

The international congress on wood coatings has reached its eleventh edition, always inspiring the interest of the entire community involved in such topics.

190 delegates coming from all over the world participated to the biennial event and listened to the 31 presentations that took place over the two days.

Catas was one of the institutes that promoted this initiative since its first edition in 1998, having always been part of the steering committee that presides over the organization of all the phases of the congress.

Also this year Catas presented a study that focused in particular on the resistance to light of furniture surfaces. The work has attracted a lot of interest from the delegates present considering the issues still open that this research has clearly underlined with experimental data collected in over a year of work.

The evidence of this study on the resistance to light of furniture surfaces will be presented in a next article in the Catas newsletter. With these brief notes we would like to underline what were the most recurrent themes emerged during the congress in such a way as to make evident the current trends of this important sector that has considerable effects on the furniture and building markets.



1. Sustainable raw materials

This topic featured several presentations by raw material producers. The need of the modern world and that of tomorrow to use renewable materials pushes research towards the use of raw materials derived from renewable sources and in particular of natural origin. This “revolution” has begun and the coating world is confronting all the problems and consequences that derive from the beginning of this new path.

2. Solvent-free raw materials

Resins and varnishes with increasingly reduced contents of solvents and coalescents are required by the market to meet the demands of products that are safe for the environment in general but also for the end user. In this regard, one of the topics covered was that of indoor emissions, whose legislative and normative framework becomes more complex every day, considering coatings in particular, given their typical significant contribution in terms of content and emissions of volatile organic substances.

3. New resins and new hardeners for water-based coatings

The wood and furniture market still focuses on the challenge of water-based coatings which, although already well-established in various sectors, still find some limitations in their use especially in terms of performance when compared to traditional solvent-based coatings.

New resins, new hardeners and even new additives to push even more the market to choose and prefer

products with a lower environmental impact.

4. Powder coatings and plants

The subject of powder coatings was already present at the first edition of the Wood Coating Congress in the far 1998. It is not therefore an innovation but the presented reports have been useful to consider a situation where the use of this technology is not widespread in the wood sector but nevertheless is well established for some applications. The topics considered during the Congress were related to the formulation (resins deriving from raw materials of plant origin), to the electrostatic application and to the process control with an automatic system able to “read” the applied thicknesses continuously and consequently adjust the powder coating application system.

The theme of the measurement (thickness and presence of microbubbles) and of the automatic regulation of the application systems was also presented by another paper which concerned, in this case, the traditional coating process of window frames with water-based products.

5. Test methods

Standardization continues its journey in this sector with ever more specific themes.

During the congress some studies were presented on two methods to verify the resistance of coatings to hails and tannin staining. The need to define repeatable and reproducible test methods has been addressed in a third presentation which specifically concerned the tensile test of coating films. The data of the interlaboratory tests, which was also attended by the Catas, testify that the method being defined at European level requires further analysis and improvements to necessarily make it more reliable.

6. Standards on the classification of coatings

The classification of coatings and coating systems is becoming more and more a requirement of the market. The performance classes may in fact be linked to specific end-uses rather than certain performance requirements for specifications or tenders.

The work presented concerned the resistance of furniture surfaces to liquid substances. The German proposal to introduce further staining substances (wine and mustard) was supported by the results of research conducted at European level and in which the Catas also took part.

7. Biocides

Also that of biocides and the restrictions foreseen at European level has been a topic dealt with by some reports that have presented during the Congress. In particular there were some studies on new raw materials (resins and additives) that prevent biological aggressions without being biocides themselves and therefore not subject to the required authorization procedures.

This brief notes can be considered the general framework of the world of wood coating sector that emerged from the eleventh edition of the Wood Coating Congress.

The next appointment has already been set for 2020.

October 2018

For info:

Franco Bulian

+39 0432 747231

bulian@catas.com

All rights reserved

Reproduction or duplication of the contents of this article is authorized under condition that the source

- © CATAS - San Giovanni al Natisone - Udine - Italy is being cited