

Our **quality** stems from a careful and rigorous process control. From design to production, each stage is monitored in order to guarantee the correct flow and the final product characteristics.

Our controls start from input materials:

- Bearings: Ima has developed a specific bearing line for TC able to ensure low starting torque and a very low noise level.
- PA66: the use of leading brands material such as Dupont and Basf guarantees the required performance.
- Springs are made of special steel and are specifically treated according to their application. For every lot, Ima performs torque tests.
- Smelting material is certified and controlled to exclude any internal defects.



Direct reading spectrometer



X-ray diffractometer

In particular, wheel hubs require careful control of induction hardening conditions which can provide raceway hardness without weakening the surrounding material.

Our **THERMAL TREATMENT** guarantees quality and uniformity of required characteristics.





Automatic grinding machines

### **ASSEMBLY PROCESS**

Everything is assembled on semi-automatic lines equipped with control stations ensuring product integrity.

As far as automatic belt tensioners are concerned, torque and damping controls are carried out in a static manner as well as dimensional and parallel checks.

With regard to hubs and wheel bearings, backlash control is crucial during the assembly phase.

Thanks to a series of check, we are able to guarantee 100% of our finished products.

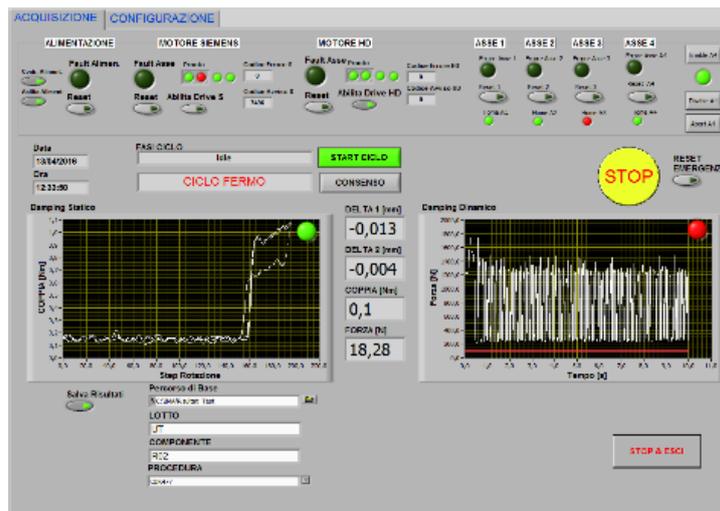


In particular, we perform the following tests on automatic belt tensioners:

-Stability belt & belt tensioner control on a special test bench



Static and dynamic damping spring check on a specific test bench.



Where present, our wheel bearings' ABS system is checked.



ABS test

Our laboratories are also equipped with measurement and control devices that allow us to perform the most advanced tests on product quality and duration: dimensional tests, high temperature tests, life tests and metallurgical controls



Endurance wheel bearing life test



CMMs Machine



Torque wheel bearing test machine



Micro motion wheel bearing Test