

The roller brake tester FRU4 is used to make a reliable evaluation of the condition of the braking system of a vehicle, light or heavy vehicle up to 20 tons per axle.

Its main task is to carry out a quick and efficient verification of the operation status of the braking control, accurately measuring the maximum braking on the front and rear axles, hand brake, as well as the existing ovality in the discs and drums of the braking system.

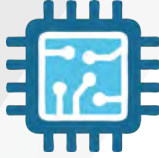
The two frames, one for each wheel on the same axle, are mechanically welded steel structures. Their design and the most demanding production and quality processes, give our machines robustness, reliability and longevity. Rollers are mounted inside the frames to ensure adequate adherence for successful testing. Their powerful motors drive the rollers and the force cells report the braking measurement continuously during the test.

A computer controls the entire measuring system and the operation of the machine. The control can be done by keyboard, mouse or remote control and the visualization is done by a highly intuitive software.


Max load per axle to the step	20 Tn.
Motor	2X 11 Kw.
Maximum Track Width	3.100 mm.
Minimum Track Width	850 mm.

Debido a la continua evolución de nuestros productos, las características técnicas y de diseño podrían estar sujetas a modificaciones, sin previo aviso.


Electronics




Latest generation processor
New high-speed processor
Increase the response and process of each vehicle test





Connections
Ethernet (TCP-IP) / RS-232 connection on the main board

ANTES 


AHORA 

RAM memory
New memory 16 times faster

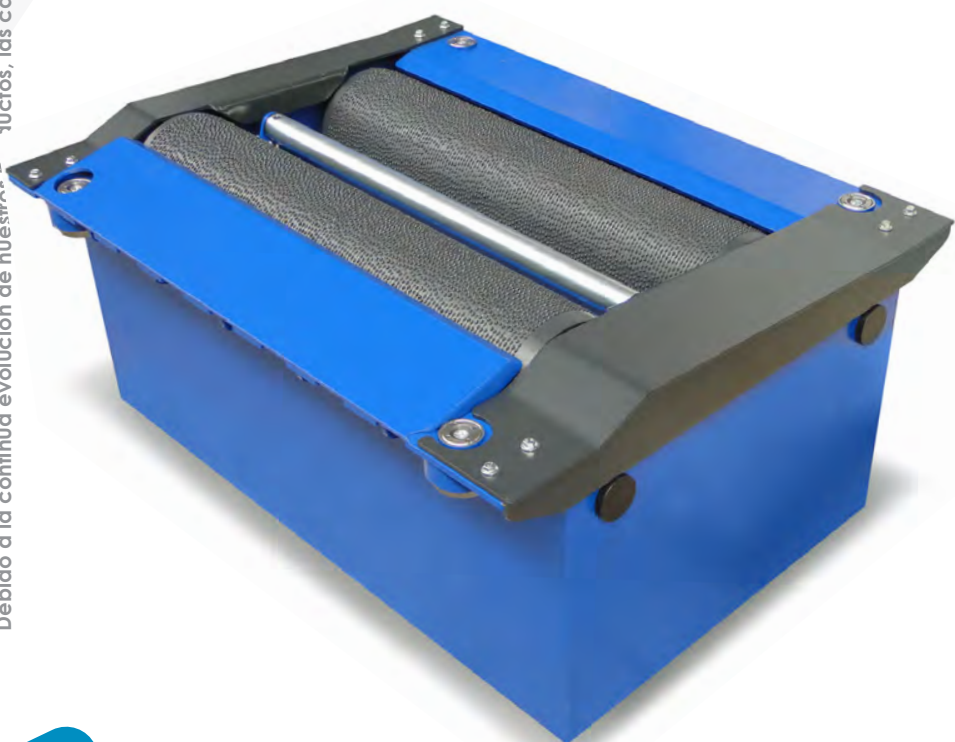
ANTES 

AHORA 

Flash Memory
New memory 4 times faster



Modular System
All electronics are expandable.
Specially designed for automotive and vehicle inspection centers



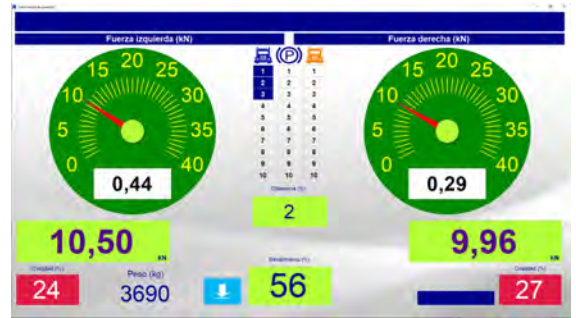
Brake tester adapted to the requirements set out in the revision of the manual for vehicle inspection centres, with reference to ISO 21069, on braking tests for heavy vehicles. This brake tester can be equipped with both load simulation and axle lift.

Standard Equipment

- Brake roller bench Universal
- Control cabinet
- Electronic control & software
- Electric blockage of rollers to facilitate the vehicle entry/exit
- Remote control for test control
- Rollers coated in welded steel or synthetic fiber

