



ECCC RECOMMENDATIONS - VOLUME 4 [Issue 6]

**GUIDANCE FOR THE EXCHANGE
AND COLLATION OF CREEP
RUPTURE, CREEP STRAIN-TIME,
STRESS RELAXATION, CREEP
CRACK INITIATION AND MULTI-
AXIAL CREEP TEST DATA FOR
ASSESSMENT PURPOSES**

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GUIDANCE FOR THE EXCHANGE AND COLLATION OF CREEP RUPTURE, CREEP STRAIN-TIME, STRESS RELAXATION, CREEP CRACK INITIATION AND MULTI-AXIAL CREEP TEST DATA FOR ASSESSMENT PURPOSES

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FOREWORD

The first issues of Volume 4 were concerned with the provision of tool for the collation and exchange of creep, creep rupture, stress rupture and stress relaxation datasets for homogeneous materials, both virgin and service exposed, and welds

This latest edition of Volume 4 has been extended by three new parts, including Issue 6 of the original volume now becoming Part I.

With some recent amendments, Part I mostly represents the work of Working Group 1 of the European Creep Collaborative Committee (ECCC-WG1) during the period 1992 to 2001, where from 1992 -1996 the focus was on recommendations relating to the assessment of datasets typical of those used for the determination of strength values for European Design and Product Standards. Since 1997, the focus has been on the collation and characterisation of small datasets typical of those for *i)* new alloys, ripe for early industrial exploitation, *ii)* welds, and *iii)* post service exposed material (in collaboration with WG1.1 – PEDS – Post Exposure creep Data Subgroup) .

Volume 4 Part II provides a collation tool for creep crack initiation data as independently prepared by the WG1.2 (Creep Crack Initiation Data Generation and Assessment Procedures) in the years 2001 – 2005.

Volume 4 Part III has been prepared by WG4 (Creep of Components and Features), and provides the collation tool for data on multi-axial creep tests.

Volume 4 Part IV, also prepared by WG4, gives an overview on a database set-up for the collation and comparison of component in-service experience and performance

The a comprehensive overview on the contents of the new/revised Volume 4 is shown in the table on he next page:

AUTHORISATION

Volume 4 Parts I, II, III and IV are authorised for use by the Working Groups of ECCC by the
Management Committee:

..... Date:
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Contents of ECCC Recommendations Volume 4

Part	Title	ECCC WG responsible	Data type	Collation sheet	Document Controller
I	Guidance For The Exchange And Collation Of Creep Rupture, Creep Strain-Time And Stress Relaxation For Assessment Purposes	WG1	Mono-axial creep data on virgin material	Creep_v0002.xls	Dr. G. Merckling (Istituto Scientifico Breda I)
		WG1	Mono-axial relaxation data	Relax_v0002.xls	
		WG1	Mono-axial creep data on welds	Creepweld_v0002.xls	
		WG1.1-PEDS	Mono-axial creep data on post exposure materials	CreepPE_v0002.xls	
II	Guidance For The Exchange And Collation Of Creep Crack Initiation Data For Assessment Purposes	WG1.2	Creep crack initiation data	CCIdat3.xls	Dr. S.R. Holdsworth (Alstom Power, UK)
III	Guidance For The Exchange And Collation Of Multi-axial Creep Test Data For Assessment Purposes	WG4	Multi-axial creep test data		Mr P. Auerkari (VTT , FI)
IV	Creesty Database – User Manual	WG4	-	-	Dr. A. Tonti (ISPESL, I)