

Description of innovation

Innovation	
Title	VISCAN-Portable: A new grading machine for
	local structural timber
Picture	
Domain	Sustainable management and planning
Source of wood	Stemwood
Location	CNR IVALSA (Sesto Fiorentino)
	https://goo.gl/maps/vbKeSViQuFBMy79o7
Implementers	Associazione Foresta Modello delle Montagne Fiorentine https://goo.gl/maps/b3QuQboQxj3iN84Y7
Actual status	Running
Approach	The strength grading of timber is mandatory for structural uses. Most of the sawmills in the area are small or medium-sized enterprises that cannot acquire an automatic classification line because of the very high costs. For this reason it was decided to develop a new portable machine, with significantly reduced costs, which could be shared between the sawmill of the territory. The new grading machine was design starting from the technology ViSCAN of Microtec
Main results	The machine was then set on the timber species present in the FMMF territory already used or potentially suitable for construction: ViSCAN-portable was officially certified as strength grading machine on March 2014. At the same date the settings for Douglas fir and black pine were approved, while for fir and chestnut they were approved on October 2014. Some local sawmills have already used the machine to grade their sawnwood for structural uses, but the VISCAN-portable has also been requested by other Italian regions, especially to grade chestnut timber.
Lessons learned	With these results, it becomes possible to introduce the machine strength grading among small/medium



	sawmills. Thanks to this new opportunity the companies can enjoy advantages both in terms of quantitative yields and efficiency in the classification. On the other hand, the portability of the machine is an interesting stimulus to its possible spread: neighboring sawmill could share the purchase or lease the equipment, reducing the amount of initial investment and operating costs. This sharing mode is well suited also to a non-continuous production of lumber.
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Code	IN_IT_02



Innovation assessment

Region	Tuscany
Time scale	Since 2014
Mobilization Potential	N/A
Kind of wood concerned	sawnwood
Sustainability Potential	Increase of the use of timber in construction in general and local timber in particular
Impact on environment & biodiversity	Implementation of the use of underutilized species as sawnwood
Ease of implementation	N/A
Economic impact	Improvement of grading yields
Job effect	Increase of the manufacture of local products with a consequent improvement for the supply chain and the whole sector
Income effect	Added value to the raw material with consequently higher incomes for the sawmills
Specific knowledge needed	Need of short training for use
Costs of implementation	N/A
Technical readiness level	2 applicable
Key information for adoption	Knowledge of the technical regulation on strength grading for structural uses