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.

DETALII

SURSA DE LEMN

Industrie

TIPUL DE LEMN

Lemn masiv

TIPUL DE LEMN îN CAUZă

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

IMPACTUL ASUPRA MEDIULUI șI BIODIVERSITățII

Positive, it mobilizes wood with a proper forest management

EFECT ASUPRA VENITURILOR

Positive, more quality timber is mobilized

POTENțIAL DE EXPLOATARE

--

HUB

--

IMPACT ECONOMIC

Structural timber value increases in 10€/m3 approximately

CUNOșTINțE SPECIFICE NECESARE

Knowledge about Phisical-mechanical properties of wood. Harmonized rules

POTENțIALUL DE MOBILIZARE

300,000 m3

POTENțIAL DE SUSTENABILITATE - VALOARE

--

FACILITATEA DE IMPLEMENTARE

Very easy

FACILITATEA DE IMPLEMENTARE - EVALUARE

--

CONDIțII CHEIE PREALABILE

Experience on manufacturing and classification of structural timber

TIPUL DE EVENIMENT LA CARE A FOST PREZENTAT ACEST IPB

--

EFECT ASUPRA LOCURILOR DE MUNCă

Positive through better competitiveness

COSTURI PENTRU IMPLEMENTARE (EURO - €)

--

needed

MAI MULTE DETALII

PROVOCARE ABORDATă

--

DOMAIN

Industrii forestiere, economie bio / circulară

Industria construcțiilor din lemn

TIP DE SOLUțIE

--

CUVINTE CHEIE

--

SOLUțIE DIGITALă

Nu

INOVAțIE

Nu

ȚARA DE ORIGINE

Spania

SCARA DE APLICARE

Național

ANUL DE îNCEPUT șI DE SFâRșIT

2011 -

DATE DE CONTACT

PROPRIETAR SAU AUTOR

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REPORTER

REFERENCES AND RESOURCES

PAGINă WEB

http://www.cesefor.com

WEBSITE PROJECT

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REFERINță PROIECT

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RESURSE

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PROIECTUL îN CADRUL CăRUIA A FOST CREATă ACEASTă FIșă INFORMATIVă

Rosewood

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