

Title (en)

TUBE-JACK SYSTEM AND METHOD FOR TESTING IRREGULAR MASONRY WALLS

Title (de)

ROHR-MUFFEN-SYSTEM UND VERFAHREN ZUM TESTEN VON UNREGELMÄSSIGEN MAUERWERK

Title (fr)

SYSTÈME DE TUBE-MANCHON ET PROCÉDÉ DE TEST DES MURS DE MAÇONNERIE IRRÉGULIERS

Publication

**EP 2622318 A1 20130807 (EN)**

Application

**EP 11776545 A 20111003**

Priority

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- IB 2011054333 W 20111003

Abstract (en)

[origin: WO2012042510A1] System and method to analyze the pressure (or stresses), the deformability (Elastic moduli) and strength of masonry or adobe structural elements (1). The system comprises a number of tube-jacks (2), expandable tubular elements, connected in parallel, with a number of displacement transducers measuring the displacement of the masonry near the line of the tube-jacks, that when inserted into holes drilled in a stressed masonry element or wall (1), and inflated with fluid, through suitable connectors (3, 4, 6) to a pressure generator, expand to the size of the holes, and provide the necessary stress and displacement measurements, together a pressure gauge (5), to calculate the existing local compressive stress, the deformability and whenever possible, the strength of the masonry. Application includes historical and heritage constructions containing masonry or adobe structural elements with large and irregular stone units and nonlinear mortar joints.

IPC 8 full level

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