

HELCS. Auto-Levelling System

The HELCS. (Hemscheidt Engineering Level Control System) serves as a means to compensate for height disparities between trams and the height of station platforms. It operates during standstill or at low speeds. such as when entering or leaving a station. The primary goal of the HELCS. is to provide passengers with a comfortable boarding and disembarking experience by minimizing the height difference between the tram and the platform. This is achieved through precise hydraulic adjustment of the tram's height.

The regulation process is based on sensor information that detects the floor height of the tram and GPS based information about the platform height. The HELCS. operates fully automatically. The system comprises hydraulic actuators fully integrated into the secondary suspension of the tram bogie, featuring integrated displacement and force measurement systems. These actuators are supplied by a hydraulic aggregate. The regulation is controlled by a central controller unit directly linked to the vehicle's central computer.



HELCS. Hydraulic Actuator

HELCS. represents a significant enhancement in safety and passenger comfort, streamlining the boarding and disembarking processes at stations.

HELCS. Features

- Integrated displacement and force measurement
- Stepless heigth adjustment
- Suspension integrated solution
- Push or pull version
- Optionally as hydro-pneumatic spring available

