

The new standard for choosing the sample to be tested

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March 2022

Geometries, dimensions, finishes... a single furniture product can be declined in a potentially infinite series of variants, starting from the same concept or design. We speak about a **family of products** (or even collection, series, range,...) that is often proposed for the same supply, because it allows the customer to meet different needs of use, while maintaining a uniform design. Generally the product family is made from the same materials, using the same accessories (hardware etc., ...) and with the same construction system and production process. When the conformity of the entire family to the reference standards is required, it is necessary to make distinctions that do not follow the logic of cost/price or functionality. **In the laboratory we look at safety and performance**, thus, for example, a piece of furniture covered with gold leaf and one with melamine paper, from the point of view of the resistance of the structure do not present any difference for our technicians (obviously this does not apply to the resistance of the surfaces). Sometimes, unfortunately, the opposite happens and apparently minor differences in structure (a square table for four people and a round one) require the repetition of all tests. How to do it? The company usually presents its catalog to the laboratory technicians and they are able to identify a **minimum set** of configurations that are defined as “**representative**”, thanks to a deep knowledge of the reference standard and also of the products in question.



The **selection criteria** are these:

- the variants that do not affect the test are equivalent for the laboratory and therefore testing one is enough to include them all;
- between two variants of the same product, one of which is more unfavorable than the other for test purposes, if the more unfavorable obtains a positive result, we can assume that even the less unfavorable will not have worse performance and will therefore be compliant.

UNI T1840 applies these criteria to **office furniture**, with reference to *mechanical tests, tests on surfaces and analysis of VOC emissions*.

The significant samples therefore constitute that minimum core of configurations that, if they meet the requirements, allow to affirm, that also **all the other configurations of the family will be compliant**, without further tests.

The test report is always related **ONLY** to the sample actually tested, but it will be possible to declare, according to UNI T1840, which other models of the family are represented by the one examined for the tests carried out. This declaration may be issued by the manufacturer himself or also by Catas.

An example?

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Let's suppose that within the family "MORE CHAIRS" the model MAGDA is representative also of the models SALLY and GIADA. The tests are performed on the model MAGDA and the entry "sample name" in the test report will report for example "Chair model MAGDA". On a separate document, however, the statement that "...on the basis of UNI T1840:2021 and the manufacturer's declaration, the model MAGDA is representative of the models SALLY and GIADA as to mechanical tests for the intended use "office chair"" will be reported. The manufacturer shall provide the construction details of the products of the "MORE CHAIRS" family and declare that they are made with the same materials, the same accessories and the same construction system and production process. This is the first standard of its kind in the furniture sector and it takes its cue from an Assufficio (the Italian association of office furniture producers) document, which stimulated its drafting, and is the result of a highly complex activity by the UNI working group that published it.

As mentioned, **it applies to the following types of office furniture:**

- desks, worktables, meeting tables;
- storage furniture;
- screens;
- work chairs, community seating, ranked seating,

and covers the following tests:

- mechanical tests;
- chemical analysis;
- tests on surfaces,

in reference to test methods standardized at national and European level; it doesn't deal with dimensional requirements because they have to be verified on each model, in the event that models have different dimensions. In our opinion this is **an important new development in the standardization panorama** and could be extended to other types of furniture and end uses.

It was born as a document mainly addressed to contracting authorities and public purchasers, who will find in it a tool to assess the adequacy of the technical documentation provided by the manufacturer to certify the safety and performance of the product.

It can be an important support in the field of product certifications, one of which is the brand **Italian Furniture Origin**, in the definition of significant samples to be tested within a certified family (for further information about this, please [read the article](#) published in October 2021).

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