

BHTC product portfolio

Innovations driving the business

Climate control and thermo management for all leading car manufacturers

Young, dynamic, successful, and, different from many other companies in the new economy: lively, healthy and ready for growth. This is the character of Behr-Hella Thermocontrol GmbH (BHTC), Lippstadt. The company was founded in 1999 as a joint venture by Stuttgart specialist for car climatization and motor cooling, Behr, and Hella, Lippstadt, focused on automotive electronics and light systems. Today, BHTC belongs to the top league of global producers of automotive climate controls. In the automatic climate control segment, BHTC is the market leader in Europe with ca. 35% market share.

BHTC works for all leading European, Asian and American car manufacturers, such as the VW-Group, the Daimler-Chrysler-Group, BMW/Mini, PSA (Peugeot/Citroen-Group) as well as for system customers such as Behr, Valeo, Delphi, SAS, etc. BHTC develops new climate features for luxury vehicles like the new Mercedes S-Class, Audi A8 or VW Phaeton, as well as for cost-efficient, platform-based high volume production cars.

Climate controls with optimum handling

Electronic climate controls are the most important product group from BHTC. These devices are the interface between driver and car (man-machine-interface) and thus more or less the central “switchboard” used by the driver to control car climatization. The portfolio includes simple mechanical controls as well as semi or fully automated devices, which provide a comfortable climate in two, three or even four different climate zones. Common denominators for all operating elements are ergonomically tested knobs and buttons, clear icons and function symbols, and an easy-to-see night design, to ensure simple and intuitive control. Together with the comprehensive system of software know-how and devices (blower control units and electrical heaters), which remain invisible to the passengers, optimum climate comfort is provided under all conditions.

Hard- and software for climate control made by BHTC

Linear and cycled blower control units command the intended volume and intensity of air flow at all times. In winter, electrical auxiliary heaters produce additional heat to bridge the gap until the engine operating temperature reaches an adequate level. Sensors measure different parameters such as solar radiation, air humidity and temperature and report them to the climate control system. Based on these data, the climate control unit then produces the desired climate

automatically. Controllers for intelligent engine cooling supplement the portfolio.

Hardware – software – services: BHTC's breadth of performance simplifies the interface management for customers and creates synergies in the coordination of climate control, cooling circuit and control development. More than 80 patents in the areas of control and control algorithm, operating elements and sensors illustrate the impressive innovative power of the company.

Platform strategy – from the idea to Running Change

Appearance, feel, features, price and image make the difference with cars – but in fact, under their metal face, many car models use the same platform. Europe's largest producer of high volume vehicles, the VW-Group, implements this concept. BHTC has been their partner, from the first sketch of an idea and the development of tools, through to series production on specific manufacturing lines, including a comprehensive logistics system. Today, BHTC coordinates the delivery of climate control units for VW-cars to 13 VW-production sites in the world. Just-in-time.

Thanks to simultaneous engineering, BHTC cooperates with the car manufactures from the very beginning, when the profiles of a new series are being created. This cooperation continues during series production: Adaptions of current models, so-called „running changes“, demand high flexibility in production and software programming. Here BHTC benefits from its experience with platform strategies for customers such as Seat, Porsche, Audi, BMW/Mini, VW and Mercedes-Benz. Today, more than 20,000 climate control units are delivered to the customers from BHTC's production site – every day.

No air conditioning – unattractive

Part of BHTC's success is connected to a general change in global customer buying habits of cars: According to the economic research institute Global Insight, 76 percent of cars and commercial vehicles up to 6 tons in Europe are equipped with an air condition. In Asia it is 89 per cent, in the US even 99 per cent. Eastern Europe, India and China are important growing markets. In order to be near to their customers, BHTC founded additional locations for development, marketing, sales and manufacturing the US, China and India, which supplement the headquarter of the company in Lippstadt.

Comfortable climate from the climate specialist

Of course, climate control A and B are not the same. „It is easy to simply cool the car's passenger compartment air to a chilly, unpleasant temperature“, says BHTC Technical Director Friedrich Waldeyer. „However, to cool it in such a way that we

like to sit and drive in it, this really requires some skills.” An art which BHTC masters. The technicians and engineers understand that the climate senses of man are a highly complex system. A climate the driver may find comfortable might be unpleasant for his front or rear passenger. It is all about temperature, solar radiation and intensity, humidity, speed, volume and place of air flow. „All these factors – and more – play a role in the question of whether the car passengers feel good in the car”, adds Norbert Gruber, Management Director at BHTC. A perfectly aligned system of BHTC climate controls, electrical auxiliary heaters, blower control units and sensors provides the necessary conditions, to ensure that the passengers feel good in the car.