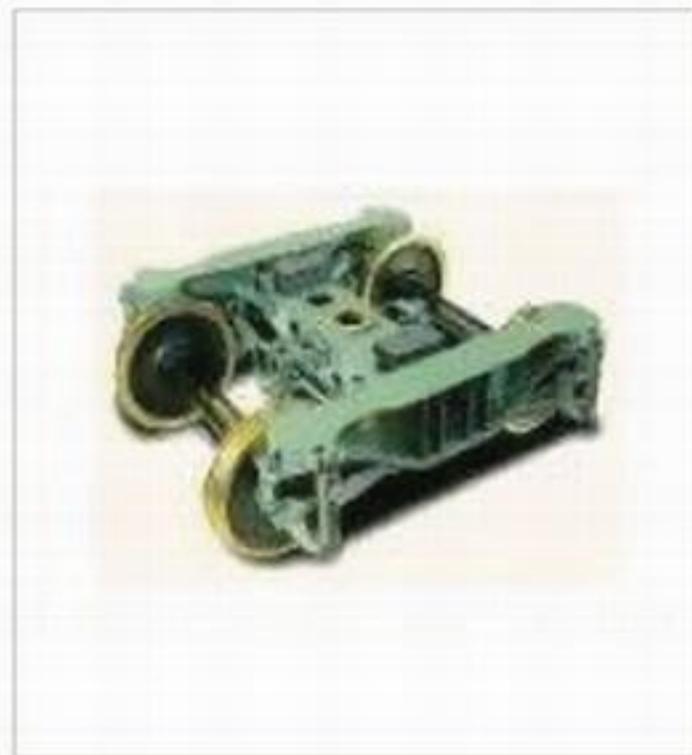


CKD Kutna Hora, a.s.

Karlovy Vary 197
284 49 Kutna Hora
Czech Republic



TF25 Track Friendly Bogie

- Axle Load: 25.5 tonnes (at 100 km/h)
- Track Gauge: 1435 mm
- Wheel Base: 2000 mm
- Wheel Diameter: 920/840 mm (UIC)/mm (UK)
- Width: 2625 mm
- Length: 2900 mm
- Weight 4.4 to 4.6 tonnes
- Maximum Speed: 120 km/h

axiom rail | TF25



- Reduced maintenance
- Track friendly
- Freight friendly
- Low noise
- Speeds of up to 120 KPH
- 25.5 tonnes per axle load

Axiom Rail is a company with an outstanding pedigree. One that provides a fresh alternative for customers in rolling stock services through Maintenance, Refurbishment, Components and Suspension Systems.

Axiom Rail is a supplier of innovative and adaptable rail freight suspension systems, operating throughout the UK and Nordic regions. All Axiom Rail designs are fully approved for use in the UK, Europe and Nordic countries.

Axiom Rail is a provider of engineering solutions for rolling stock, offering an all-encompassing package from design and production through to approval and installation.

TF25

The TF25 is an innovative hydraulically damped bogie for axle loads up to 25.5 tonnes and can operate at a maximum speed of 120 KPH.

Entering operations in 1999, two complementing suspension components make the TF25 distinctive - a soft primary suspension comprising of hydraulically damped coil springs and a stiff secondary suspension using rubber bonded side-bearers.

The TF25 has the following advantages:

- Low track forces producing low bogie wear and reduced maintenance
- Track friendly - low track wear
- Freight friendly - low vertical acceleration
- Low noise
- High speed of 120 KPH
- Relatively light at 4.4 tonnes with an integrated brake
- High axle loads of up to 25.5 tonnes - anticipating future axle-loads allowances

