

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 insignis*, *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.

DETALJER

VEDENS URSPRUNG

Industri

TRÄTYP

Rundvirke

TYP AV TRÄ

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

PÅVERKAN PÅ MILJÖ & BIOLOGISK MÅNGFALD

Positive, it mobilizes wood with a proper forest management

EKONOMISK EFFEKT

Positive, more quality timber is mobilized

KOMMERSIELL POTENTIAL

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NAV

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EKONOMISK PÅVERKAN

Structural timber value increases in 10€/m3 approximately

SPECIFIKA KUNSKAPSBEHOV

Knowledge about Physical-mechanical properties of wood. Harmonized rules

MOBILISERINGSPOTENTIAL

300,000 m3

HÅLLBARHETS POTENTIAL - VÄRDE

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ENKEL IMPLEMENTERING

Very easy

ENKEL IMPLEMENTERING - UTVÄRDERING

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NYCKEL FÖRUTSÄTTNINGAR

Experience on manufacturing and classification of structural timber

TYP AV EVENEMANG DÄR DENNA BPI HAR PRESENTERATS

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EFFEKT ANTAL ANSTÄLLDA

Positive through better competitiveness

KOSTNADER FÖR IMPLEMENTERING (EURO - €)

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needed

MER INFORMATION

UTMANING SOM ADRESSERAS

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DOMÄN

Skogindustri, bio/cirkulär ekonomi

Industri for träbyggnation

TYPE AV LÖSNING

--

NYCKELORD

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DIGITAL LÖSNING

Nej

INNOVASION

Nej

UPPHOVSLAND

Spanien

POTENTIAL

Nationell

START OCH SLUTÅR

2011 -

KONTAKT INFORMASION

ÄGARE ELLER FÖRFATTARE

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RAPPORTÖR

REFERENCES AND RESOURCES

HEMSIDA (HUVUDSIDA)

<http://www.cesefor.com>

PROJEKTETS HEMSIDA

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PROJEKTFERENS

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RESURSER

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PROJEKT SOM DETTA FACTSHEET SKAPATS INOM

Rosewood

DATUM FÖR INLÄGG

30 aug 2019



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

