

INFORMATION TO AUTHORS

All Figs send in different **vector** (cdr, ai, jpeg, jpg, xls) files.
Charts – in **xls** format.

1. General Concerning References

References could not exceed 20.

References should be in alphabetical order by author surname.

References mentioned in the text using brackets.

2. Do not include in References (just mentione in the text, please) standards, regulations, codes and other documents which do not have Citation Impact Factor

According to *EN 1992-1:2004 Eurocode 2: Design of Concrete Structures – Part 1: General Rules and Rules for Buildings*, the nominal flextural stiffness of pier shafts with constant cross-sections may be represented as follows:

Usually, the reliability verification of bridge structures is based on the limit state concept used in conjunction with partial factor methods (*ENV 1991-3:1995 Eurocode 1 – Part 3. Basis of Design and Actions on Structures. Traffic Loads on Bridges; EN 1992-2:2005 Eurocode 2: Design of Concrete Structures – Concrete Bridges – Design and Detailing Rules; EN 1993-2:2006 Eurocode 3: Design of Steel Structures – Part 2: Steel Bridges*).

The probability distribution of bending moment $M_Q(t)$ caused by random live loads within 75-year reference time may be treated as lognormal one (Eamon, Nowak 2004) (*ISO 2394:1998. General Principles on Reliability for Structures*).

2.1. Examples of the References mentioned in the text using brackets:

Hordijk and Reinhardt (1993) studied the fatigue behaviour of plain concrete and concluded that the propagation of cracks leads to failure of concrete, although the exact mechanism is not clear.

Nowak *et al.* (2000) found that shrinkage strains in accomplice with tensile fatigue of concrete induced cracking in concrete slabs in two existing haunched steel-girder bridges in Michigan.

The increase in the rate of crack width development under cyclic loading has been reported by different investigators (Rehm, Eligehausen 1979).

During the last few years the concrete fatigue phenomenon has once again gained interest, especially for railway bridges due to more slender structures, higher traffic speeds and higher axle loads (Carpinteri *et al.* 2004; Dulinskas *et al.* 2007; Gribniak *et al.* 2007, 2008; Kaklauskas 2004).

As is shown in our previous investigations, one of the ways to increase the rigidity of a bridge suspension system is to transfer a part of stiffening girder's rigidity to a suspension cable (Grigorjeva *et al.* 2004; 2006).

The steel hollow sections filled with concrete can be an attractive solution (Kuranovas, Kvedaras 2007; Soundararajan *et al.* 2008).

The examples of suspension bridge in Pittsburgh (Качурин *et al.* 1971) and famous Tower Bridge in London (Bennett 1997) can be mentioned

The *Wöhler's* diagram with 95% confidence limits, based on the experimental results reported by Dulinskas (Дулинскас 1973), Ople and Hulsbos (1966), and Holmen (1979).

3. Description of the References

3.1. Paper (article) from Journal and Newspaper (needs DOI)

Boult, M. I.; Righionis, T. D.; Chryssanthopolous, M. K. 2008. Probabilistic fatigue evaluation of riveted railway bridges, *Journal of Bridge Engineering* 13(3): 237–244. DOI: 10.1061/(ASCE)1084-0702(2008)13:3(237)

Gerbrandt, R.; Berthelot, C. 2007. Life-cycle economic evaluation of alternative road construction methods on low-volume roads, *Transportation Research Record* 1989: 61–71. DOI: 10.3141/1989-07

Леонович, И.; Кашевская, Е. 2007. Выбор критериев мониторинга процессов на оперативном уровне управления качеством автомобильных дорог [Leonovich, I.; Kashevskaja, E. Selection of criteria for process monitoring at the operative level of road quality management], *Technological and Economic Development of Economy* 13(2): 144–152. DOI: no

Купляускас, Р.; Ноткус, А. 1987. Экспериментальные исследования полной диаграммы растяжения бетона [Kupliauskas, P.; Notkus, A. Experimental research of complete stress-strain diagram for concrete in direct tension], *Железобетонные конструкции* [Concrete Structures] 15: 83–89. DOI: no

3.2. Paper (article) from Journal and Newspaper in CD-ROM

Choi, Y.; Collop, A.; Airey, G.; Elliot, R. 2005. A comparison between interface properties measured using the Leutner test and the torque test [CD-ROM], *Journal of Association of Asphalt Paving Technologists* 74E. ISSN 1553-5576.

3.3. Proceedings

Dulinskas, E.; Gribniak, V.; Kaklauskas, G. 2007. Influence of curing conditions on the fatigue strength and cyclic creep of compressive concrete, in *Proc of the 9th International Conference “Modern Building Materials, Structures and Techniques”*: selected papers, vol. 2. Ed. by Skibniewski, M. J.; Vainiūnas, P.; Zavadskas, E. K. May 16–19, 2007, Vilnius, Lithuania. Vilnius: Technika, 517–522.

Palkowski, Sz. 2006. Some problem of calculation and design of cable structures, in *Proc of the 11th International Conference on Metal Structures (ICMS-2006) “Progress in Steel, Composite and Aluminium Structures”*. Ed. by Giżejowski, M.; Kozlovski, A.; Słęczka, L.; Ziolkowski, J. June 21–23, 2006, Rzeszow, Poland. London: Taylor and Francis, 102–116.

