

A person in a blue jacket is pulling a sled through a snowy mountain landscape. Three huskies are running alongside the sled, pulling it. The background features snow-covered mountains and evergreen trees.

THE TRIPLE

PACK

Providing highest availability.

°CELSINEO



**The DNA of a
leading European expert in trailer manufacturing**

For generations, the refrigerated semi-trailers from KRONE have stood for robustness down to the very last detail and for the highest level of economic efficiency.
The industry expert offers consistent performance through first-class equipment and a European-wide service network.



**The DNA of a
technology-driver in the area of thermal management**

Know-how that has been built up by many generations of engineers: development expertise in cooling and refrigeration are like a law of nature at Liebherr. After aviation and rail, the next step was into road transport.





Highest availability is the top priority

Tackling extreme challenges with CELSINEO.

Conditions are particularly harsh in temperature-controlled goods transport. Due to the events over the last few years, end consumers are now also aware of the importance of robust supply chains. Downtimes caused by cooling capacity failures and persistent labour shortages call for a reliable partner in cooling logistics.

Highest availability through technical reliability.

Making the impossible possible! In response to the needs of logistics providers, CELSINEO is paving the way for noticeable improvement thanks to a revolutionary idea. The economic efficiency of the cold chain is taken to a whole new level with the patented technology concept. Interrupted journeys due to malfunctions in the refrigeration circuit are now a thing of the past.





High performance with maximum durability

Continually providing new impulses: that's CELSINEO.

This unique product combines decades of market expertise from a trailer manufacturer and extensive technological know-how from a global cooling and air conditioning expert. When developing CELSINEO, the two companies, KRONE and Liebherr, created a pioneering class of cooling systems.

The two brands have a shared mission:

to continually set new impulses as CELSINEO has paved alternative ways for cooling logistics. Simplicity is a benchmark when it comes to usability.



Easy to use, quick to pull down, all at only one workshop

Sounds easy! And it is, thanks to CELSINEO.

The innovative technology allows the trailer to cool down to the required temperature very quickly. The panel on the outside was developed with ease of use in mind. User errors or language barriers are no longer an obstacle.

CELSINEO significantly reduces service costs.

If maintenance or repair work is required on the cooling unit or trailer, this can all be done in the same workshop. The 24-hour hotline locates the nearest service partner on the main routes in Europe. Thanks to the comprehensive service network, downtimes are minimised. It's that easy.



At home on Europe's roads

The refrigerated semi-trailer for extremely harsh conditions

Freight forwarders are extremely well equipped with trailers from KRONE. Stable, sophisticated and with many functional detailed solutions, KRONE Telematics offers maximum visibility of the position, status and temperature of the transport units.

The perfect conditions for all kinds of routes.

The intelligent door electronics are designed in line with the latest technology standards.

The stainless steel rear portal is compatible with loading bays and ramps.

The impact-optimised substructure perfectly withstands heavy loads.

The air duct is flexibly mounted and evenly distributes the cold air in the trailer.

The screwed Prall plate is designed for optimal maintenance and cleaning.

The aluminum floor pan is glued at the sides and welded to make it liquid-tight.

The solid chassis absorbs the exerted forces with ease.





The triple pack. For highest availability.

Uninterrupted trips thanks to three independent cooling modules.

Long, unanticipated downtimes belong to the past. Three independent cooling modules guarantee an uninterrupted journey. If one module fails, the other two maintain the preset temperature.

This CELSINEO principle offers a new level of planning reliability: enabling independence from previous manufacturers and cooling technicians. This increases the profitability of the trailer. And keeps everything running!

Why logistics providers can rely on the triple pack:

- | Complete temperature control – the goods are kept at a constant temperature.
- | Minimal downtime due to the fail-safe modular plug-in cooling system.
- | Less investment in vehicles leads to higher utilisation per cooling trailer.

Cooling unit status: reliable!

The CELSINEO centrepiece ensures highest availability.

CELSINEO cooling systems are a guarantee for superior quality and have been validated by numerous product and field tests to maximise cooling availability and reliability.

- 1 The three independent cooling modules can be controlled individually. Even if one of the modules fails, the other modules deliver continuous cooling capacity and therefore highest efficiency.

If repairs are required, the simple design of the cooling unit means that the module can be easily replaced thanks to plug-and-play.
- 2 The adapted cooling capacity of the cooling modules ensures a consistently stable temperature curve with simultaneous cooling and defrosting. Dreaded temperature peaks are minimised – the goods in the cargo area are always kept at the ideal temperature.
- 3 The highly efficient management of the electric components ensures highest availability of the battery.
- 4 Intelligent control and power distribution for diesel and electric operation – with fully-automated switch-over.
- 5 The panel on the cooling unit exterior is easy to use thanks to the intuitive colour touch display. It's as simple as a smartphone!





Impulses for the future

Technology, environment and innovative spirit are the three areas where we excel most.

Road freight transport is facing increasingly complex challenges – especially when it comes to alternative fuels and digitalisation. This is where the strengths of both CELSINEO manufacturers especially come into play.

