

Customised external gear pump for charging station technology

A successful partnership with innovative results



Success Story

innovatek OS GmbH

innovatek



The mobility of the future

HPC charging stations are a vital part of the mobility of the future. Modern HPC charging stations can achieve charging capacities of up to 500 kW. This significantly reduces charging times and allows for smooth long-distance travel.

What matters: efficient cooling

High charging power generates considerable heat in both the charging cables and the charging station electronics. innovatek places the highest demands on its thermal management for charging stations, relying on innovative components from AVS Römer to overcome the following challenges: Extreme temperature fluctuations, highly aggressive media, limited installation space, durability and reliability.



At a glance

The customer innovatek OS GmbH

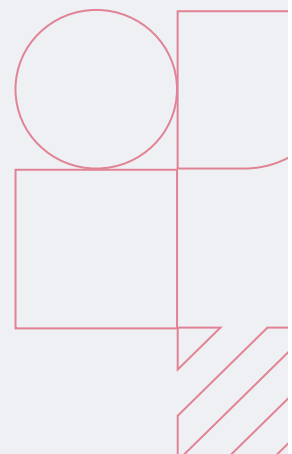
Since 1999, innovatek has been designing high-quality, high-performance cooling systems. In addition to industrial and medical cooling systems, the company develops powerful cooling solutions for the aerospace industry and e-mobility.

The project

Following the initial customer briefing, it was agreed that an innovative solution was needed. This could only be achieved through close cooperation and the bundling of expertise. A pump that can deliver cooling media with precision, reliably process highly viscous media, and fit into the specified installation space.

The requirements in detail

- ✓ Precise conveyance of cooling media
- ✓ Very compact design for maximum space savings in the charging station
- ✓ Individual customisation options
- ✓ Protection against overheating
- ✓ Suitable for highly viscous cooling media
- ✓ Pulsation-free and high dosing accuracy



The solution: the smartflow® external gear pump – expertise meets innovation

A key factor in the success of this project was the close partnership between innovatek and AVS Römer. Thanks to short communication channels and a high level of development expertise, a new flange version of the smartflow® external gear pump was created in just eight weeks, from specification sheet to sampling.

'An outstanding achievement – exactly the solution we needed.'

Markus Husterer, Managing Director of innovatek OS GmbH

The initial samples were extensively tested by innovatek in the company's own cooling units. The result: performance, noise emission and installation space all met the requirements exactly. In particular, maximum savings were achieved in terms of installation space. The required flow rate of 5,7 l/min was reliably achieved with the new flange version. Following successful testing, the pump went into pre-series production. Following approval, series production began in close cooperation with innovatek.

This project is a notable achievement in the collaboration between AVS Römer and innovatek – an example of innovative strength, speed, and partnership-based development at the highest level.



"The outstanding performance and customised adjustments of the pump make it the perfect solution for our application. We were also particularly impressed by the fast and smooth cooperation on all levels, which contributed significantly to the success of our project."

Markus Husterer, Managing Director of innovatek OS GmbH

The conclusion

The AVS Römer overall package, consisting of consulting, customer proximity and flexibility, stood out from the competition. The customer's requirements were fully taken into account and fulfilled. The specially developed flange version fits perfectly into the customer's distribution block thanks to its compact design.

In addition to the pump, innovatek relies on customised fittings and quick-connect couplings from AVS Römer.





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