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

Structural timber value increases in 10€/m3 approximately

Knowledge about Phisical-mechanical properties of wood. Harmonized rules

CUNOȘTINȚE SPECIFICE NECESARE

SURSA DE LEMN	POTENȚIALUL DE MOBILIZARE
Industrie	300,000 m3
TIPUL DE LEMN	
Lemn masiv	POTENȚIAL DE SUSTENABILITATE - VALOARE
TIPUL DE LEMN ÎN CAUZĂ	FACILITATEA DE IMPLEMENTARE
Pinus sylvestris, Pinus nigra, Pinus radiata, Pinus pinaster, Pseudotsuga	Very easy
menziessii, Larix sp, Quercus rubra, Abies alba	
IMPACTUL ASUPRA MEDIULUI și BIODIVERSITății	FACILITATEA DE IMPLEMENTARE - EVALUARE
Positive, it mobilizes wood with a proper forest management	
EFECT ASUPRA VENITURILOR	CONDIȚII CHEIE PREALABILE
Positive, more quality timber is mobilized	Experience on manufacturing and classification of structural timber
POTENȚIAL DE EXPLOATARE	TIPUL DE EVENIMENT LA CARE À FOST PREZENTAT ACEST IPB
NUD	
	Positive through better competitiveness
	COSTUDI DENTRU IMPLEMENTARE (EURO - 2)
	COULDER + COUL

3

needed

PROVOCARE ABORDATă	DOMAIN	TIP DE SOLUțIE
	Industrii forestiere, economie bio / circulară	
	Industria construcțiilor din lemn	
CUVINTE CHEIE	SOLUțIE DIGITALă	INOVAțIE
	Nu	Nu
ȚARA DE ORIGINE	SCARA DE APLICARE	ANUL DE îNCEPUT și de sfârșit
Spania	Național	2011 -
DATE DE CONTACT		
PROPRIETAR SAU AUTOR	REPORTER	
edgar.lafuente@cesefor.com		
REFERENCES AND RESOURCES		
PAGINĂ WEB	RESURSE	
http://www.cesefor.com		
WEBSITE PROJECT		
REFERINță PROIECT		

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PROIECTUL ÎN CADRUL CĂRUIA A FOST CREATĂ ACEASTĂ FIȘĂ INFORMATIVĂ

Rosewood

DATA POSTĂRII

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY



