

JRC Dataset

Small punch creep test data for 2.25 Cr 1Mo V mod material at 580 °C and a load of 340 N (second repeat test)

Description:

Data collection created in the scope of a programme designed to evaluate the reliability of the Small Punch (SP) testing method as an alternative mechanical test technique for evaluation of the residual life and integrity assessment of components in ageing plants. Tests were performed on the low alloy - 2¼Cr 1Mo V modified ferritic steel, widely selected for construction of high temperature components in petrochemical plants. The technique was shown to facilitate determination of both creep and tensile properties of materials. However, special attention was directed to the potential of the SP creep testing technique for assessing the deterioration of material due to hydrogen attack and thermal ageing, in comparison with conventional uniaxial creep methods.

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Elevated temperature material properties

Related resources:

Data access

MatDB XML distribution

MatDB XML distribution

https://odin.jrc.ec.europa.eu/alcor/Flex?entity=DOI&p;_version=null&action;=displayXML&p;_xmlType=data&p;_RN5=10 00000110020

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