NEXT.assembly

x-brake

The flexible brake test stand

With the brake test stand x-brake function tests of the brake system are carried out. ABS functions (sensor test, valve test, etc.) are measured and evaluated at low speeds. The function of the parking brake is also tested here.

Vehicle and slip detection are performed via contact rollers.

The x-brake essentially consists of 4 roller sets, each with one load cell for measuring the brake force. Each roller set in the brake test stand is driven by a three-phase geared motor.

TASKS

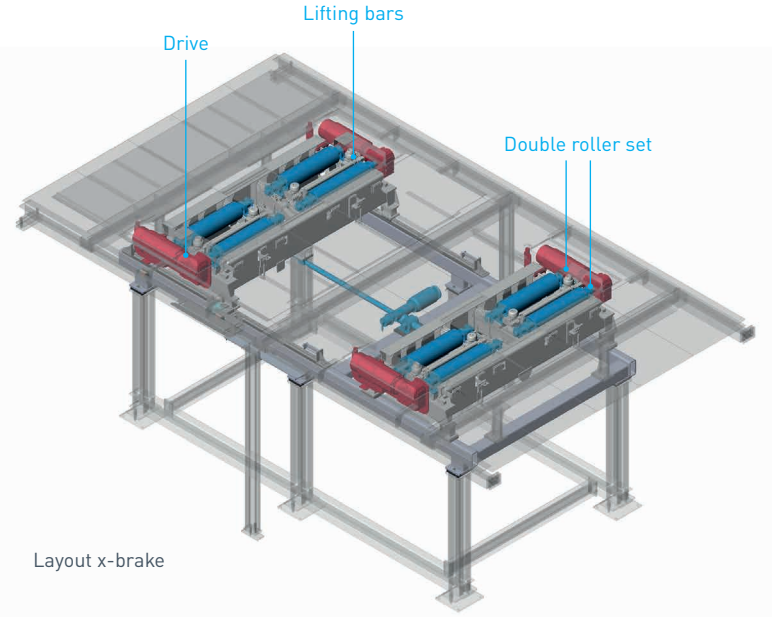
- Testing of front, rear and 4-wheel drive vehicles
- Measurement and evaluation of the maximum vehicle brake force at low speeds
- Parking brake function test
- Brake test (max. brake force)
- Brake force balance left/right
- ABS test at low speed

Technical Data

x-brake

VEHICLE TESTS

- ABS sensor – commutation test (with ECU communication)
- ABS valve – commutation test (with ECU communication)
- ABS sensor – quality test (with ECU communication)
- „Static“ brake test v-constant, driven by test stand
- Slip rate detection and control



Layout x-brake

MODULES X-BRAKE

- Double roller set with lifting bar on the front and rear axle to support the vehicle wheels
- 4 gear motors with brake to drive the double roller sets
  Optional: Frequency control of the speed
- Load cells on each roller set for measuring braking force
- Contact rollers for vehicle and slip rate detection
- Motorised wheelbase adjustment
- Optional: Transducer for hand brake and pedal brake force
- x-line automation system for control, visualisation and storage of measured, set and nominal values in a database and connection to higher-level hall networks

TECHNICAL DATA	
Test speed brake test	2,5 km/h
Test speed Sensor test (optional)	0 - 10 km/h
Max. test force	5000 N at 2,5 km/h
Max. force tolerance, static	+/- 2 % of final value
Colouring	According to Dürr Standard
Mechanical and electrical design (components)	According to Dürr Standard
Max. axle load	2000 kg

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