CLAIMS

1. A machinery (1) for testing one or more electronic components (**DUTs**) at a predetermined controlled temperature (**T**), the machinery comprising:

- A surface (4);
- At least one test recess (25) obtained in a part of said surface (4) and into which the component under test can be arranged;
- Means (27, 28a, 28b, 200) for generating a predetermined thermal condition within said test recess (25);
- Said test recess (25) being thermally insulated from the surrounding environment;
- wherein a pre-conditioning recess (20) is obtained on said surface (4) configured for keeping a predetermined temperature condition suitable for conditioning the components under test and wherein said test recess (25) is obtained at the base of the pre-conditioning recess (20);
- wherein said test recess (25) has an upper opening for enabling the insertion of the component under test and wherein a barrier element, arranged in such a way as to be above the component under test and suitable to prevent and/or reduce the thermal dispersion through said upper opening, is comprised;
- wherein said barrier element is in form of a laminar gaseous flow (**f1**) arranged above the component under test and forming a closure for the said upper opening;
- wherein a plurality of nozzles (28a, 28b), arranged at a predetermined height and through which said laminar flow is generated, is comprised and wherein on said surface (4) handling means (5) are arranged for handling

the electronic components under test;
- wherein a storage place (7) for the items under test is further provided;
- Said handling means and said storage place being outside the test recess (25).

~~2. A machinery (1), according to claim 1, wherein a pre-conditioning recess (20) is obtained on said surface (4) configured for keeping a predetermined temperature condition suitable for conditioning the components under test.~~

~~3. A machinery, according to claim 2, wherein said test recess (25) is obtained at the base of the pre-conditioning recess (20).~~

~~4.~~2. A machinery, according to claim 1, wherein said means for generating a predetermined temperature condition within the test recess (25) comprise at least one duct (27) arranged within a wall (30, 31) delimiting said test recess and suitable for enabling the circulation of a fluid at a predetermined temperature.

~~5.~~3. A machinery, according to claim ~~4~~2, comprising a device

(200) suitable for heating and/or cooling said fluid at the required temperature and sending it along said duct, preferably said fluid being a liquid.

~~6.~~4. A machinery, according to one or more of the preceding claims, wherein said means for generating a predetermined temperature condition within the test recess (25) comprise a gas flow (**f2**) at a predetermined temperature and injected within said chamber through one or more injecting nozzles (29a, 29b).

~~7.~~5. A machinery, according to claim ~~4~~6, wherein said gas flow is air.

~~8.~~6. A machinery, according to one or more of the preceding claims, wherein said test recess (25) is delimited by lateral walls, by an upper opening, through which the component under test can be inserted within it and by a base equipped with an arrangement place (26) onto which the component under test can be arranged.

~~9.~~7. A machinery (1), according to one or more of the preceding claims, further comprising a housing (11) for a testing device (100), said housing being arranged so that, when said testing device (100) is housed within said housing (11), a part (101) of said testing device (100), provided with electric contacts for carrying out the test, is arranged at said arrangement place (26).

~~10. A machinery, according to one or more of the preceding claims, wherein said recess is open above for enabling the insertion of the component under test and wherein a barrier element, arranged in such a way as to be~~

~~above the component under test and suitable to prevent and/or reduce the thermal dispersion through said upper opening, is comprised.~~

~~**11.** A machinery, according to claim 10, wherein said barrier element is in form of a laminar gaseous flow (**f1**) arranged above the component under test.~~

~~**12.**~~**8.** A machinery, according to claim ~~11~~1, wherein said laminar gaseous flow is at room temperature.

~~**13.**~~**9.** A machinery, according to claim ~~11~~ 1 or ~~12~~8, wherein said laminar gaseous flow is air.

~~**14.** A machinery, according to one or more of the preceding claims from 11 to 13, wherein a plurality of nozzles (28a, 28b) arranged at a predetermined height and through which said laminar flow is generated, is comprised.~~

~~**15.**~~**10.** A machinery, according to ~~one or more of the preceding~~ claim~~s from 11 to 14~~ 1, wherein said laminar flow is selectively activatable/deactivatable.

~~**16.** A machinery, according to one or more of the preceding claims from 9 to 15, wherein said barrier element is in form of a cover.~~

~~**17.** A machinery, according to claim 16, wherein the type of said cover is slidable or hinged to open and close again itself.~~

~~**18.** A machinery (1), according to one or more of the preceding claims, wherein on said surface (4) handling means (5) are arranged for handling the electronic components under test and/or a storage place (7) for the items under test, said handling means and/or said~~

~~storage place being outside the test recess (25).~~

~~19.~~11.A machinery, according to claim ~~18~~1, wherein said handling means comprise at least one robotic arm (5).

~~20.~~12.A machinery, according to one or more of the preceding claims, wherein a cover (3), of removable type, suitable for covering said surface (4) is provided.

~~21.~~13.A method for carrying out a temperature-dependent test on one or more electronic components under test, the method comprising the following steps:

- Arranging a machinery accordingly to one or more of the previous claims;

~~- Arrangement of at least one test recess (25) obtained in a part of a surface (4) and in which it is arrangeable the component under test;~~

~~- Arrangement of means (27, 28a, 28b, 200) for generating a predetermined thermal condition inside said test recess (25) and with said test recess (25) thermally insulated from the surrounding space;~~

- The method providing the generation of a predetermined thermal condition within said test recess and the arrangement of the component under test within the test recess (25);~~.~~

- wherein the recess has the upper opening for enabling the insertion of the electronic component to be tested and the step of arrangement of the barrier element to cover above and thermally insulate said test recess is provided, said barrier element being arranged above the component under test;

- wherein said arrangement of the barrier element provides the generation of the laminar gaseous flow arranged above the component under test so that to

close said upper opening.

~~22. The method, according to claim 21, wherein the arrangement of handling means (5), suitable for moving said electronic components under test from a storage place to said recess and vice versa, is provided, said handling means being arranged outside the recess and arranging said component under test within said recess.~~

~~23. The method, according to claim 21, wherein the recess~~

~~is open above and the step of arrangement of a barrier element to cover above and thermally insulate said recess is provided, said barrier element being arranged above the component under test.~~

~~**24.** The method, according to claim 23, wherein said arrangement of the barrier element provides the generation of a laminar gaseous flow arranged above the component under test.~~