

Mankind measures

Metrology presents a seemingly calm surface covering depths of knowledge that are familiar only to a few, but which most make use of – confident that they are sharing a common perception of what is meant by expressions such as metre, kilogram, watt and second.

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COVER

Photo of Great Belt east bridge, Denmark. Each of the east bridge's 55 prefabricated 48-metre, 500-ton bridge sections were measured in detail in order to adjust the four hangers which carry the section, to ensure the correct tension. The measured, and expected, deviations from the theoretical measurements required a hanger adjustment of \pm 30 mm. The adjustment of each hanger pin was determined to an accuracy of \pm 1 mm. A wide network of contractors and subcontractors from 10 European countries were involved in building the bridge 1988 - 1997. Reliable and verified measurements were essential in this huge and complex collaboration.

ΒY

Preben Howarth	Fiona Redgrave
Danish Fundamental Metrology Ltd	National Physical Laborat
Matematiktorvet 307	Hampton Road, Teddingto
DK 2800 Lyngby	TW11 OLW
Denmark	United Kingdom
pho@dfm.dtu.dk	fiona.redgrave@npl.co.uk

EURAMET project 1011, participants: DFM Denmark, NPL United Kingdom, PTB Germany

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