Heat pump
reference case

Energy
Industries

Scout Motors South Carolina

To support Volkswagen Group's goal of achieving carbon neutrality across all production sites by 2040, Scout Motors has chosen a large-scale heat pump system by Everllence for its new electric vehicle plant in South Carolina. The solution will ensure sustainable heating and cooling across the 1,100-acre production site, leveraging ambient air as a renewable energy source. With a capacity of 25 MW, the installation marks a forward-looking blueprint for climate-friendly manufacturing in the U.S.

Everllence

Key facts

- End customer: Scout Motors (South Carolina, USA)
- Application: Heating & cooling for a new car manufacturing plant
- Scope of delivery: Two five-stage RH heat pump compressors
- Refrigerant: R1234ze(E)
- Heat source: Air
- Heat sink: Water
- Cooling / heating capacity: ~25 MW / ~15 MW
- COP heating / cooling: ~3.6 / ~3.0
- CO_2 savings: 1,330 t p.a.

Explore our landingpage →

Scout Motors South Carolina

Heat pump reference case

Project background

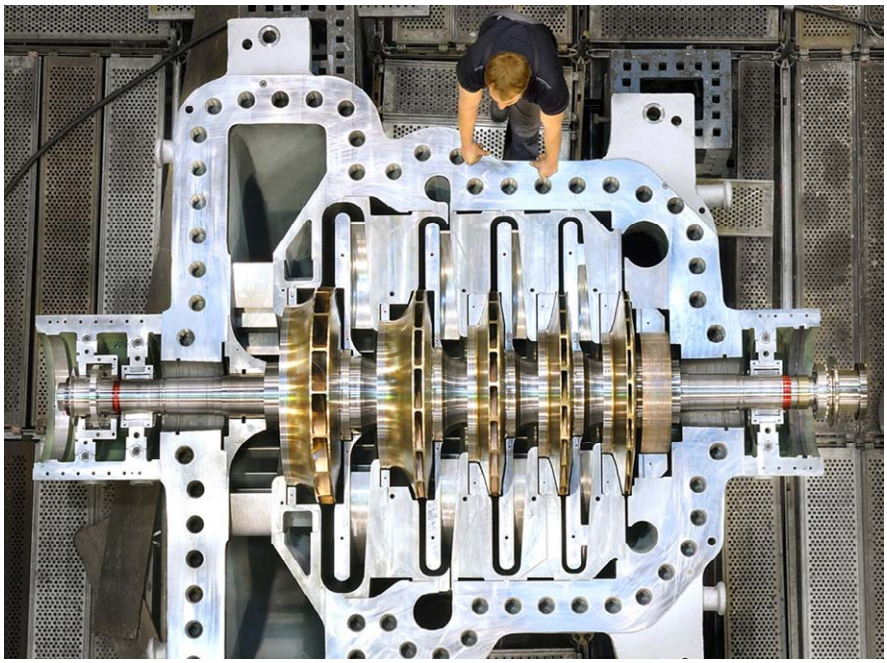
Scout Motors is building a new electric vehicle production facility in Blythewood, South Carolina – designed with sustainability at its core. To meet the site's substantial heating and cooling needs, Everllence is supplying a large-scale heat pump system. The solution supports Volkswagen Group's ambition to achieve carbon neutrality across all production sites by 2040 and reflects Scout Motors strong environmental commitment.

System integration & application

The heat pump system can deliver 25 MW cooling and 15 MW thermal heat. While one unit meets the heating demand in winter, both operate in tandem to support cooling during summer. The fully electric system adapts to seasonal loads and integrates seamlessly with the site's energy infrastructure.

Operational impact & scalability

The solution will reduce CO_2 emissions by ~1.330 tons annually and ensure energy-efficient operation year-round. With its modular design and adaptable control, the system sets a new benchmark for sustainable thermal management in automotive manufacturing and serves as a blueprint for future factory sites.



Cross-section of an RH71 compressor from Everllence

Technical highlights

Heat source	Ambient air
Heat sink temperature	Heating: ~45 °C, Cooling: ~7 °C
Total heating capacity	15 MW
Total cooling capacity	25 MW
Annual heat output	Up to 75,000 MWh
Refrigerant	R1234ze(E), a low-GWP and non-flammable refrigerant
Technology	Two five-stage RH71 compressors
Electrical input	Green electricity
COP	~3.0 (heating) / ~3.6 (cooling)
Annual CO_2 savings	Up to 1,330 tons

Everllence
86224 Augsburg, Germany
P+ 49 821 322-0
info@everllence.com
www.everllence.com