

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.

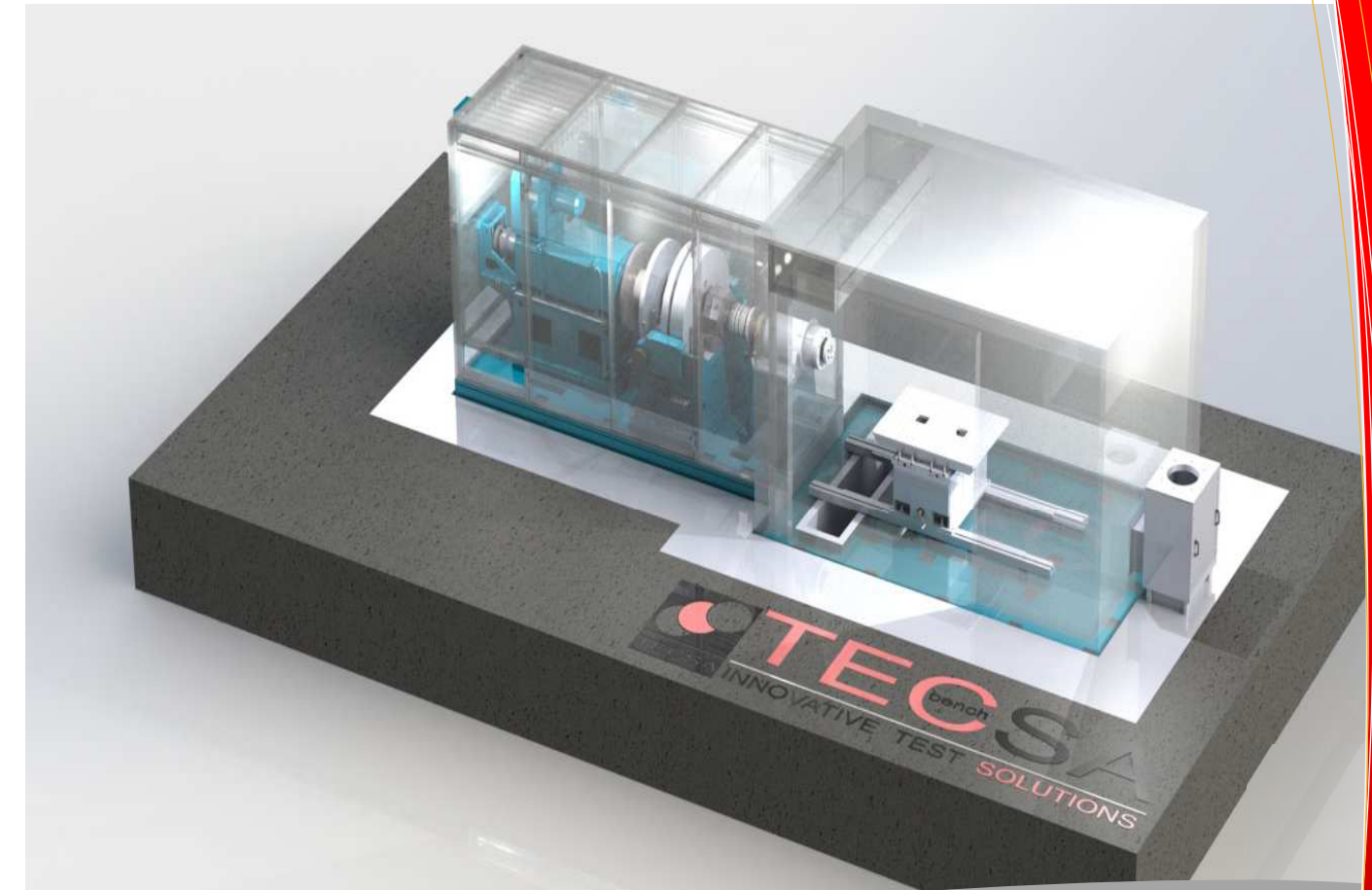
Several machines have been supplied for quality control and product development.

The main ones are:

- dynamometers for passenger and racing automotive sectors
- dynamometers for light commercial vehicle sector
- dynamometers for truck and railway sectors
- 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)



CAR TEST BENCH AUTOMOTIVE BRAKE INERTIA DYNAMOMETER:



Model TC 185



Model TC 225

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

TC 185



Dynamometer with three flywheels

- Performance tests, from motorbikes to light commercial vehicles
- NVH tests
- R&D: dust analysis, residual torque

FEATURES

- DC/AC Motor: 260/300 kW
- Max. Braking Moment (Torqueing Moment): 7000 Nm
- Max. Pressure: 200 bar
- Max. Speed: 2800 - 3000 rpm
- Drag torque: 2200 Nm
- Static friction with main motor (AC motor): 2049 Nm
- Three Inertia Flywheels in Free Combination: 25-50-100 kgm²
- Inertia Range (at 1g): 5-240/260 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. 5000/6000 Nm, 10/20 rpm
- NVH (Noise Vibration Harshness)
- DTV (Disc Thickness Variation): 2-6 channels
- Absorption Tests

BRAKE MOUNTINGS

Simple



with Wheel Hub



with Axle



with Corner



TC 225

Dynamometer with three flywheels

Reference test machine for high performance cars: electric and hybrid vehicles, high speeds and accelerations/decelerations, huge mass

- Performance tests, from motorbikes to light commercial vehicles



- NVH tests

FEATURES

- R&D: dust analysis, residual torque
- AC Motor: 450 kW
- Max. Braking Moment (Torqueing Moment): 10000 Nm
- Max. Pressure: 200 bar
- Max. Speed: 3500 rpm
- Drag torque: 2613 Nm
- Static friction with main motor: 2251 Nm
- Three Inertia Flywheels in Free Combination: 30-60-120 kgm²
- Inertia Range (at 1g): 5-320 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. 6000 Nm, 20 rpm
- NVH (Noise Vibration Harshness)
- EPB (Electric Parking Brake)
- Electric Wheels
- WLTP (Worldwide Harmonized Light Vehicles)
- DTV (Disc Thickness Variation): 2-6 channels
- Absorption Tests

BRAKE MOUNTINGS

Simple



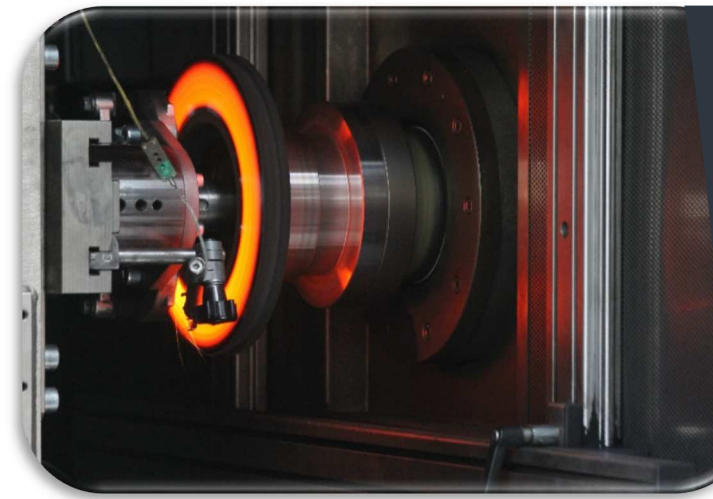
with Wheel Hub



With Axle



with Corner



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.



acoustic & climatic chamber

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
- lubrication of bearings and mechanical components
- 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 selecting their own suppliers 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

