

General description

SMBX7 bogie is a metro bogie type designed for 14 t axle load. The bogie combines best comfort and running safety. The design focus was to create a bogie which fits highest quality standard and technical features state of the art while using standard components and materials.

Technical features

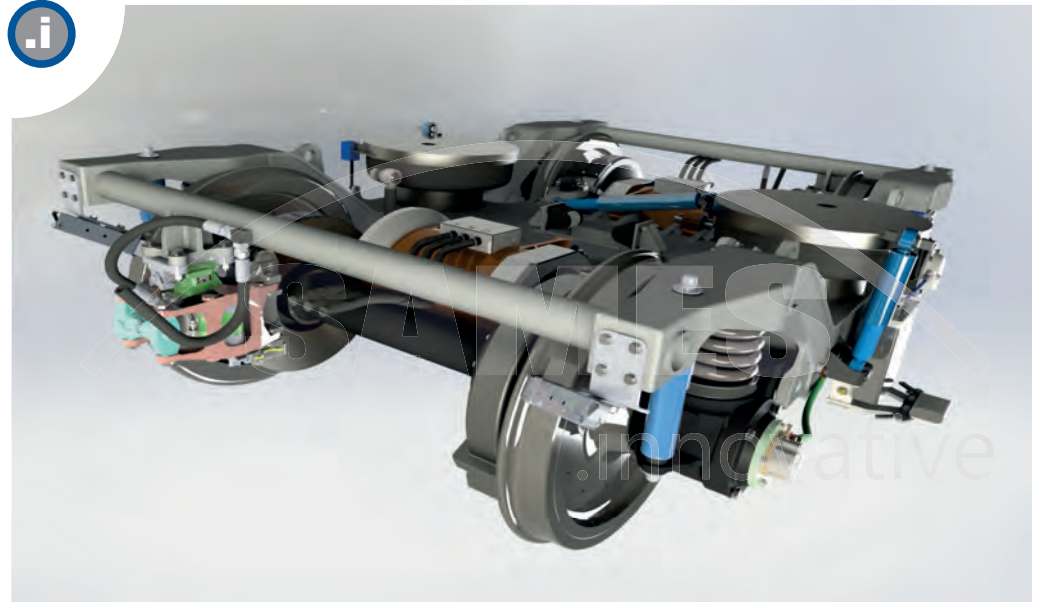
The new SMBX7 bogie is based on sophisticated bogie design technologies. A classical trail arm wheelset steering with short wheelbase combined with a heli-coil double steel spring and fluid dampers ensures a comfortable and save running up to high vehicle speeds, as well as low wheel wear. The wheelset is designed for an axle load of 14t. The wheels optionally equipped with sonic absorbers will be fitted in profile and width to customer's needs in a defined range. A propulsion system based on a fully suspended air-cooled traction motor with a semi-suspended single stage gearbox is placed on each axle of a motor bogie. The modern brake equipment consists of a pneumatic caliper fixed on each head beam of the bogie frame, with an axle mounted brake disc for highest brake performance. The bogie frame design is based on a O-shaped frame structure with a combination of welded sheet metal and casted parts. Stress relieving and high quality production methods ensure long lifetime of the bogie frame. With regard to high comfort the SMBX7 bogie is equipped with auto-levelling air-suspension systems with integrated rubber-element emergency springs. The secondary

suspension is completed by two vertical and one lateral fluid damper and an anti-roll bar stabilizer to fit strong environmental clearance and gauging requirements of a metro vehicle. The lateral displacement is stopped in center of cross beam by two rubber-metal bump stops, while longitudinal traction is transmitted by a center pin. The entire bogie is completed by anti-lift protection, wheel flange lubrication, anti-sliding protection and lifting rings. The classical and efficient design of the bogie leads to low

maintenance effort and high reliability.

Documentation

SAMES prepares all documents necessary for the local production of bogies at the customer. Welding drawings with respect to EN 15085, assembly drawings, quality control documents for the entire production process, as well as dimensional control data sheet, manuals for operation and maintenance being created.



Metro Motor bogie (3D-design)



reliable - flexible - .innovative

Customer

n.n.

Operator

n.n.

Scope

Metro bogie - motor and trailer bogie

Status of project

tender

Project size

>600 bogies

Project duration

2014-2018

Bogie characteristics

Gauge:	1435	mm
Wheelbase:	2200	mm
Wheel diameter:	860/790	mm
Max. design speed:	80 (+10%)	km/h
Weight (MB/TB):	~ 7000/5000	kg
Traction power (per bogie):	155	kW
Axle load:	14	t

Secondary suspension:	air spring
Primary suspension:	steel coil
Damping:	vertical/lateral

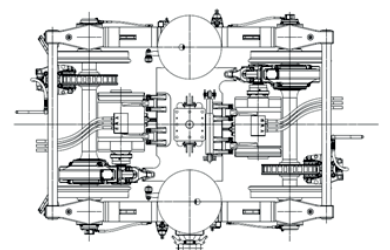
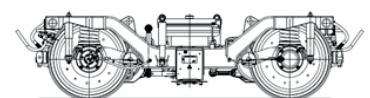
Brake equipment:	2 x axle disc brakes
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Standards (e.g.):
EN 14363, EN 15085, EN 13749, EN 15827, EN 50126,
UIC 513, EN 12299

Technical data is subject to change

Contact

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1435 mm gauge metro motor bogie