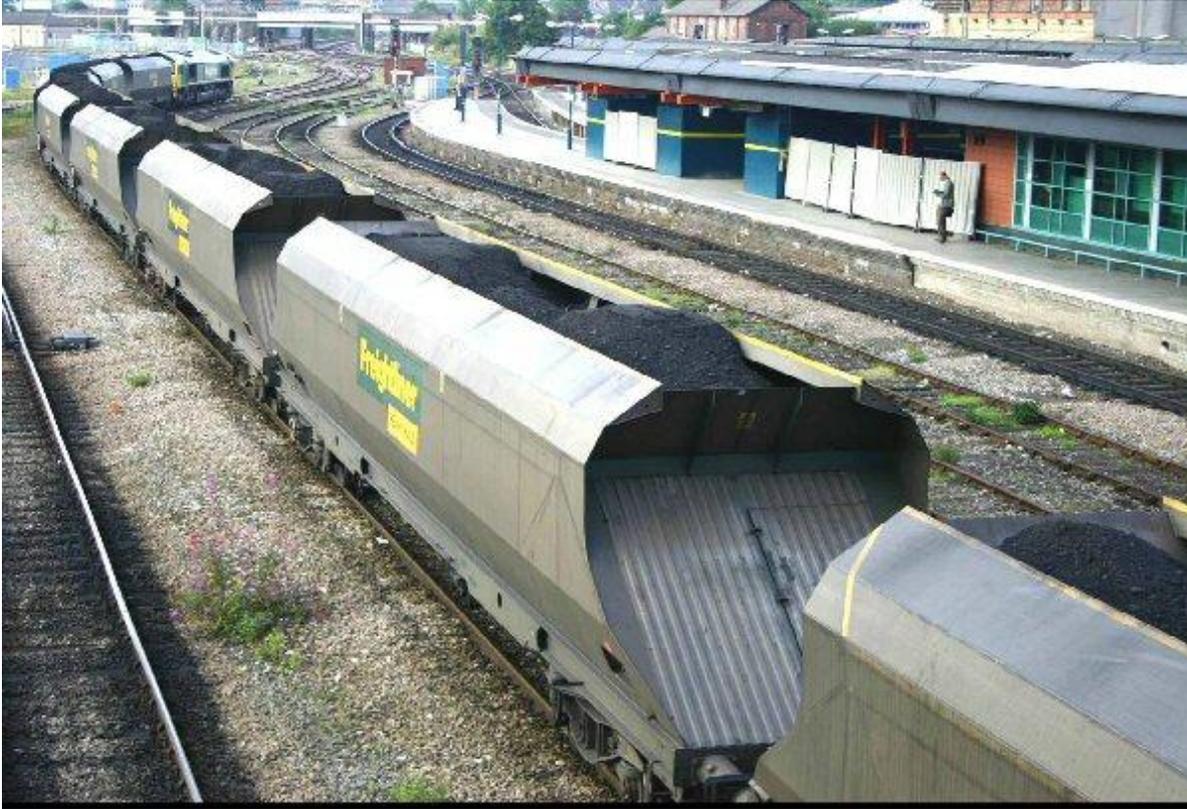
The TF25 is especially suited for new wagon designs and enjoys unrestricted approval in the UK.

Why choose Axiom Rail suspension systems?

- Low maintenance costs
- High axle loads
- Low noise
- High speeds
- Freight friendliness
- Track friendliness



HHA Wagon



Freight Operator

Freightliner Heavy Haul

Vehicle Qty	242
Consist	Wagon – formed in sets
Traction Type or Power Supply Type	None
Max Speed	60 mph loaded – 75 mph tare

Built at Wagony Swidnica in Poland, these wagons are modern bulk coal carriers, capable of moving 1,270 tons in a 17 wagon train. The bogies are the Powell-Duffryn “track friendly” PD TF 25, manufactured in the Czech Republic by CKD Kutna Hora Ltd. under contract to Powell-Duffryn. The body is constructed of stainless steel and the underframe of mild steel, with pneumatic equipment located under the end panels beneath the hopper overhang. The hoppers have a 50 degree slope angle, slightly steeper than the HTA used by EWS, and the wagons are longer, being 19.6 metres compared to 17.8 metres. Wagony Swidnica are part of the American Greenbrier group, who have extensive experience of wagon design and construction.