# Development of visual and mechanical sorting tools for the enhancement of structural sawn timber




Structural sawn timber intended for construction must offer similar guarantees to those offered by other materials and products intended for the structural construction sector. For this purpose, it is necessary to develop classification tools that allow manufacturers and marketers to certify the strength and stiffness values of all the wood that is placed on the market (adjusted to the species and origin that corresponds).
It is, in addition to being a legal obligation, a tool for the valuation of wood that is enabling a competitive improvement of its industrial network.

Technological development of structural sawn timber not only enables it to be directly promoted in the construction sector as a construction element, but also to be incorporated into the manufacture of technological products with high added value, such as glued laminated timber, duos, trios, CLT, prefabricated panels... These are high value-added products that require high levels of competitiveness that cannot be achieved without their main raw material, structural sawn timber, increasing its competitiveness, optimising its manufacturing times and its declared mechanical properties

Visual classification tools have been developed for the main commercial wood species found in Spanish forest stands, such as Pinus sylvestris, Pinus insigne, Pinus nigra, Pinus pinaster, Abies alba, Pseudotsuga menziesii, Quercus rubra, Castanea sativa and Eucalyptus globulus. Tools that in many cases enable the possibility of classifying structural sawn timber into three structural qualities, which allows the different qualities of wood that the timber industry places on the construction market to be classified and valued.
Mechanical classification systems are currently being developed for the main species of the Pinus genus. This is one more step in the competitive improvement of this type of wood, as it improves the classification times and the classifying performance in the different mechanical qualities.

Both developments have enhanced the value of the wood of the different wood species characterized, and have promoted its use in construction.

## DETALJI

PODRIJETLO DRVA

Industrija

VRSTA DRVA

Deblo

ODGOVARAJUĆA VRSTA DRVA

Pinus sylvestris, Pinus nigra, Pinus radiata, Pinus pinaster, Pseudotsuga menziessii, Larix sp, Quercus rubra, Abies alba

UTJECAJ NA OKOLIŠ I BIORAZNOLIKOST

Positive, it mobilizes wood with a proper forest management

UČINAK NA PRIHOD

Positive, more quality timber is mobilized

POTENCIJAL ISKORISTIVOSTI

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SREDIŠTE

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GOSPODARSKI UČINAK

Structural timber value increases in 10€/m3 approximately

POTREBNA POSEBNA ZNANJA

Knowledge about Phisical-mechanical properties of wood. Harmonized rules

POTENCIJAL ZA POVEĆANJE UPORABE DRVA

300,000 m3

POTENCIJAL ODRŽIVOSTI - VRIJEDNOST

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JEDNOSTAVNOST PROVEDBE

Very easy

JEDNOSTAVNOST PROVEDBE - EVALUACIJA

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KLJUČNI PREDUVJETI

Experience on manufacturing and classification of structural timber

VRSTA DOGAđAJA NA KOJEM JE PRIKAZAN OVAJ BPI

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UČINAK NA ZAPOŠLJIVOST

Positive through better competitiveness

TROŠKOVI PROVEDBE (EURO - €)

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needed

## VIŠE DETALJA

**IZAZOV**

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**DOMENA**

Industrije utemeljene na šumama, bio / kružna ekonomija

Drvna građevinska industrija

**VRSTA RJEŠENJA**

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**KLJUČNE RIJEČI**

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**DIGITALNO RJEŠENJE**

Ne

**INOVACIJA**

Ne

**ZEMLJA PODRIJETLA**

Španjolska

**PODRUČJE PRIMJENE**

Nacionalna

**POČETAK I KRAJ GODINE**

2011 -

## KONTAKT PODATCI

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**IZVJESTITELJ**

## REFERENCES AND RESOURCES

**GLAVNA WEB STRANICA**

http://www.cesefor.com

**WEB STRANICA PROJEKTA**

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**REFERENCA PROJEKTA**

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**IZVORI**

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PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood

DATUM UNOSA

30 kol 2019

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

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