

x-road truck

MULTI-FUNCTION ROLL/BRAKE/ABS TEST STAND



Experience

The rapid development of control units in order to optimize the driving and braking behaviour of a vehicle leads to increasing test requirements to ensure function and quality of these systems. Such systems are e.g. ABS, ESP, ASR and driver assistance systems.

The objective of the test system development should be to create a system for this increasing complexity of test requirements which is suitable to comply with today's and tomorrow's requirements of vehicle testing. Reliability, easy operation and easy maintenance should also be granted.

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The solution offered by Dürr Assembly Products is x-road truck. The x-road truck combines the increased requirements to the test environment due to modern vehicle technology with a reduced complexity of the test stand and high-precision measuring technology.

- » Acceleration and deceleration tests
- » Tests of sensors in the vehicle (ABS, ESP, ASR)
- » Differential test
- » Retarder test

Tasks

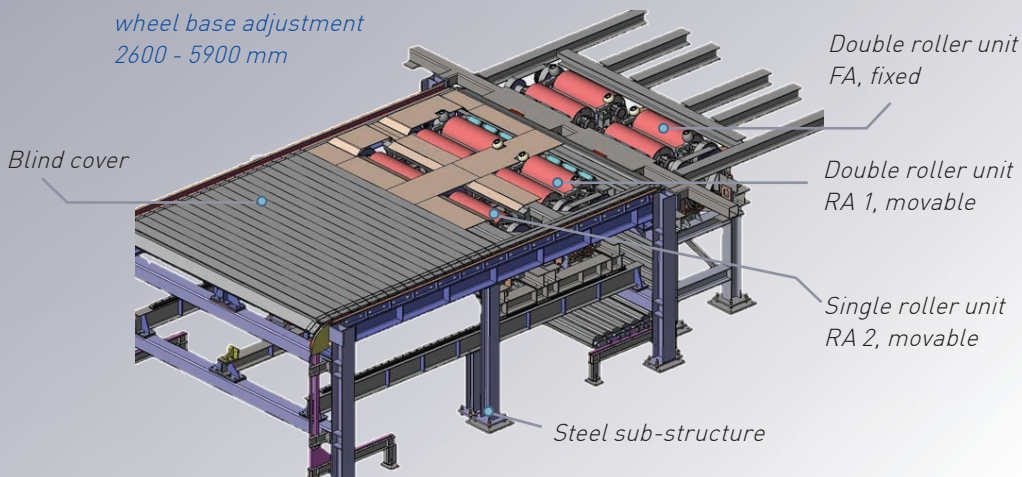
- » General function test of vehicle
- » Gearbox function tests (automatic and manual)
- » Tests of the vehicle's braking system

Environment

Due to the functionality of the energy recovery system which is integrated in each x-road truck, any surplus energy will be returned to the grid. This saves energy costs and has a positive effect on the CO₂ balance, too.

Technical data x-road truck

Max. test speed	100 / 120 km/h
Typical motor traction force for each roller set (55 kW motor / 75 kW frequency converter) (in relation to the roller circumference, $v = \text{constant}$)	$F_{\text{neff}} = 7100 \text{ N}$ $F_{\text{max}} = 17000 \text{ N}$
Accuracy of the speed detection (in relation to the roller circumference)	typical $< \pm 1 \text{ km / h}$
Max. difference speed, FA roller to RA roller - $v = \text{constant}$	$< 0,1 \text{ km / h}$



* The photos or figures of the assembly and testing systems in the flyer are not showing the complete installation. The requirements of the machinery directive (2006/42/EG) will only be met by other supplementary scope of supply or - on delivery of uncompleted machines - those requirements must be fulfilled by the manufacturer of the (complete) machine. Flyer x-road truck, Version D

