



ESTIMATE (European Space maTerial deMisability dATabasE)

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Introduction

- ESTIMATE (European Space maTerlal deMisability dATabasE)
 - A material database whose purpose is to act as an online resource and point of reference for European destructive entry analysis
- The database consists of:
 - Monolithic
 - Laminate
 - Composite
 - Complex (mixed) material types.
- It contains a range of data necessary for performing destructive entry calculations, e.g. :
 - Density
 - Specific heat
 - Emissivity
- Data originated from the “Characterisation of Demisable Materials” TRP

Characterisation of Demisable Materials TRP

- Website has been designed by DLR and QinetiQ and compiles the results from two consortia

CHARDEM

- DLR (prime), HTG, OGI, QinetiQ (website design)

CoDM

- FGE (prime), AAC, BRL, IRS, VKI

Website Map

- Home
 - General description of each consortium and main findings
- Materials
 - Database materials listed by type with sample description
 - Links to thermophysical and demisability testing for each material
 - Measurement data downloadable
 - Lineplots available in Tecplot TM format
- Test Facilities
 - Links to a description of the test facilities used to derive data for the website

Website Map

- Database
 - Thermophysical properties for re-entry tool analysis (XML format)
 - Emissivity for re-entry tool analysis (XML format)
 - Measured thermophysical characterization data (Excel format)
 - Measured demisability test data to be used for Plasma Wind Tunnel test rebuilding (Tecplot TM format)
- Test Summary
 - List of demisability testing performed for both parallel activities
- Project Reports
 - Downloadable final report for both activities
- Contacts
 - List of contacts from both consortia

Website Demonstration



Questions?

Thank you for your attention

