

WHO WE ARE



TecSA S.r.l. has more than 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.

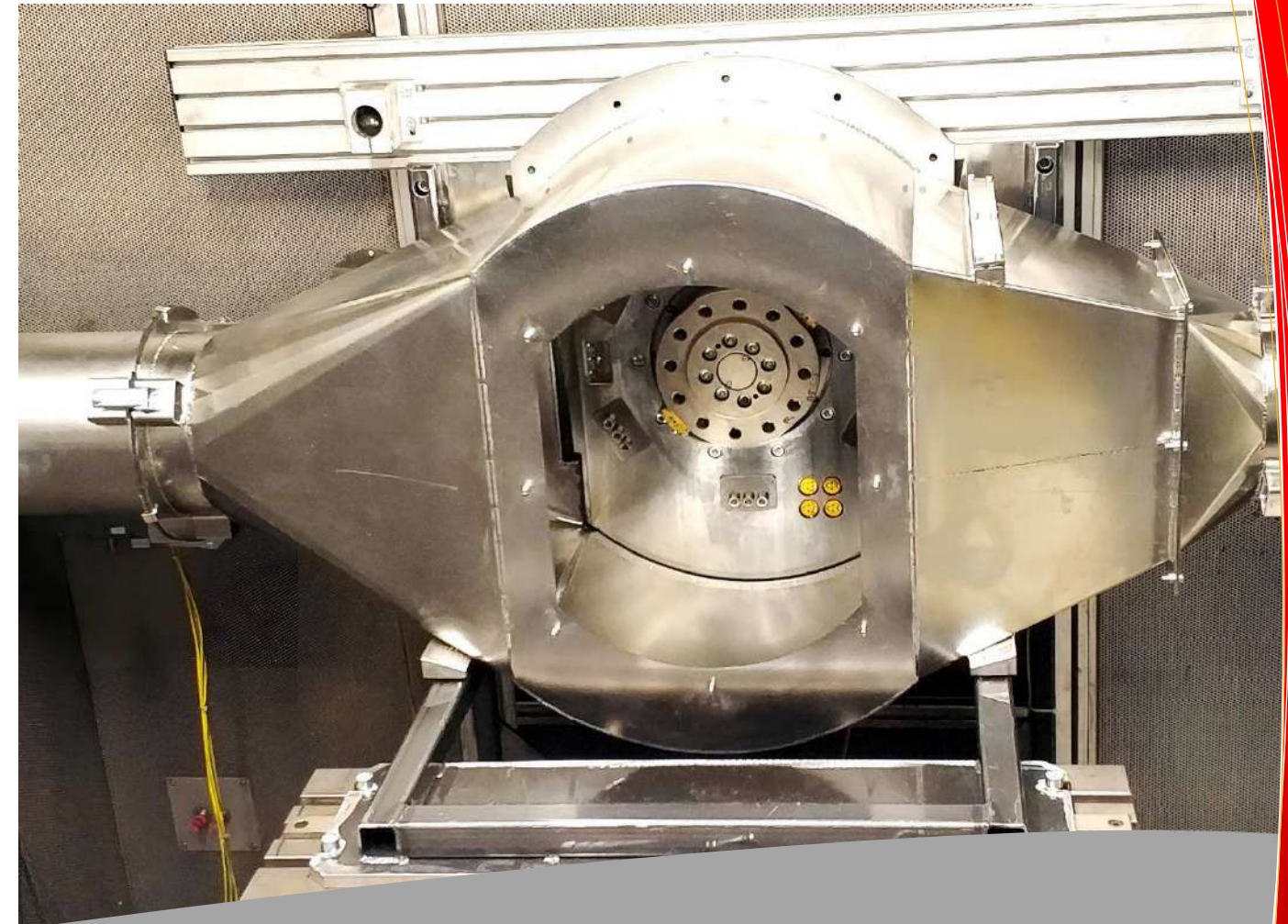
Several machines have been supplied for quality control and product development.

