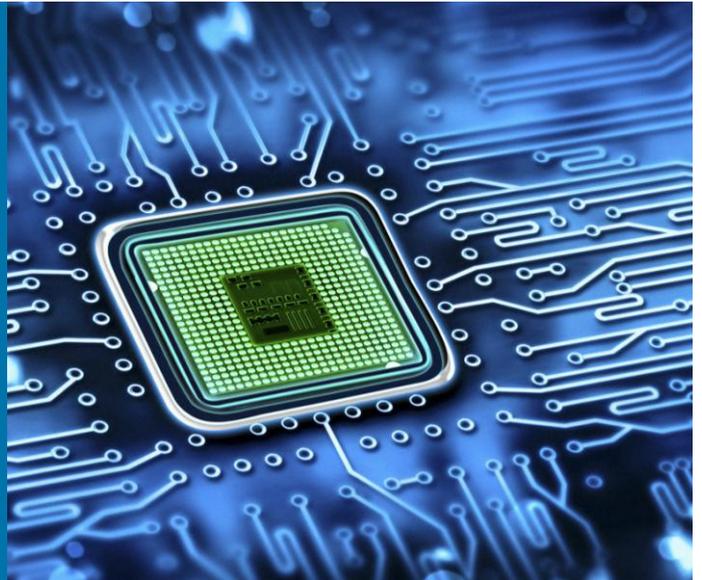


nexelia

for Cooling Systems

WE DELIVER:

- UP TO €20K/YEAR IN ENERGY COST SAVINGS
- UP TO 70T CO₂/YEAR FOOTPRINT DECREASE
- IMPROVED OPERATING EFFICIENCY



The Industry Challenge

As lead-free soldering becomes the global standard, the electronics manufacturing industry is looking for a more efficient cooling system within the soldering processes. This is due to the fact that:

- The process temperature is much higher with lead-free solders.
- Improved thermal insulation in the soldering equipment generates higher heat.
- The reflow ovens' length is already maxed out and cannot continue to be expanded.

In addition, the industry continues to require increased energy savings and reduction in CO₂ emissions.

Whatever your current needs, **Nexelia for Cooling Systems** will boost your existing system towards optimal efficiency.

The Nexelia Solution

A comprehensive gas solution designed for and adapted to your specific needs, **Nexelia for Cooling Systems** combines the best of our gases, application technologies and expert support. As with all solutions under the **Nexelia** label, we work closely with you to pre-define a concrete set of results, and we commit to delivering them.

A real-time automatic solution, **Nexelia for Cooling Systems** works by recycling the cold generated by liquid nitrogen vaporization back into your cooling system.

Nexelia for Cooling Systems was created specifically for the sectors within the electronics manufacturing industry that require cold.

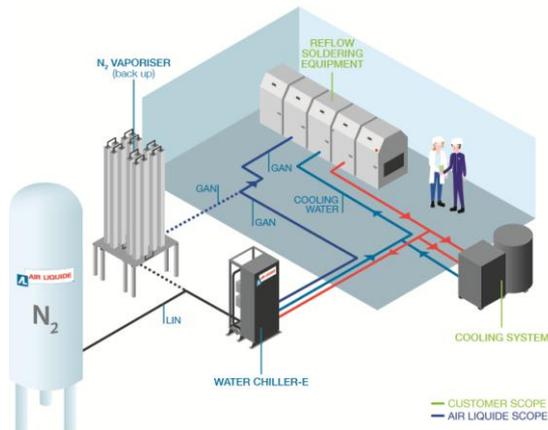
Your Advantages

- **NOTABLE ENERGY COST SAVINGS**
The WATER CHILLER-E is implemented close to the nitrogen bulk tank, so you can use the cold from the N₂ vaporizer and decrease your energy costs by up to €20K/year.
- **OPTIMAL OPERATING EFFICIENCY**
Thanks to the automatic exchange system between vaporization of liquid nitrogen from the Air Liquide bulk tank and your water cooling network, the WATER CHILLER-E maintains a constant gas temperature in the gaseous N₂ supply that allows for improved operating.
- **GREENER: CO₂ FOOTPRINT REDUCTION**
Decreasing electrical energy consumption in your cooling system results in CO₂ footprint reduction.

Core Features

The Nexelia for Cooling Systems consists of:

- **Nitrogen supply:** the liquid nitrogen storage requirement is meticulously calculated by our teams to ensure ongoing optimized activity within your cooling system.
- **The equipment:** WATER CHILLER-E is an automated exchange equipment which recycles the cold generated by gas vaporization back into your cooling system. The system, which plugs directly into your water cooling network, is suitable for reflow processes starting from a nitrogen flow rate of 50m³/h.



- **The full support of our application experts,** from the point of the solution's design, right down to its implementation and maintenance.

Case Study

CASE: Energy Savings and CO₂ Footprint Reduction for Two Customers

Results:

- Energy savings between €3-€20k/year
- CO₂ footprint reduction between 10 and 70T/year
- Customer A was able to rely on more constant N₂ gas temperature and icing risk diminution for the N₂ vaporization.

Parameters		
	Customer A	Customer B
Nitrogen consumption (Nm ³ /h)	50	500
Working hours (hours)	24	24
Working day (days/year)	360	260
Energy cost (€/kW)	0.16	0.15
CO ₂ footprint ratio (kg CO ₂ /kW)	0.566	0.566
Calculation		
Thermal energy recovered by the LIN vaporization (kWh)	6.2	62,5
Electrical energy saved (kWh)	2.1	20,8
Savings		
Energy savings (€/year)	3	20
CO ₂ footprint reduction (t/year)	10	70

Related Offers

- Nexelia for Reflow Soldering
- Nexelia for Wave Soldering
- DRY-P CABINET

Contact Us

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