Software

- Automatic 4WD vehicle detection
- Sending and processing data and graphics in real time
- Possibility of sending encrypted data to the server using the AES encryption method (Advanced Encryption Standard)
- Braking lock difference less than 20 ms
- 100% compatible with management systems and databases
- Assigning permissions to different user levels
- Possibility of assigning the results obtained to a vehicle plate before or after each test
- Intuitive, simple and fast configuration software
- Graphical and numerical display of results
- Customization of the test duration to the minimum and/or maximum time to optimize working time
- Self test of auto-zero in the beginning of each test
- Very intuitive control software guided by graphic icons
- Automatic slip cut-off: new system for measuring the slip, the safety of the tyre is considerably increased, taking into account the performance of the engine in the lowering of the rolling speed
- Analysis of performance, ovality and differences
- Automatic start and stop
- Star-delta start / delayed start
- Common database (on network as well as in local mode) that's allows us to save all client and vehicle data and have easy access to them to be able to make comparisons between old and new tests.
- Translation module which the user will be able to translate the program into his own language or modify any sentence or word on it..
- Customized advertising on screen
- Test control by using a remote control
- Carrying out a test for each individual wheel for differential observation per individual wheel
- Automatic slip cut-off: new system for measuring the slip, the safety of the tyre is considerably increased, taking into account the performance of the engine in the lowering of the rolling speed
- Possibility of repetition and independent analysis of each wheel
- Possibility of automatic or manual start and stop
- Independent strain gauge measurement system for each wheel with the possibility of testing a single wheel
- Measurement display with error less than 1%.
- Manual entry of the vehicle weight
- Communication USB / RS232 / Ethernet (TCP-IP) Protocol
- Calibration software
- Software for automatic operation



Software



More Productive
Repetition of partial tests



Safer
Ryme application can encrypt data, make them safer



More Intuitive
Incorporation of graphic icons. RYME applications share the same menus..



More Compatible
Compatibility with more than 95% of the database management systems on the market today, ORACLE, SQL SERVER, Postgre, SQLite, etc. OS support for 32 and 64 Bits and with Android, Windows...



Online support
Possibility of remote connection from our technicians with your equipment
Consult conditions



More Reliable & Precise
Improvement in the process of calibrating the main board Allows the adjustment of the weighing and force calibration to very precise values.



Software adaptations

Possibility of analysis and study, under budget, for adaptation to new regulations in any region and/or country

Technical Data

Maximum axle load	20 Tn
Drive Motors	2 x 11 kW (S2)
Test Speed	2,82 km / h.
Track width max. / min.	3.100 / 850 mm.
Voltage	400 V. 50 Hz. Threephasic
Protection Fuse	3 x 63 A
Thermal Protector	2 x 25 A
Roll diameter	278 mm.
Length of the rollers Welding / Synthetic fiber	1.135 mm.
Useful length of the rollers welded steel / Synthetic fiber	1.135 mm.
Distance between centers	485 mm.
Lifting height rear roller	50 mm.
Measurement indication error	1 %
Friction coefficient (welding rollers)	0,9 dry 0,7 wet
Measurement ranges	0-8 kN / 0-40 kN
Range of measurement	10 N

Dimensions

Bench dimensions	1.475 x 1.150 x 680 mm.
Packed bench dimensions	1.500 x 950 x 800 mm.
Bench weight	1.150 Kg
Packed bench weight	1.200 Kg

Cabinet dimensions	680 x 570 x 1.350 mm.
Packed cabinet dimensions	850 x 760 x 1.600 mm.
Cabinet weight	120 Kg
Packed cabinet weight	150 Kg

Mechanics



Epoxy Paint

Powder-coated finish ensures optimal and long-lasting protection



Perfect Fit Assembly

Mechanical design using Perfect-Fit, which guarantees the assembly and perfect final finish on all our equipment



High adherence rollers

Roller coating with our own technology, which provides optimal adhesion even in adverse conditions and high durability




Strongest Gearmotors

Tested for durability to ensure optimum performance


Optional Equipment

		Multi-function wireless device, keyboard, mouse and remote control			
	AU- KIT	Side slip aligner integration kit			GEN-DPR Pedal dynamometer with wireless PC communication. Includes receiver.
	BSU-KIT	Integration kit suspension bench BSU			FRS -PR Wireless Pneumatic Pressure Converter (Unit) * Requires a GEN-PUM unit
	GEN-EIN	Computer equipment			GEN-PUM USB wireless receiver compatible with up to 15 computers
	GEN-IMP	Printer			GEN-SCS Docking station for pressure converters for 5 units Lost Alert Hardware and Software
	GEN-TD	Data display terminal			FRU -BAS Weight scale for vehicle axles (8 cells)
	GEN-STD	Second Data display terminal			GEN-230 Power supply 230 V. Threephasic
	GEN-SDP	Stand for data screen			GEN-60HZ Power supply 60 Hz
	GEN-EST	Voltage Stabilizer			FRU -2V (220 V) Two roller speeds 230 V
	GEN-230	Power supply 230 V. Threephasic			FRU -2V (380 V) Two roller speeds 380 V
	GEN-60HZ	Power supply 60 Hz			FRU -4x4 Control software and hardware for 4WD vehicles
	FRU -2V (220 V)	Two roller speeds 230 V			GEN-PGH Hydraulic group desk for load simulation/ lift
	FRU -2V (380 V)	Two roller speeds 380 V			FRU-STD Standard lift system. 8 cylinders (4 on each wheel)
	FRU -4x4	Control software and hardware for 4WD vehicles			FRS -SCH Hydraulic load simulator
	GEN-PGH	Hydraulic group desk for load simulation/ lift			
	FRU-STD	Standard lift system. 8 cylinders (4 on each wheel)			FRS-BOC Civil work frame
	FRS -SCH	Hydraulic load simulator			GEN-SSA Software for sending encrypted and non-encrypted measurements that guarantees the saving of the results of each test and their sending to the management program even in possible power cuts or other...
	FRU-EPR	Roller covers platform (2 units)			
	GEN-PES30	Calibration weight 30 kg			
	GEN-PAL3	Calibration lever			

Other versions

	FRU-KIT	Electronic box with software and mechanical frames Dimensions of the electronic box: 600 x 600 x 210 mm.
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Other Cabinet

	GEN-MC	PREMIUM CABINET Cabinet only Dimensions: 730 x 600 x 1.800 mm.
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