3.4. Proceedings in CD-ROM

Diniz, S. M. C. 2005. Effect of concrete age specification on the reliability of HSC columns [CD-ROM], in *Proc of the 9th International Conference on Structural Safety and Reliability of Engineering Systems and Structures (ICOSSAR 2005)*. Ed. by Augusti, G.; Schuëller, M.; Ciampoli, M. June 19–23, 2005, Rome, Italy. Rotterdam: Millpress, 565–572. ISBN 9059660404.

3.5. Proceedings On-line

Pratico, F. G.; Leonardi, G.; Scopelliti, F.; Giunta, M. 2007. Assessing road safety levels in a road network on the basis of unlocalised accident data, in *Proc of the 4th International SIIV Congress*. 12–14 September, 2007, Palermo, Italy [cited 3 May, 2008]. Available from Internet: <http://sed.siiv.it/documenti/63_2848_20080110111905.pdf>.

3.6. Books (needs No edition, ISBN)

(include in References if have Citation Impact Factor)

Bennett, D. 1997. *The architecture of bridge design*. London: Thomas Telford Ltd. 198 p. ISBN 0727725297.

Gimsing, N. J. 1997. *Cable supported bridges: concept and design*. 2nd edition. Chichester: John Wiley & Sons, 480 p. ISBN 0471969397.

Petersen, Ch. 1993. *Stahlbau. Grundlagen der Berechnung und bauliches Ausbildung von Stahlbauten* [Structures. Analysis of fundamentals and professional training in field of steel structures]. Braunschweig, Wiesbaden: Vieweg. 1451 S. ISBN 352828837X.

Михайлов, В. 2002. *Предварительно напряженные комбинированные и вантовые конструкции* [Michailov, V. Prestressed combined bars and cables structures]. Москва: АСВ. 256 с. ISBN 5930931372.

Качурин, В; Брагин, А.; Ерунов, Б. 1971. *Проектирование висячих и вантовых мостов* [Katchurin, V.; Bragin, A.; Erunov, B. Design of suspension and cable-stayed bridges]. Москва: Транспорт. 280 с.

3.7. On-line Document

Podolny, W.; Cox, W. R.; Hooks, J. M.; Miller, M. D.; Moreton, A. J.; Shahawy, M. A.; Edwards, D.; Madani, M.; Montgomery, R. K.; Pielstick, B.; Tang, M.C. 2001. *Performance of Concrete Segmental and Cable-Stayed Bridges in Europe* [cited 3 May, 2008]. Available from Internet: <http://international.fhwa.dot.gov/Pdfs/conc_seg_cabstay_euro.pdf>.

3.8. Research Report

Kim, S.-M.; Mc Cullough, B. F. 2002. *Reconsideration of thickness tolerance for concrete pavements*. Research Report 4382-1. Austin: University of Texas. 98.

Hatzi, P. 2003. *Maintaining traffic sign retroreflectivity*, Report No. FHWA-SA-03-027, Federal Highway Administration, Washington DC, 4.

Helmets, G.; Werner, G. 1992. *Hur förändras trafiksignaler i drift? Effekter av driftstid i olika trafikmiljöer. Slutrapport* [How does the performance of traffic signals in operation change? Effect of time in use in different road environments. Final Report], VTI Report 373, Linköping and Borås, Sweden, 39.

Kopf, J. 2004. *Reflectivity of pavement markings: analysis of retroreflectivity degradation curves*, Report No. WA-RD 592.1. Washington State Transportation Center, Washington State Department of Transportation, Federal Highway Administration, USA, 48.

Nygårdhs, S.; Lundkvist, S. O. 2004. *Tillståndsmätning av vägmarkeringarnas funktion i Norden 2003* [Condition assessment of road markings in the Nordic countries 2003], VTI Note 44-2004, Linköping, Sweden, 20.

3.9. PhD Thesis

Thun, H. 2006. *Assessment of fatigue resistance and strength in existing concrete structures*. PhD thesis 2006:65. Lulea: University of Technology. 187 p.

Дулинскас, Е. 1973. *Исследование усталости и жесткости преднапряженных балок с учетом напряженного состояния в процессе теплообработки* [Dulinskias, E. Experimental investigation of fatigue and stiffness of prestressed RC flexural members subjected to thermal curing]. Дис. ... канд. техн. н. Вильнюс. 258 с.

3.10. Patent

Rocens, K.; Verdiņš, G.; Serdjuks, D.; Pakrastiņš, L. 1999. *Kompozītpārseguma konstrukcija* [Rocens, K.; Verdinh, G.; Serdjuks, D.; Pakrastinsh, L. Structure of composite roof]. Latvijas Republikas Patentu Valde, Int.Cl. 6 E04B5/02, E04B5/43 [Patent No. 12191 of the Republic of Latvia, published in 20.03.1999].

4. Other Text Examples

percent (%) (no space)

Steel wire strands can be treated as a material with an increased up to 10% ultimate elongation for the first type of the cable.

multiplication (×) (with space)

Moduli of elasticity of steel wire strands, GFRP, CFRP and Vectran are equal to 2×10^5 , 0.75×10^5 , 1.37×10^5 and 0.65×10^5 MPa, respectively.

measurement (×) (no space)

The dimensions of the tapes cross-sections were 50×1.2 mm.