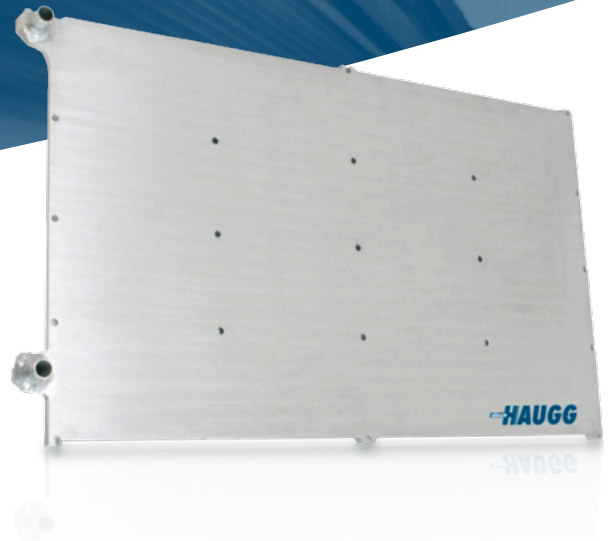
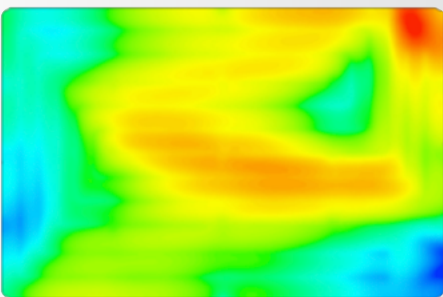


## COLD PLATES FOR HYBRIDS AND E-VEHICLES



## ALUMINIUM COLD PLATES – MOST EFFICIENT AT LOW PRESSURE DROP

THE HAUGG GROUP OF COMPANIES DEVELOPED HIGHLY EFFICIENT COLD PLATES FOR THE THERMOMANAGEMENT OF ELECTRONIC COMPONENTS LIKE FOR EXAMPLE INVERTERS (IGBT), BATTERY PACKS AND CONTROLLERS.



29.964 30.670 31.375 32.081 32.786 33.492

Temperature (°C)

CFD simulation showing surface temperature,  
maximum temperature difference 3.5K

Source: TheSys GmbH

The cooling requirements of electric and hybrid locomotives are extremely demanding, as the performance and lifespan of the electronic components is depending on their working temperature. If the working temperature is either too high or too low, the negative effects are important. Our cold plates keep the temperature of the components at the right level.

Due to the new construction a homogeneous surface temperature is achieved with a maximum spread of 3K at the contact surface. This outstanding homogeneity is achieved without losing cooling performance and without increased pressure drop.

Today two different types of construction are available: A welded and a brazed construction, which are easy to adapt to the available space. A homogeneous surface temperature at low pressure drop is achieved with both construction types.