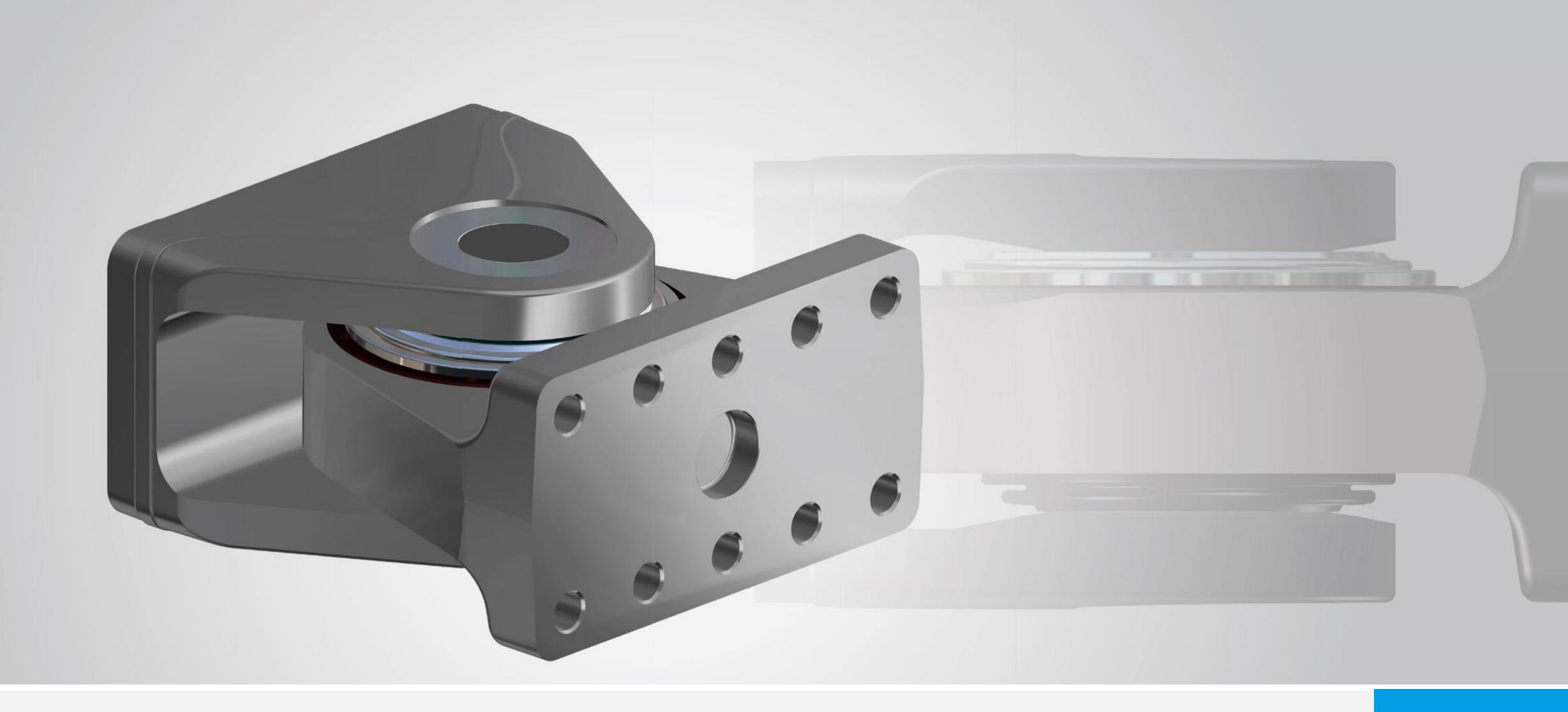
MAKING MOBILITY HAPPEN. today | tomorrow | together

HÜBNER EXPERT TALKS

HÜBNER ARTICULATION SYSTEMS: PERFECTLY CONNECTING RAIL VEHICLES

DIPL. ING. MATTHIAS HEIWIG
TECHNICAL OFFER MANAGER GANGWAY SYSTEMS AND ARTICULATIONS, DIVISION MOBILITY RAIL





HÜBNER ARTICULATIONS: PERFECTLY CONNECTING RAILWAY VEHICLES



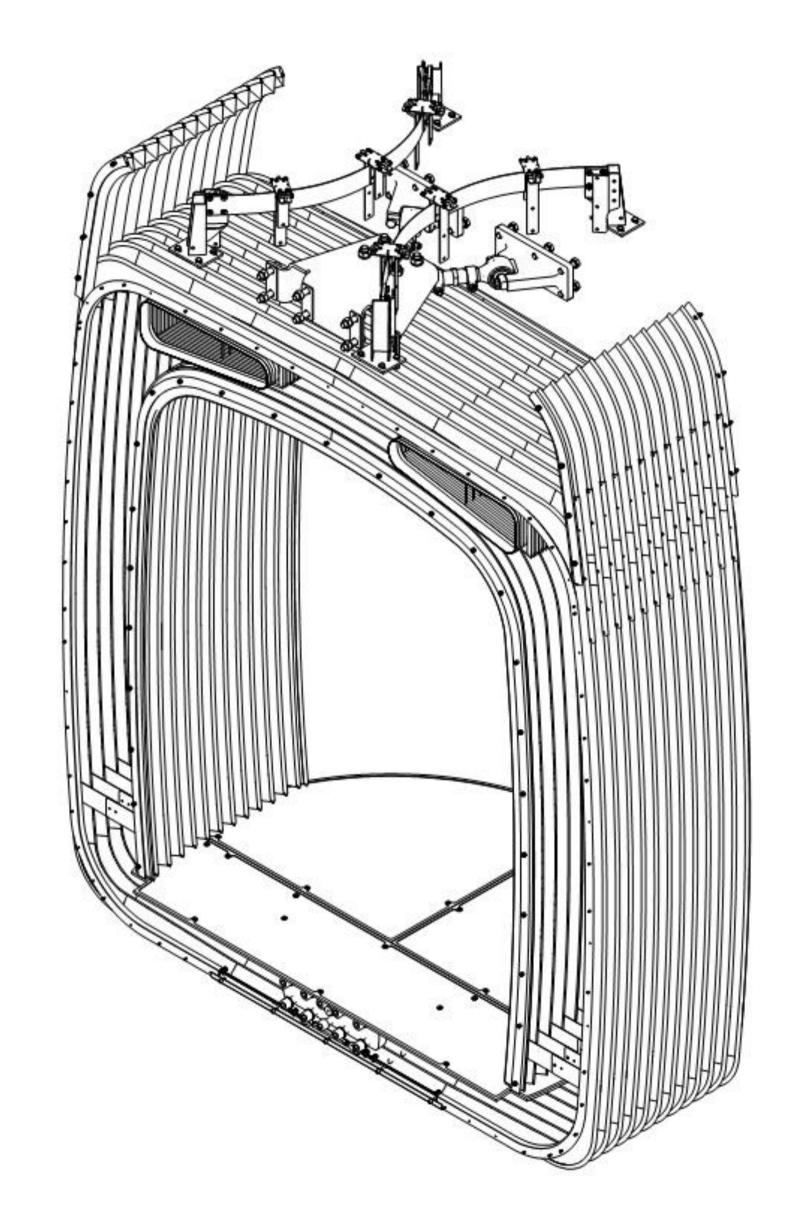
LRV VEHICLES

OVERVIEW



- Modern Low Floor LRV vehicles comes into service in several concepts using gangway systems with lower and upper articulations
- HÜBNER provides a wide range of products from single bellows to a complete system

