



.engineering BOGIES

- Consulting and Design
- Engineering and Documentation
- Structural strength and kinematic (MBS) analysis
- Running behavior (e.g. derailment safety) and stability
- Twist test and homologation support



reliable - flexible - .innovative

Project task

SAMES had been contracted by well-known railway vehicle supplier ASTRA Vagoane Calatori S.A. to develop new, but sophisticated and proven 100% low-floor bogie solution. The customer decided to SAMES engineers help, to meet the challenge of a tight project timeschedule. Using most modern computer based development methods (CAE) it was possible to define and release (design freeze) all main components for the procurement process very early in the design process. The frame design has been adapted to the needs and equipment of customers manufacturing capability, so to keep production cost as low as possible. SAMES prepared all documents for the customers local production of bogies; so welding drawings with respect to EN 15085, assembly drawings, quality control documents, as well as dimensional control data sheet, manuals for operation and maintenance. The reliable and innovative engineering process of SAMES in combination with the technological professionals of the customer ensures a high quality, safety and production on schedule.



Customer

ASTRA Vagoane Calatori S.A., Romania

Scope

Development of tramway bogie

Status of project

completed

Project duration

2014

Bogie characteristics

Gauge:	1435	mm
Wheelbase:	1800	mm
Wheel diameter:	600	mm
Max. design speed:	80	km/h
Weight:	4900	kg
Secondary suspension:	rubber (hourglass)	
Primary suspension:	rubber	
Damping:	vertical/lateral	
Brake equipment:	2 x disc brakes, MTB	