

WHO WE ARE



TecSA S.r.l. has thirty years of experience in the field of braking system testing laboratories.

Our activities include the manufacture of new machinery and the revamping/updating of existing test benches.

Over the years, TecSA products have undergone continuous evolution and updating:

- PC, latest generation electronic and mechatronic solutions
- Increased performance, along with ease of use and high production yield.

The automation level allows our machines to work in safely conditions even in the absence of the operators. The tests can therefore also be performed at night or during the weekends.

Several machines have been supplied for quality control and product development.

The main ones are:

- dynamometers for traditional and racing automotive sectors
- dynamometers for light commercial vehicle sector
- dynamometers for truck and railway sector
- FQT (Friction Quality Test) for quality control and/or aftermarket development
- SST (Shear Strength Test) for detachment of friction material from the backplate
- Compressibility
- Alternate torque

Thanks to the close relationship established with its customers, TecSA has developed procedures that meet both international standards (including homologation) and research needs, with high flexibility and the possibility of customizing tests.

- Sprinkling on brake: water, salt water, snow
- Regenerative brakes (electric and hybrid vehicles)



MINI DYNO AUTOMOTIVE BRAKE INERTIA DYNAMOMETER:



Model MD 50



Model TC 80

Brake
Inertia
Dynamometers
For Research
&
Development,
Homologations
And your
Special Test
Purposes

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Aderenti al modello Ex D.Lgs. 231/2001 (MOGC 2017)

MD 50

Dynamometer with a Single Flywheel

- Drag Test at 660 rpm
- Performance Tests on brakes, from bicycles to small family cars/city cars
- NVH Tests
- R&D: dust analysis, residual torque

.FEATURES

- DC Motor: 190 kW
- Max. Braking Moment (Torqueing Moment): 3000 Nm
- Max. Pressure: 200 bar
- Max. Speed: 2600 rpm
- Drag torque: 1993 Nm
- Inertia Flywheel: 30/50 kgm²
- Inertia Range (at 1g): 5-120 kgm²
- Inertia Simulation
- Modulated Airflow: max. 3000 m³/h

OPTIONS

- Climatic System: -40° C/+50° C
- Hand Brake (Parking Brake): max. 5000 N
- Sprinkling System: Water, Salted Water, Snow
- NVH (Noise Vibration Harshness)
- DTV (Disc Thickness Variation): 2-6 channels
- Absorption Tests

BRAKE MOUNTINGS

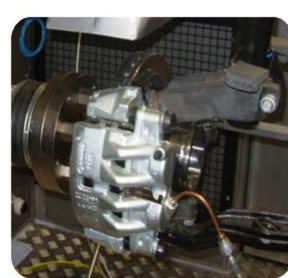
Simple



with Wheel Hub



with Corner



Simple



with Wheel Hub



With Axle



with Corner



TC 80

Dynamometer with a Single Flywheel

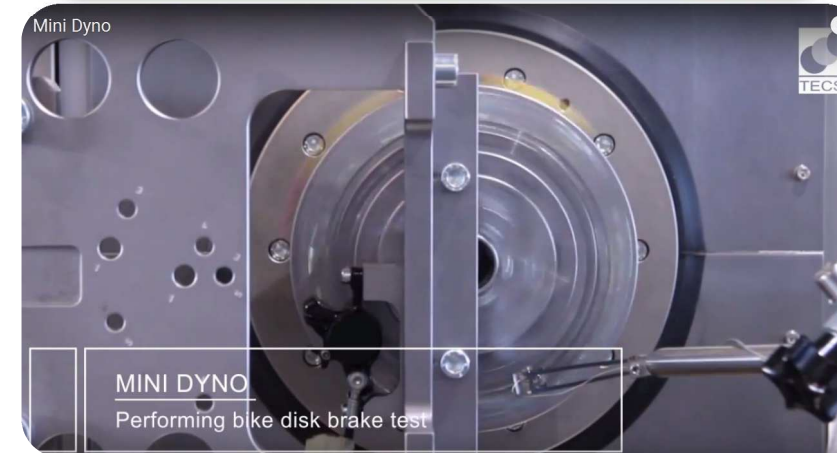
- Performance Tests on brakes, from bicycles to mid-size cars
- NVH Tests
- Modular and Ergonomic Layout
- R&D: dust analysis, residual torque

.FEATURES

- AC Motor: 300 kW
- Max. Braking Moment (Torqueing Moment): 5000 Nm
- Max. Pressure: 200 bar
- Max. Speed: 2400 rpm
- Drag torque: 2750 Nm
- Static friction with main motor: 2498 Nm
- Inertia Flywheel: 80 kgm²
- Inertia Range (at 1g): 5-180 kgm²
- Inertia Simulation
- Modulated Airflow: max. 4000 m³/h

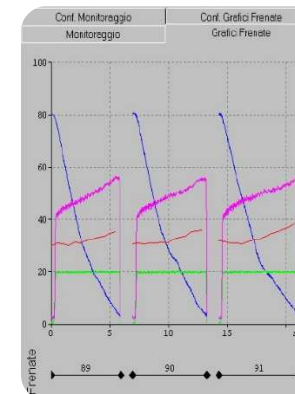
OPTIONS

- Climatic System: -40° C/+50° C
- Hand Brake (Parking Brake): max. 5000 N
- Sprinkling System: Water, Salted Water, Snow
- Static Friction: max. 5000 Nm, 20 rpm
- Dust Analysis System
- NVH (Noise Vibration Harshness)
- DTV (Disc Thickness Variation): 2-6 channels
- Absorption Tests



RESEARCH & INNOVATION

TecSA operates as a strategic partner for the development of new braking components and assists the main market players in the analysis and research of new solutions.



Always attentive to market demands and thanks to constant collaboration with its customers, TecSA responds in real time to innovations in the field of brakes.

TecSA has developed testing procedures to meet international standards (including approvals) and individual research needs, through an extremely flexible and customizable software.

The capabilities of our machines include:

- Implementation of profiles (from telemetry - LAP racing) and WLTP
- KERS applications
- Dust survey and analysis
- NVH
- EPB system (electric park brake)

OUR ASSISTANCE, ALL OVER THE WORLD.

PROGRAMMED AND PREVENTIVE ASSISTANCE



Periodical inspection of our benches for:

- ordinary maintenance
- bearings and mechanical components lubrication
- calibrations



EXTRAORDINARY MAINTENANCE

Extraordinary maintenance is provided in three steps:

- Diagnosis of the problem and hotline/email assistance
- Remote control assistance
- On-site intervention, through the technicians of our assistance services subdivided in geographical areas



REPLACEMENTS

All the spare parts are freely available on the market, to allow our Customers to reduce times and costs, by autonomously select their own supplier and reducing/removing transport costs and customs clearance.

Our assistance centers, subdivided for geographical areas, have warehouses already provided with spare parts that, commonly, need periodical substitution:

- **electronical components:** PCs, control and acquisition systems, conditioning modules, transducers (pressure), etc.
- **electromechanical components:** fuses, drives, relès, contactors, thermals, etc.
- items for periodical maintenance interventions

