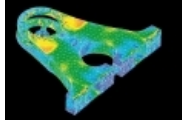


Engineering services



Comprehensive consultation

The design of an articulated bus has to meet high demands on the connection of chassis and articulation system. For that, HÜBNER GmbH offers comprehensive calculations and strength test analyses.

Based on drawings provided by the customer, we develop together detailed FE models in the IDEAS format. We test the design via force transmissions, filter weak spots and develop suggestions for improvement.

Depending on customer requirements, our consultation can extend up to the complete design of chassis connections, such as an individual part, component or as a 3D model (CATIA V5).

Concepts for the chassis connection of the front and rear cars

Together with our customer we determine the ideal chassis connection based on stress and load data and worldwide measuring. Generally, we design the connection to the articulation with the help of a 3D system (CATIA V5).

FEM calculations & strength testing

FEM calculations (Finite-Element-Method) enable us to realistically map our customers' requirements to modern products. We put special emphasis on the evaluation and documentation of stress and load factors within the tolerance.

Test drives to determine strain

We verify calculations by attaching the respective loads to the chassis. We use strain gauges in positions with particularly high levels of strain and match the test results with those of the FEM calculations. We determine the actual strain subsequently, with test drives and a static test setup. In this way we ensure that our products withstand any kind of stress, strain and load..

www.hubner-germany.com info@hubner-germany.com