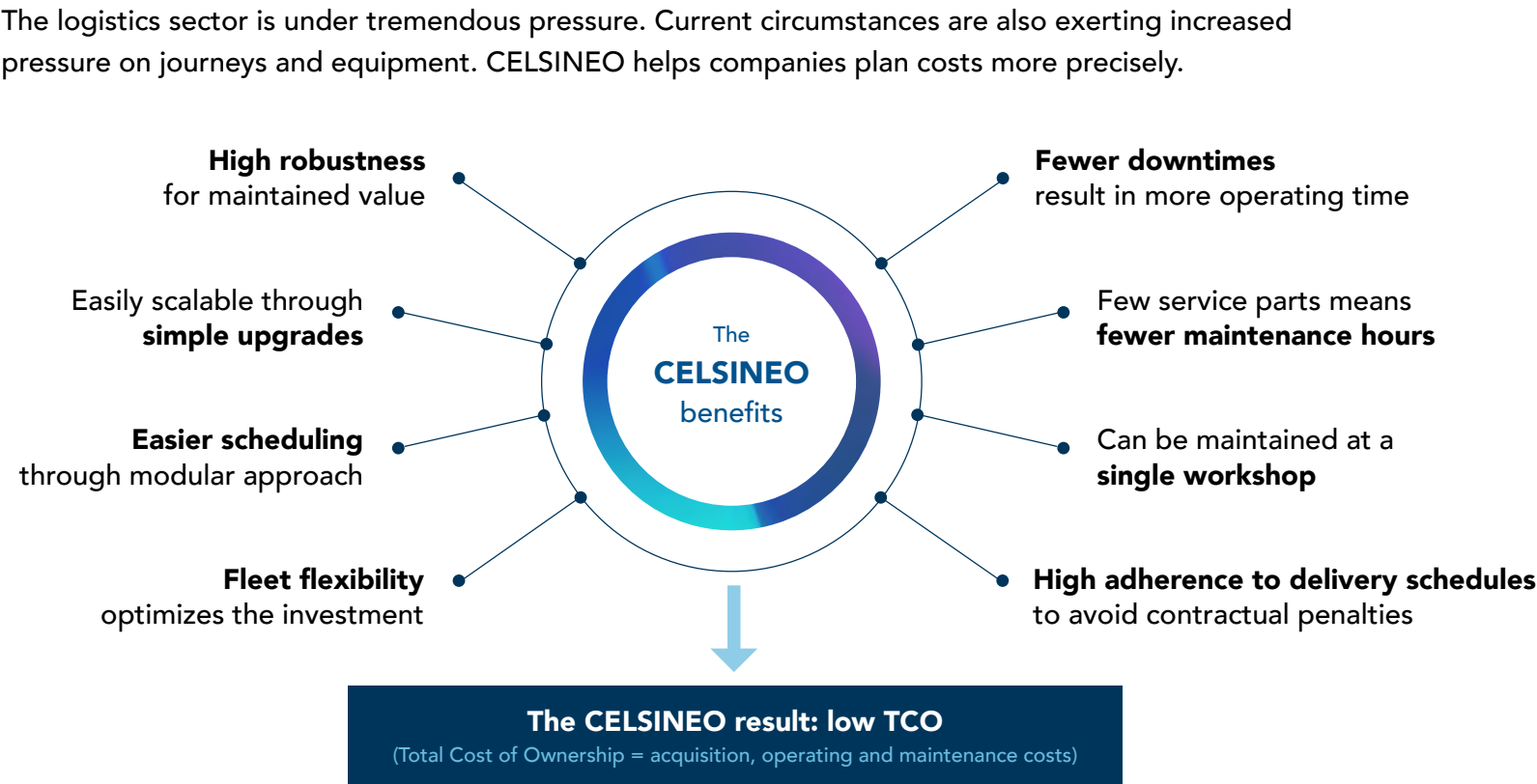
Electrification, telematics and over-the-air upgrades

These are not marketing buzzwords, but in fact actual product developments running at full speed towards their release. The transport sector needs new options for Europe's roads in order to make journeys as easily as possible in future.

Continuously creating new impulses for resource conservation, economic efficiency and comfort – this is the joint mission of Liebherr and KRONE.

Clever investment in capacity, time and customer benefit

Consistently low operating costs make it easier to plan the future.



One stop shop – no ifs and buts

Figures that guarantee seamless processes.

Over **300**

currently **certified service partners** along the main routes **across Europe**.

We are continually expanding our network.

74

KRONE contact persons in **14 countries** provide the best advice.

1 **shop for all works.**

The trailer and the cooling unit are maintained and repaired at the same site.

350 000

successful **operating hours**.

Yes! We're OPEN

Service-Hotline
7 days a week. **24 hours** a day.

+49 (0) 5951 209 903



A BRAND OF

LIEBHERR  **KRONE**

Designed for new impulses

Liebherr-Transportation Systems GmbH & Co KG

Liebherrstraße 1
2100 Korneuburg
Austria
info@celsineo.com
www.liebherr.com

Fahrzeugwerk Bernard Krone GmbH & Co. KG

Bernard-Krone-Strasse 1
49757 Werlte
Germany
info.nfz@krone.de
www.krone-trailer.com

www.celsineo.com

The CELSINEO 24-hour hotline

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