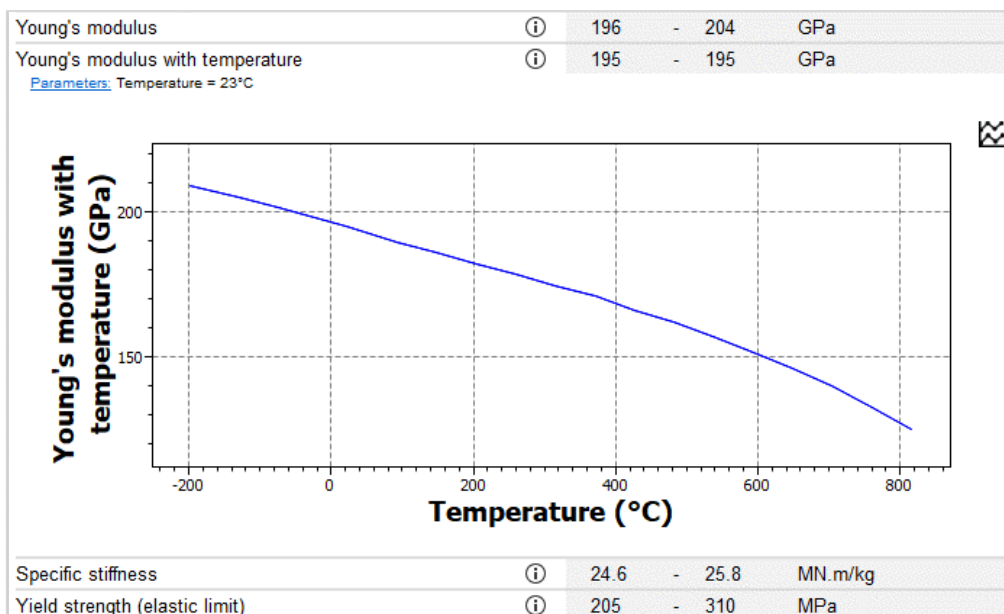




GRANTA SELECTOR

Getting Started with Granta Selector

Functional Data



1 About these exercises

The Getting Started exercises provide an overview of the key tools and features in *Granta Selector*, and form a set of tutorials to help you familiarize yourself with the software. You can choose whether to work through them in order, or complete only the exercises relevant to you. They are intended for use with *Granta Selector 2021 R2*, and may not work correctly with earlier or later versions of *Granta Selector*.

There are also [Quick Start Videos](#) provided online to teach you about *Granta Selector*. These can be used independently of the videos, or alongside them, to test and check your knowledge.

Some properties within the databases are stored as **functional data**, meaning that data is available for a number of different conditions. This allows users to readily incorporate the conditions of their application into their selection project. For example, using the “Fatigue strength model”, you can specify both the stress ratio and number of cycles for the fatigue strength. This set of exercises covers how to view and specify parameters for functional data.

<i>Exercises</i>	3
Exercise 1: Viewing Functional Data	3
Exercise 2: Setting Parameters for Functional Data	4

Document conventions

In this document:

- ❖ Each step of the exercises is shown on a gold background, like this.

More detailed instructions appear below the main instruction.

Text on elements in the software (such as buttons, dialogs and tabs) appears in bold, **like this**. The names of records, datatables, and documents are emphasised *like this*.


Words and numbers that you type as you follow the instructions appear in monotype, like this.

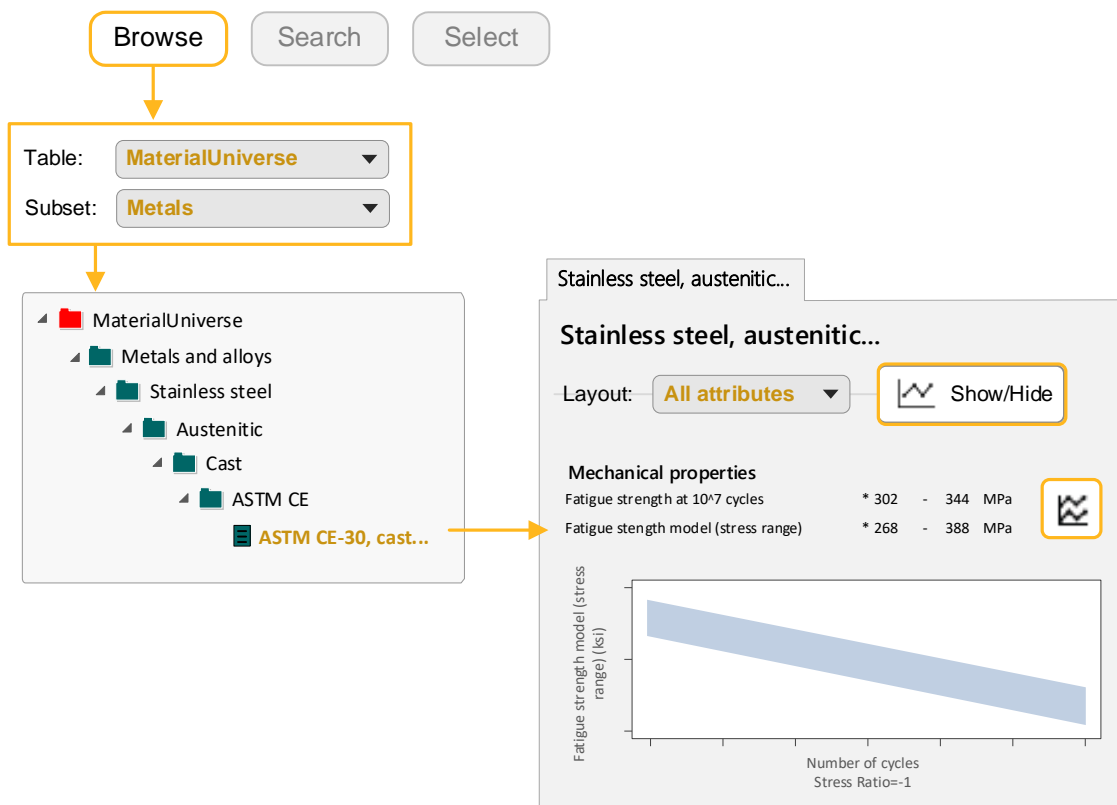
2 Exercises

Exercise 1: Viewing Functional Data

❖ Open the datasheet for a *Stainless Steel* record and view functional data graphs

Click  **Show/Hide** to expand or collapse functional data graphs on the datasheet.

