Title (en)
METHOD FOR PREDETERMINING THE FATIGUE LIFE OF POLYMER COMPOSITION

Title (de)
VERFAHREN ZUR VORBESTIMMUNG DER ERMÜDUNGSDAUER EINER POLYMERZUSAMMENSETZUNG

Title (fr)
PROCÉDÉ DE DÉTERMINATION DE LA TENUE À LA FATIGUE D'UNE COMPOSITION POLYMÉRIQUE

Publication
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Application
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Abstract (en)
[origin: WO2010026356A1] The invention relates to a method for evaluating the fatigue life of a polymer composition, including the following steps: i) providing a polymer composition; ii) manufacturing a plurality of axisymmetric test tubes cut from said composition; iii) subjecting said test tubes to a uniaxial traction fatigue test including a plurality of loading and unloading cycles for the test tube, the geometry of the test tube making it possible to subject the material to triaxial stresses, in the area of the test tube cut, simulating the stress conditions for the pressure sheath of a flexible pipe, particularly for off-shore use; and iv) predetermining the number of cycles until the rupture of said polymer composition. The invention is related to the use of said polymer composition selected through the predetermining method for manufacturing pipes or conduits to convey a pressurized and/or corrosive fluid.

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