



Up to 20 T



Description

The **FRU 20 Heavy Vehicle Brake Tester** is designed to check the brake condition of vehicles **with a maximum axle load of up to 20 T per axle.**

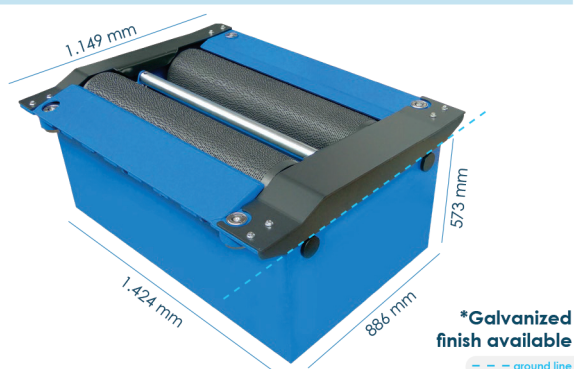
The braking force is obtained from the electrical signal provided by a strain gauge to the data acquisition system **in a 2-bench structure.**

The most significant information obtained is:

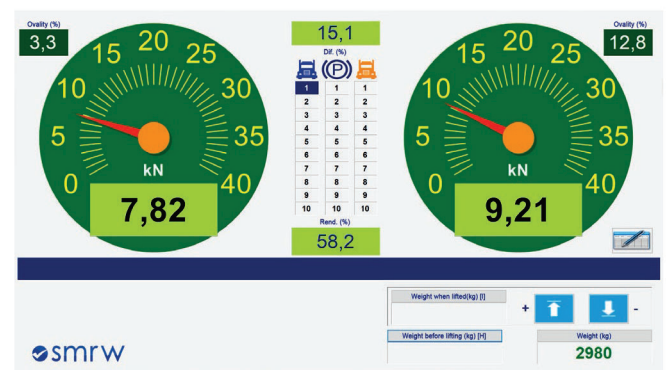
- ✓ Braking force on manual and pedal brakes
- ✓ Rolling resistance
- ✓ Ovality and weight measurement *optional**
- ✓ Hand caliper and tachometer *optional**
- ✓ Braking performance

Technical Data and Dimensions

Max load	20 T
Engine power (independent)	2 x 11 kW
Test speed	2.75 km/h
Max/min track width	3,100 / 850 mm
Voltage	400 V - 50 Hz
Protection fuse	3 x 63 A
Thermal protector	2 x 18 - 25 A
Roller Diameter / Length	282 / 1,135 (usable 1,135) mm
Distance between center	485 mm
Rear roller lift	50 mm
Dimensions and weight (per frame)	1,424 x 886 x 573 mm 1,150 kg
Adhesion coefficient	0.9 dry 0.7 wet
Measurement scale	0 - 8 kN / 0 - 40 kN
Step / measurement error	0.01 kN / 1%
Consumption	22 / 25 kW



Software



Standard Equipment

- ✓ Brake Tester
- ✓ Electronic control console + wireless controller
- ✓ Electronic control and SMRW software
- ✓ Motor soft starter
- ✓ Hardware and software for 4x4 vehicles
- ✓ Self-locking rollers for easy exit

Optional Equipment

Optional equipment	
	Side Slip Tester Integration kit
	Voltage stabilizer
	Axle weighing scale (8 load cells)
	230 V Power supply Three-phase
	60 Hz Power supply
	Hydraulic Group Cabinet
	Standard lifting system
	Tensile load simulation
	Foot pedal dynamometer + receiver
	4x4 freewheels
	Wireless pressure transducer 1 - 4 pcs.
	USB receiver up to 15 devices
	Sensor base/charger with alert
	Roller covers
	Calibration weight 10 kg
	Calibration weight 30 kg
	Heavy vehicles calibration lever



Lifting

The ISO 21.069 standard on Vehicle Technical Inspection distinguishes **two types of tests for braking tests on heavy vehicles on roller brake testers**: with full vehicle load or with partial load using the extrapolation method.

The Ryme Worldwide lifting system allows to implement the **full load simulation** system to make a **direct maximum brake reading**, or a **partial simulation** with or without lifting of the frames to be able to apply this **extrapolation method**.

This system allows to perform during the brake test:

- ✔ Apply to the braking system by extrapolation
- ✔ Weight measurement with the scale system
- ✔ Measurement of the pneumatic circuit of the brake system by means of pressure sensors



Maximum load	20 T
Power Supply	400 V. 50 Hz. Three-phase
Power of the hydraulic unit	3 kW
Maximum elevation height	250 mm
Number of cylinders	8 pcs (4 per frame)



Traction

The option of load simulation by traction **has been the traditional way** to simulate weight during brake testing of heavy vehicles.

Heavy-duty **hydraulic cylinders** are clamped to the chassis or axle of the vehicle and pull the vehicle until a suitable weight reading is obtained on the brake tester scale. There we can simulate:

The total load set by the MMA for that axle or a load sufficient to apply the extrapolation method together with the data provided by the scale and pressure sensors.

Features

Hydraulic Group	4 CV
Cylinder stroke	310 mm
Maximum traction capacity	15 T