Click the graph button  in the top right-hand corner of the plot to open the graph in a new window, and view the equation or data points.



Exercise 2: Setting Parameters for Functional Data

The parameter values for functional data apply to all applicable functional data types within the datasheet, and to all datasheets in the selection project. You can change the parameter values using the **Parameters** hyperlink.

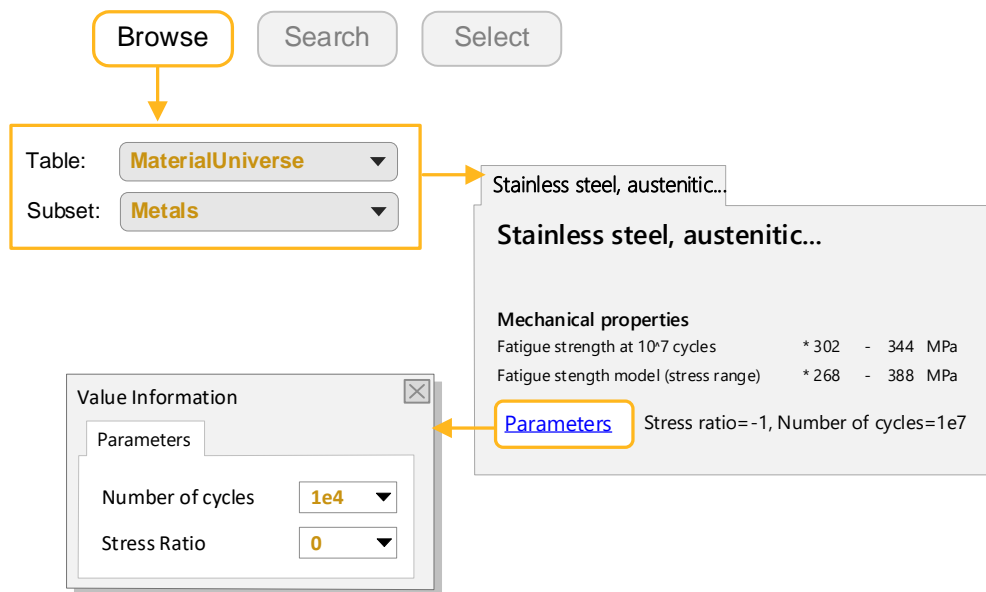
Any functional data you export is also affected by these parameter values.

Note: The value of the *Fatigue strength model* is calculated at the given values for *Stress ratio* and *Number of cycles*.

❖ Find a record for *Stainless Steel*

❖ Change the parameter value for *Number of cycles*

Click the **Parameters** link and set a new value in the dialog, then click **OK**. The value in the datasheet will be updated.



❖ View the updated project settings

Go to **Select > Project Settings**. The updated settings are under the **Parameter Values** tab.

Copyright and Trademark Information

© 2021 ANSYS, Inc. All rights reserved. Unauthorized use, distribution or duplication is prohibited.

ANSYS, ANSYS Workbench, AUTODYN, CFX, FLUENT and any and all ANSYS, Inc. brand, product, service and feature names, logos and slogans are registered trademarks or trademarks of ANSYS, Inc. or its subsidiaries located in the United States or other countries. ICEM CFD is a trademark used by ANSYS, Inc. under license. CFX is a trademark of Sony Corporation in Japan. All other brand, product, service and feature names or trademarks are the property of their respective owners. FLEXlm and FLEXnet are trademarks of Flexera Software LLC.

Disclaimer Notice

THIS ANSYS SOFTWARE PRODUCT AND PROGRAM DOCUMENTATION INCLUDE TRADE SECRETS AND ARE CONFIDENTIAL AND PROPRIETARY PRODUCTS OF ANSYS, INC., ITS SUBSIDIARIES, OR LICENSORS.

The software products and documentation are furnished by ANSYS, Inc., its subsidiaries, or affiliates under a software license agreement that contains provisions concerning non-disclosure, copying, length and nature of use, compliance with exporting laws, warranties, disclaimers, limitations of liability, and remedies, and other provisions. The software products and documentation may be used, disclosed, transferred, or copied only in accordance with the terms and conditions of that software license agreement.

ANSYS, Inc. and ANSYS Europe, Ltd. are UL registered ISO 9001: 2015 companies.

U.S. Government Rights

For U.S. Government users, except as specifically granted by the ANSYS, Inc. software license agreement, the use, duplication, or disclosure by the United States Government is subject to restrictions stated in the ANSYS, Inc. software license agreement and FAR 12.212 (for non-DOD licenses).

Third-Party Software

See the legal information in the product help files for the complete Legal Notice for ANSYS proprietary software and third-party software. If you are unable to access the Legal Notice, contact ANSYS, Inc.

Published in the U.S.A.

We welcome your feedback on this document. Please let us know if anything is unclear, if you spot an error, or have an idea for new content, by emailing granta-docs@ansys.com

Document version: SEL21-FD.02
Published: June 2021