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.

SZCZEGóŁY

POCHODZENIE SUROWCA DRZEWNEGO

Przemysł

RODZAJ SUROWCA DRZEWNEGO

Drewno okrągłe

RODZAJ DREWNA

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

WPŁYW NA śRODOWISKO I BIORóżNORODNOść

Positive, it mobilizes wood with a proper forest management

EFEKTY EKONOMICZNE

Positive, more quality timber is mobilized

POTENCJAł W ZAKRESIE KOMERCJALIZACJI

--

HUB

--

WPŁYW NA GOSPODARKę

Structural timber value increases in 10€/m3 approximately

WYMAGANA WIEDZA SPECJALISTYCZNA

Knowledge about Phisical-mechanical properties of wood. Harmonized rules

POTENCJAł DLA MOBILIZACJI DREWNA

300,000 m3

POTENCJAł DLA ZRóWNOWAżONEGO ROZWOJU - WARTOść

--

ŁATWOść WDROżENIA

Very easy

ŁATWOść WDROżENIA - OCENA

--

KLUCZOWE WYMAGANIA

Experience on manufacturing and classification of structural timber

RODZAJ WYDARZENIA, W KTóRYM WYSTąPIłA DANA BPI

--

EFEKTY W ZAKRESIE ZATRUDNIENIA

Positive through better competitiveness

KOSZT IMPLEMENTACJI (EURO - €)

--

needed

WIęCEJ INFORMACJI

WYZWANIE

--

DOMENA

Przemysły drzewne, bio-/ cyrkularna gospodarka

Budownictwo drewniane

RODZAJ ROZWIąZANIA

--

SŁOWA KLUCZOWE

--

ROZWIąZANIE CYFROWE

Nie

INNOWACJA

Nie

KRAJ POCHODZENIA

Hiszpania

SKALA APLIKACJI

Krajowa

ROK ROZPOCZęCIA I ZAKOńCZENIA

2011 -

DANE KONTAKTOWE

WłAśCICIEL LUB TWóRCA

OSOBA PRZYGOTOWUJąCA FISZKę

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ŹRóDłA I MATERIAłY

STRONA INTERNETOWA

http://www.cesefor.com

ZASOBY

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STRONA INTERNETOWA PROJEKTU

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PROJEKT

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PROJEKT, W RAMACH KTóREGO STWORZONA ZOSTAłA NINIEJSZA FISZKA

Rosewood

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY