

	PROTOCOLO DE GENERACIÓN DE PUBLICACIONES EN GTED-UC REGISTRO DE PUBLICACIÓN	Fecha: 19-06-2013
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TÍTULO ARTÍCULO (En Inglés)	DYNAMIC MODULUS OF ASPHALT MIXTURE BY ULTRASONIC DIRECT TEST		
TÍTULO ARTÍCULO (En Español)	MÓDULO DINÁMICO DE MEZCLAS ASFÁLTICAS MEDIANTE ENSAYOS ULTRASÓNICOS DIRECTOS		
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TÍTULO REVISTA	NDT AND E INTERNATIONAL (ELSEVIER)		
ISSN	Área de conocimiento	Impact Factor	Cuartil
0963-8695	MATERIALS SCIENCE, CHARACTERIZATION & TESTING	1.446	JCR-Q1
Fecha (Año/Mes)	Web revista		
2010-06	http://www.journals.elsevier.com/ndt-and-e-international/		
ABSTRACT (En inglés)			
<p>This paper describes the experimental procedure followed for direct determination of dynamic modulus of asphalt mixtures by ultrasonic direct test at a specified temperature. Tests were performed on ten cylindrical samples of dense and porous asphalt mixtures manufactured with dolerite and limestone aggregates. Dynamic moduli obtained by ultrasonic transmission, calculated at a frequency of 65 kHz, were compared with values directly determined by standard dynamic tests applied in Spain at frequencies of 2, 5, 8 and 10 Hz. The obtained results demonstrate that the magnitudes for moduli calculated by ultrasonics are higher than those obtained by standard dynamic tests. It is concluded that for asphalt mixtures tested ultrasonically the increase of moduli magnitude can be associated with an increase in the frequency used but may also be due to the different testing methods. Nevertheless, these values can be used as a reference value for dynamic modulus of asphalt pavements at low strain, being necessary to apply a correction factor to replace the low frequency standard dynamic test, which is more expensive, difficult and time consuming.</p>			
Keywords (En inglés)	Asphalt mixture; Dynamic modulus; Frequency; Ultrasonic transmission		
RESUMEN (En español)*			
Palabras clave (Español)*			

* Caso de estar publicado en revista de lengua española.