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.

PODROBNOSTI

PôVOD DREVA
Priemysel

DRUH DREVA
Kmeňové drevo

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

VPLYV NA ŽIVOTNé PROSTREDIE A BIODIVERZITU
Positive, it mobilizes wood with a proper forest management

DOPAD NA PRíJMY
Positive, more quality timber is mobilized

POTENCIáL VYUžITIA
--

ROZBOčOVAč
--

EKONOMICKý VPLYV
Structural timber value increases in 10€/m3 approximately

POTREBA šPECIFICKýCH ZNALOSTí
Knowledge about Phisical-mechanical properties of wood. Harmonized rules

MOBILZAčNý POTENCIáL
300,000 m3

POTENCIáL UDRžATEľNOSTI - HODNOTA
--

UľAHčENIE IMPLMENTáCIE
Very easy

UľAHčENIE IMPLMENTáCIE - HODNOTENIE
--

KľúčOVé PREPOKLADY
Experience on manufacturing and classification of structural timber

TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANý
--

DOPAD NA ZAMESTNANOSť
Positive through better competitiveness

NáKLADY NA IMPLEMENTáCIU (EURO - €)
--

needed

VIAC INFORMáCIí

RIEšENá VýZVA

--

DOMAIN

Na lese založené priemyselné odvetvia, bio/obehová ekonomika

Odvetvie drevených konštrukcií

TYP RIEšENIA

--

KľúčOVé SLOVá

--

DIGITALNE RIEšENIE

Nie

INOVáCIE

Nie

KRAJINA PôVODU

Španielsko

ROZSAH APLIKáCIE

Národný

ZAČIATOK A KONIEC ROKA

2011 -

KONTAKTNé úDAJE

VLASTNíK ALEBO AUTOR

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REPORTéR

REFERENCES AND RESOURCES

HLAVNá WEBSTRáNKA

http://www.cesefor.com

PROJEKTOVá WEBSTRáNKA

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REFERENCIA PROJEKTU

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ZDROJE

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PROJEKT, V RáMCI KTORéHO BOL TENTO INFORMAčNý PREHľAD VYTVORENý

Rosewood

DáTUM ODOSLANIA

30 aug 2019

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY