

12.5t Independent Wheel Axle product specification

Having started with the introduction of this technology in Europe more than 30 years ago, nowadays nearly all tenders for new trams and light rail vehicles (LRV) worldwide call for low-floor vehicles.

These vehicles need to be designed for high transport capacity. The new 12.5t Independent Wheel Axle is based on the proven and reliable **GHH®***V60* wheel type.

Key features

- Capability for axle loads up to 12.5 tons
- Dimensional chain resulting from car body width typically 2.5 to 2.65 m
- Layout for wheels inner distances in the range of 1355 mm to 1392 mm
- Optimization of installation space for the car body above the bogie
- Ability for high driving and braking performance
- · Easy maintainability and increased life time



Built upon solid foundations

The 12.5t Independent Wheel Axle is a modern upgrade of the **GHH®***V60* wheel type for high axle loads.

It is based on a one-piece, die-forged portal axle design and a pair of tapered roller bearings, adjusted optimally during assembly. The two independent wheel units (driven wheels) are mounted on the head pieces via internal rigid stub shafts and bearing systems.

Applied already in Turkey and Taiwan

GHH-RADSATZ supplies the 12.5t independent wheel axles to Durmazlar and Taiwan Rolling Stock Company for LRV projects in Turkey and Taiwan.



Technical features

- To accommodate the independent wheel axle in the bogie frame, the two head pieces are provided on the wheels inner face with two machined interfaces for the primary springs.
- There are two flange faces on each head piece for attachment of the bracket for the track brake.
- At each head piece a rigid stub shaft is provided which supports the resilient **GHH**[®]*V60* diam. 650 mm via wheel bearings of the tapered roller bearing type.
- To prevent any current flow through them the wheel bearings are current-insulated.
- Each independent wheel has an interface on the front side of the wheel hub for the later mounting of the gearbox output coupling.
- Each wheel unit is provided with an encapsulated earthing contact, protected against environmental impacts, and four current bridges for the current return to the wheel tyre.





