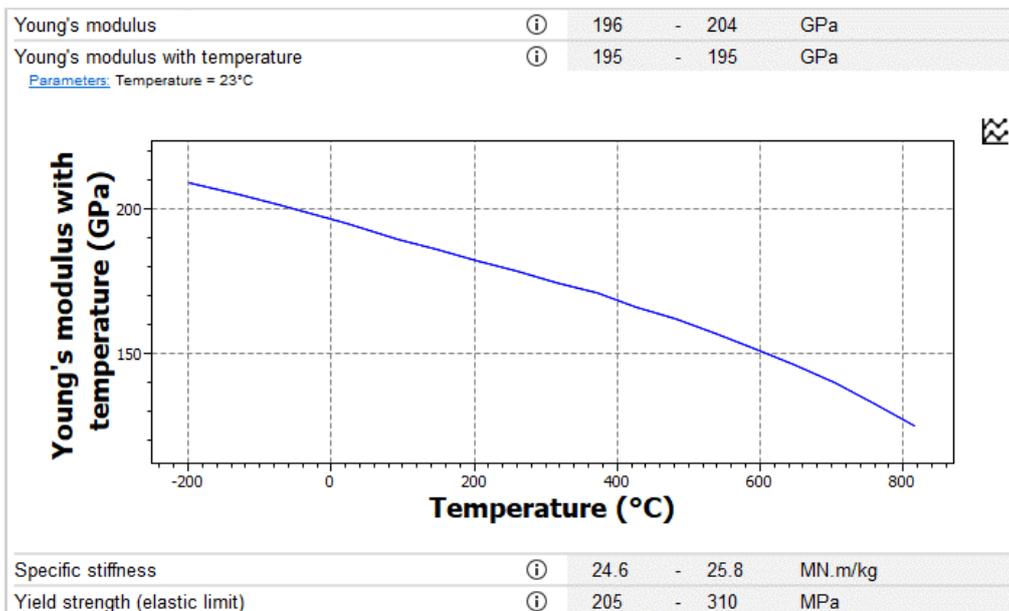


Getting Started with GRANTA Selector

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 2020, 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.

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Document conventions

In this document:

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

More detailed instructions appear below the main instruction.

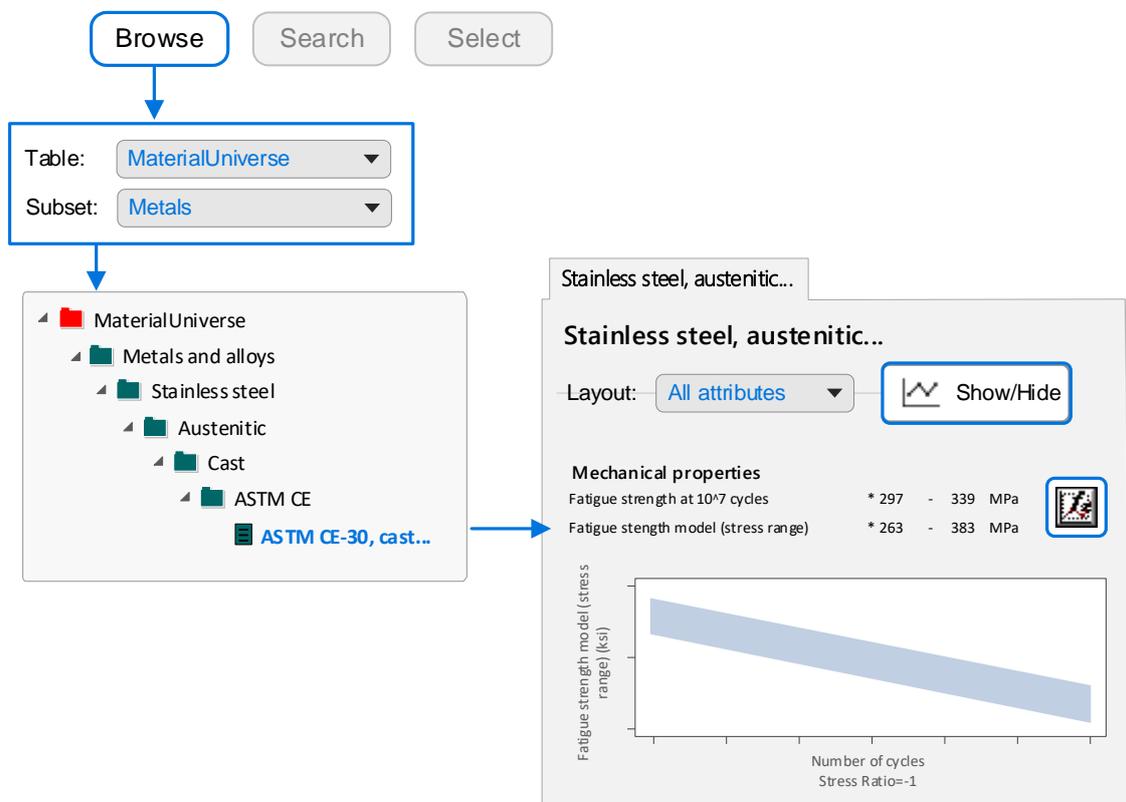
Text on elements in the software (such as buttons, dialogs and tabs) appears in bold, **like this**. The names of records, datatables, and documents are emphasised *like this*. Words and numbers that you type as you follow the instructions appear in monotype, like this.

2 Exercises

Exercise 1: Viewing Functional Data

- ❖ Open the datasheet for a *Stainless Steel* record. If the functional data graphs are not already visible, set them to be shown

Click  **Show/Hide** to toggle 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

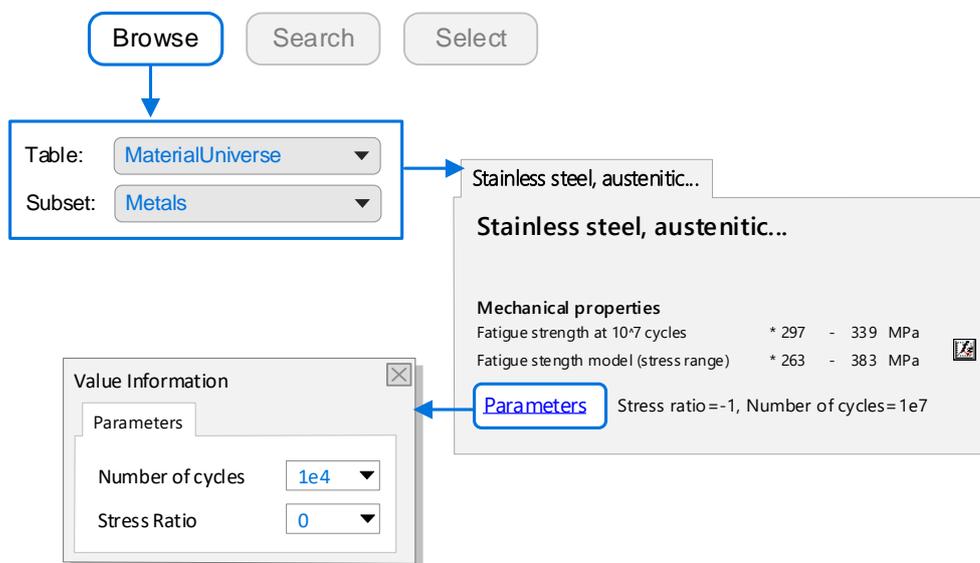
The parameter values for functional data apply to all applicable functional data types within the datasheet, and to all datasheets in the selection project. You change the parameter values using the **Parameters** hyperlink.

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.

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