The main ones are:

- dynamometers for passenger and racing automotive sectors
- dynamometers for light commercial vehicle sector
- dynamometers for truck and railway sectors
- dynamometers for brake emissions testing
- FQT (Friction Quality Test) for quality control and/or aftermarket development
- SST (Shear Strength Test) for detachment of friction material form 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)



AUTOMOTIVE BRAKE DYNAMOMETER

MODELS:

- TC 100
- TC 100 BRAKE EMISSIONS
(Euro 7 standard compliant)

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

TC 100 - PERFORMANCE BRAKE DYNAMOMETER BENCH FOR PASSENGER CAR SECTOR

BRAKE DYNAMOMETER WITH ONE FIXED INERTIA FLYWHEEL AND ONE MOVEABLE INERTIA FLYWHEEL, TO BE ADDED TO THE BASIC CONFIGURATION

POSSIBLE CONFIGURATIONS:

FOR MOTORBIKE AND RACING MOTORBIKE SECTORS:

- Motor with less power (250 kW) and higher speed values (3.000 rpm max.):
- Inertia: lower values 30 kgm² + 30 kgm²;
- Lower braking moment: torquemeter 3.000 Nm to have more sensibility.

FOR AUTOMOTIVE SECTOR:

- Motor with more power (315 kW) and lower speed values (2.5000 rpm max.) to have more torque value for inertia simulation;
- Inertia: higher values 50 kgm² + 50 kgm²;
- Higher braking moment: torquemeter 5.000 Nm

MAX. SPEED 3000 RPM;

MAX. BRAKING TORQUE 3000 NM;

MECHANICAL INERTIAS: ONE FIXED FLYWHEEL OF 30 KGM² AND ONE MOVEABLE FLYWHEEL OF 40 KGM²;

MAIN MOTOR: 250 KW;

CABIN WITH ACOUSTIC INSULATION FOR MOTOR AND FLYWHEEL GROUP

BRAKE MOUNTINGS



Simple Mounting



With Wheel Hub



With Suspension

OPTIONS TC 100

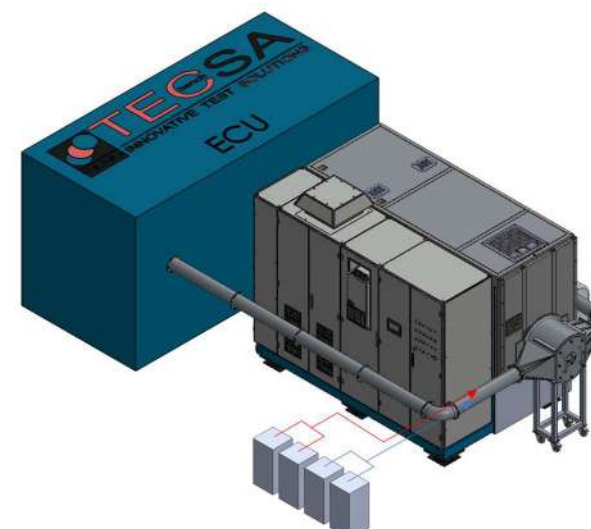
- Climatic System: -40° C/+50° C
- Hand Brake (Parking Brake): max. 5000 N
- Sprinkling System: Water, Salted Water, Snow
- Static Friction: max. 6000 Nm, 20 rpm
- NVH (Noise Vibration Harshness)
- DTV (Disc Thickness Variation): 2-6 channels
- Absorption Tests
- Additional channel for telemetry
- EPB system
- Video camera
- Torque calibration
- Residual torque system

CONFIGURATION FOR BRAKE EMISSIONS

- Environment Climatic Unit (ECU)
Controlled temperature at +20° up to +30°C;
- Enclosure designed by TecSA
- Piping GTR compliant
- Software package
- Weighting Chamber
- Ultra-micro balance with graphic display

INSTRUMENTATION (PROBE SAMPLES):

- SPN10 (solid particle counter)
- TPN10 (total particle counter)
- PM-Sampler PM10
- PM-Sampler PM2.5



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**

