

## New "COBOT" for the furniture department

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he Catas furniture testing laboratory, for some years now, has been using robots with an anthropomorphic arm, which have now almost completely replaced the electro-mechanical machines previously used.

The next step was to equip themselves with "COBOT", buying an anthropomorph one with an arm of 1300 mm and a maximum payload of 10 kg.

The cobots are collaborative robots, new generation industrial robots designed to work together and close to the operator in safety, without barriers or protective cages to divide them. This is made possible by the fact that they are equipped with safety mechanisms, based on the control of the force and on the constant monitoring of what happens around them.

The cobots can go to integrate the robots currently used in the laboratory, for all those tests that do not require an excessive



amount of maneuvering effort and excessive encumbrance, such as for the cyclic tests of opening and closing drawers and doors.

The presence in the cobots of load cells, allows us to constantly monitor the forces necessary to move the object under test and, if the values exceed those eventually provided by the requirements of the standard used, report them and stop the test.



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At the wrist of the cobot can be installed various accessories, including a gripper to be able to take and release the sample under test, being able to program both the opening length and the force applied that can be, for the gripper in our equipment, up to 120N.



The terminal parts of the gripper are removable and allow the installation of customized elements, which we design and print in 3D so that we can fix it to the various types of samples we test.



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