



MoComp Bogie SF7000

Platform for electrical multiple units

The bogie SF 7000 was developed especially for the UK market to equip regional trainsets for speeds of up to 160 km/h.

Infrastructure friendly and low LCC

The platform consists of two-axle air suspension trailer and motor bogies with a two-stage spring/damper system. Track friendliness is one of the basic characteristics of this bogie. This means minimum wheel/rail wear and low wheel/rail forces when negotiating curves. This characteristic is made possible by the combination of using inner bearings and a weight-optimized design. It was possible to keep down life-cycle costs due to the reduction in service and maintenance expenditure.

Exact height control and high comfort

Primary suspension comprises laminated springs of metal-rubber design with good self-damping characteristics. Axle guidance is affected by a link. The secondary suspension stage features air springs with coupled additional air volume, offering excellent ride quality. Optionally an electronic valve is used for air-spring control in order to minimize the air requirement of the spring and to achieve a higher accuracy of height control. A high level of passenger ride comfort is achieved by using a lateral damper and two secondary vertical dampers.

Easy exchange of wheelset and gear unit

All longitudinal forces between bogie and car body are transmitted via a center pivot. Traction is affected by means of lateral, fully suspended traction motors (fixed to the frame) each via a low-noise spur gear unit and a curved tooth coupling. By separating the coupling, the

complete wheelset/gear unit can be exchanged without having to dismount the traction motor. The traction motors are acoustically decoupled from the bogie frame.

Maintenance friendly brakes

The mechanical brakes in the motor bogie are designed as a shoe-brake unit acting on one side, offering advantages for maintenance. The brakes on the trailer bogie are disc brakes with 2 discs per wheelset.



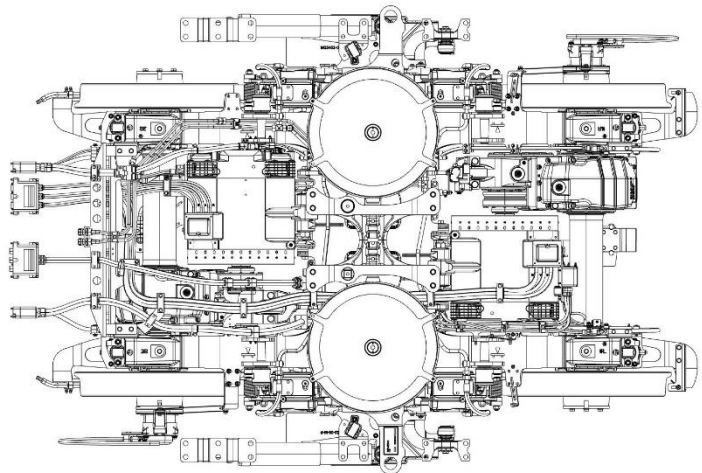
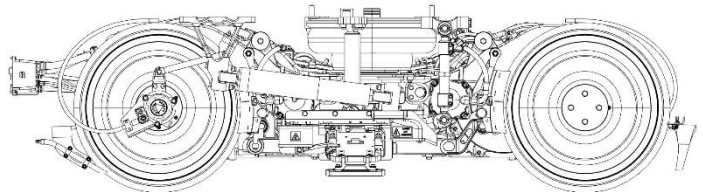
SF7000 bogie

Technical data SF7000

Bogie	Motor Bogie	Trailer Bogie
Running speed	up to 160 km/h	
Axle load (EN 13103)	up to 15,5 t	up to 14,5 t
Starting tractive effort per wheelset	n/a	
Continuous power per wheelset	n/a	
Wheelbase	2200 mm	2100 mm
Track gauge	1435 mm	
Wheel diameter new/worn	820 / 760 mm	
Smallest radius of curvature in service/workshop	120 / 90 m	
Weight MBG/TBG (with tread brakes)	approx. 5,8 t	approx. 4,1 t
Bogie height, connection to car body (top of air spring)	880 mm	
Traction motors	Partly suspended, air-cooled;	

References:

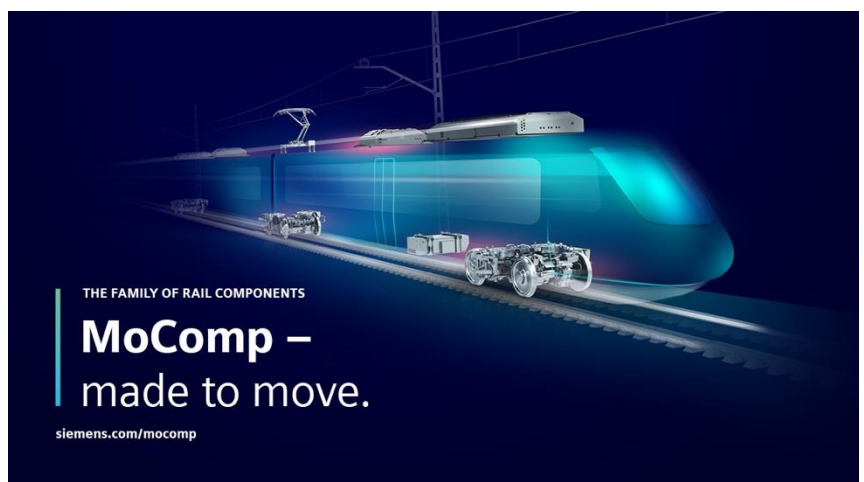
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