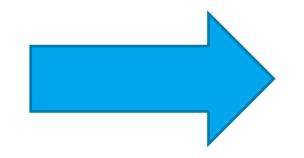


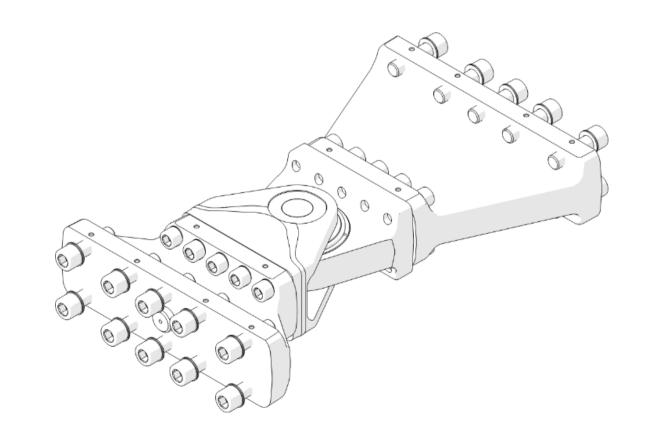


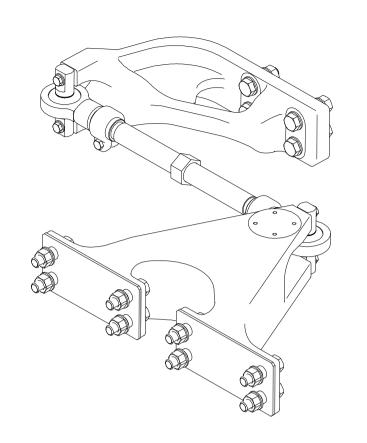
GANGWAY SYSTEM

LRV VEHICLES

- Gangway system
 - Bellows
 - Turntable
 - air ducts
 - energy guiding
- Lower articulation (spherical bearing)
- Upper articulation
 - hinge type
 - pitching type
 - rolling type



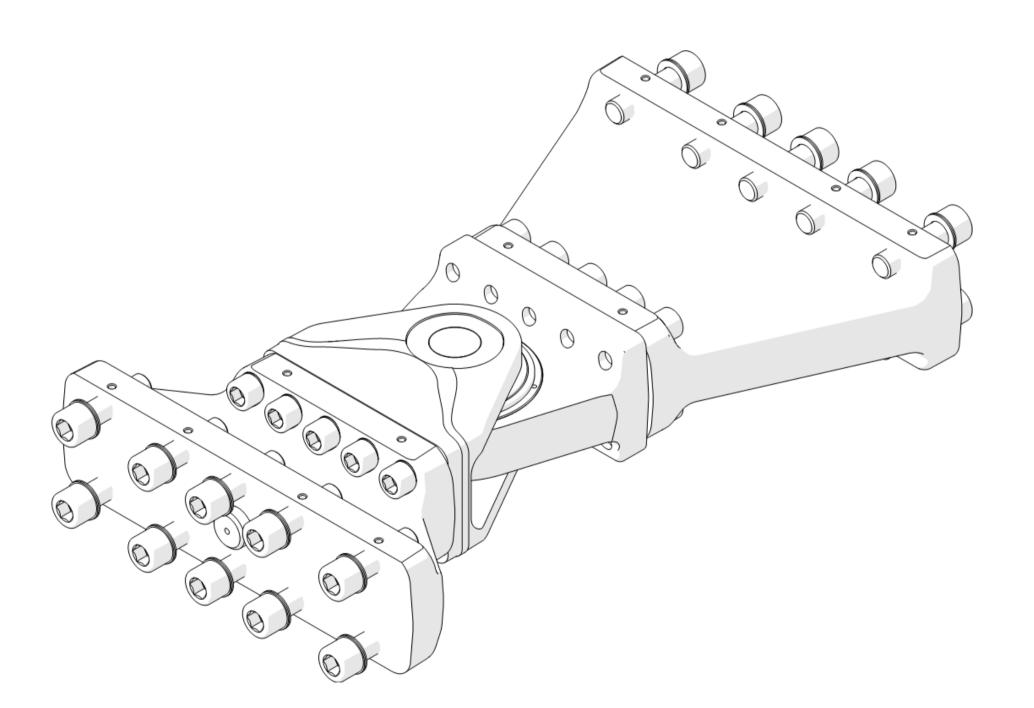






GANGWAY SYSTEM

LRV VEHICLES



Lower articulation:

- Forged material
- Core articulation satandardized
- Flexibel by using different adapters





LOWER ARTICULATION

FX 1000 PRO

- Forged parts
- Bearing inhouse produced
- Modified tribological system
- Maintenance free
- Optimized life-time
- Tested under load and in different environments



FX1000pro – PERFECT PRODUCT DEVELOPMENT

Optimized Eco Design

- Increased usage estimate only one change in vehicle life time
- 98 % of the mechanical parts can reused during overhaul

Optimized availability also for spare parts

- In-house production
- standard parts for different projects





HÜBNER PRODUCTS STAND FOR: SAFETY I HIGH QUALITY I COMFORT & CONVENIENCE I LONG LIFE

HÜBNER is certified: DIN EN ISO 9001:2015, DIN 6701-2, DIN EN 15085-2, DIN EN ISO 14001:2015, DIN EN ISO 3834-2, DIN EN ISO 50001:2011, ISO/TS 22163, NLF/ILO -OSH 2001 / ISO 45001:2018





