

MoComp Bogie SF 500

Bogies for high-speed trains

The SF 500 bogies are a further development of the SGP 400 bogies, 950 of which are in use on the ICE2 of the Deutsche Bahn AG. They are designed for electric railcar trains and modern high-speed trains and provide optimum ride quality.

Bestseller

Orders have been received from the Deutsche Bahn AG, the Netherlands Railways, the RENFE and many other operators for more than 6500 bogies.

Innovative lightweight designs

The modular design means that the SF 500 bogie can be designed both as motor bogies and as trailer bogies and can be fitted beneath car bodies with or without bolster. Bogie weight is significantly lower than that of comparable bogies due to the use of light-weight components. Extensive calculations on running characteristics led to this design distinguished by its optimum stability and ride quality values as well as excellent axle guidance behavior. A service proven link system is used for axle guidance. Laminated guides can also be used as an alternative.

Excellent riding comfort

The bogie frame is designed as a flexible, open H-Frame. Excellent ride quality is achieved in the secondary suspension system by the high-tech air suspension system and the provision of large air volume. The pivot, the yoke and the two traction rods are proven designs and like the concept of the ICE2.

Optimal running stability

Torque transmission from the lateral traction motor is

achieved by a partially suspended, low-noise gear per axle together with spiral-toothed coupling. Bogie traction motors are flexibly suspended in the bogie by a motor support structure and an innovative laminated spring damper system. Suspension is designed taking running stability and acoustic requirements into consideration. Redundant-type hydraulic yaw dampers are used to stabilize running behavior at high speeds.

Maximum braking power

The trailer bogies are equipped with a mechanical disc brake system with 2, 3 or 4 discs per axle and a non-wear eddy-current brake. On the motor bogie, wheel disc brakes are used.



SF500 bogie

Technical data SF500

Bogie	SF500
Running speed	up to 350 km/h
Axle load (EN 13103)	up to 17 t
Starting tractive effort per wheelset	up to 19 kN
Continuous power per wheelset	up to 500 kW
Wheelbase	2500 mm
Track gauge	1435 – 1520 mm
Wheel diameter new/worn	920 / 830 mm
Smallest radius of curvature in service/workshop	150 / 120 m
Weight MBG/TBG (with center pivot and bolster)	approx. 9,2/ 7,1 t

References:

ICE 3 – DB AG & NS

AVE S103 – RENFE

Velaro RUS – RZD

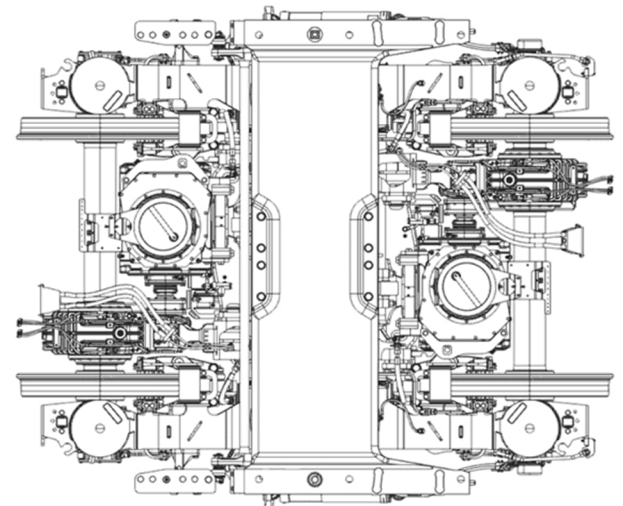
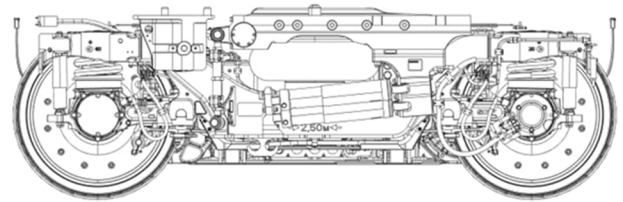
Velaro CN – MOR China

Velaro D / MS– DB AG

Velaro Eurostar

Velaro TR - TCDD

Velaro EGY Egyptian National Railways



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Published by

Siemens Mobility Austria GmbH

SMO RS CP BG&P

Eggenberger Straße 31

A-8020 Graz

Austria

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