

ROBEC

ROTATING BELT CHASSIS-DYNO



AUTOMOTIVE TESTING SOLUTIONS



FEATURES

The RoBeC is a complete chassis-dyno for motorbikes that is compliant to all international regulations.

It can be used for emission testing, performances evaluation or durability tests ensuring in all working conditions the maximum accuracy and repeatability.

The electric motor and the roll are placed on a steel-runners sliding rig, connected to the frame by a strain-gauge so that the force generated by the vehicle is immediately transmitted to the transducer.

It means that the measurement is not affected by inertial and friction forces of the rotating parts so that no calibration is required.

Moreover the machine is able to convert the energy generated by the vehicle in electrical power that can be directly sent to the network thus reducing drastically the operative cost of the system.

Finally the RoBeC offers a unique option: the rotating-belt.

Using a traditional roll system the tyre runs on a curved surface; naturally it is far away from real conditions. Main effect of this anomaly is an unnatural deformation of the tyre that reduces drastically its life.

Common solution to this problem is increasing the roll diameter, but it leads to an increase of mass and dimensions of the system (deep dig required that implies a high cost for the whole test facility).

The RoBeC is aiming to give a flat runway to the tyre, similar to the road condition, in a very compact machine that can be placed in a low pit or directly over the floor using a short ramp.

The belt is kept stretched by a tensor system which, at the same time, can be closed to allow an easy belt replacement (the operation requires less than 10 minutes). The durability of the belt is in any case more than sufficient in order to allow very long cycles.

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CONTROL SYSTEM

Expert engineering, flexible deployment.

Control System is a leading producer of Testing Facility solutions for the Automotive sector providing all-round service and extensive specialization across the vehicle testing spectrum: Engine Testing Cells, Components Testing Rigs, Powertrain & Gearbox Testing Solutions.

Control System also develops in-house complete dedicated management Software that is a key feature of the entire test process alongside the other elements in the Testing chain.

The high-level technical and entrepreneurial capacity acquired in over 20 years experience in the Automotive sector enables Control System to deliver cutting-edge solutions comprising latest-generation technology as well as sophisticated Hardware and Software systems.

Proven expertise in the sector has enabled the Company to collaborate with top automakers both in Italy and worldwide with consistently excellent results.

Control System's real strength is its highly flexible ability to design and produce solutions tailored to customer specifications or developed in conjunction with customers themselves – a versatility that has become a fundamental market plus in the development of each project.



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