



Release Notes

2020 R2

Key new features in Ansys GRANTA Selector 2020 R2:

Specialist datasets [MMPDS-14](#) and [ASME BPVC](#) have been updated for the 2020 R2 release, and [GRANTA MI Pro users can now export data](#) directly from GRANTA Selector. The [Quick Start tutorial videos](#) have also been refreshed for this release.

If you didn't install *GRANTA Selector 2020 R1*, you may also want to learn about the updates and new features in that release. You can download the [Release Notes for 2020 R1 here](#).

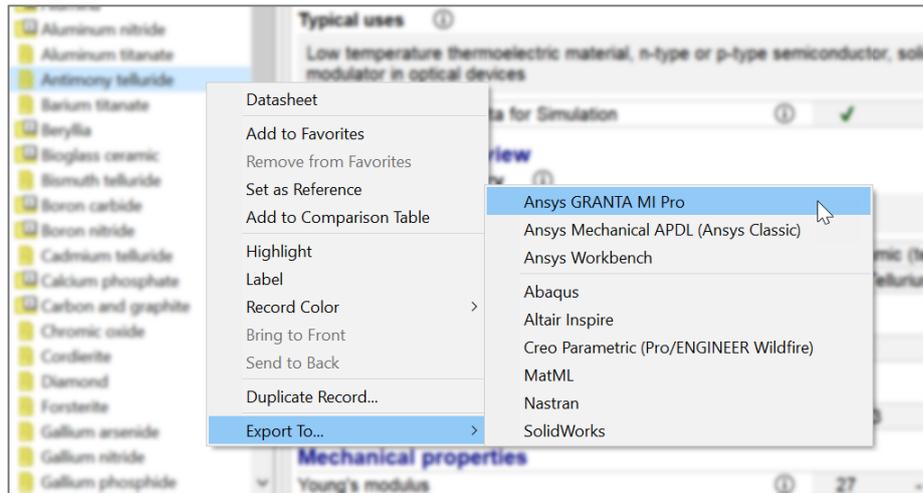
These features and more are described in more detail under the headings below:

- [Integration with GRANTA MI Pro](#)
- [Changes to Advanced Materials – Polymers data bundle](#)
- [Latest versions of specialist datasets](#)
 - [MMPDS-14](#)
 - [ASME BPVC](#)
 - [ASM Medical Materials](#)
- [Refreshed Quick Start tutorial videos](#)

Detailed Descriptions

1. Integration with Ansys GRANTA MI Pro

GRANTA Selector users can now export data directly to GRANTA MI Pro.



Benefits:

- Identify the optimal materials for your application and seamlessly add them to your materials database in GRANTA MI Pro
- Save time and avoid human error in finding and manually entering materials data

2. Changes to Advanced Materials – Polymers data bundle

The *Advanced Materials – Polymers* data bundle contents have changed:

- New *Global Polymers* dataset, incorporating:
 - *Prospector® Plastics*
 - New data on polymer additives
- Removal of *M-Base Plastics* dataset

The *Global Polymers* dataset from UL contains a global library of plastic and elastomer datasheets (*Prospector® Plastics*) including over 100,000 datasheets from over 900 manufacturers and specialty compounders, and provides information on performance, uses, key features, agency ratings, and global availability. It also includes nearly 15,000 datasheets with key attributes and physical properties for additive, filler and masterbatch products. These additive products can be compounded with plastic materials to enhance performance or safety, reduce weight and cost, or improve molding process.

3. Latest versions of specialist datasets

3.1. MMPDS-14 (Advanced Materials – Aerospace)

This dataset is part of the *Advanced Materials – Aerospace* data bundle.

The *Metallic Materials Properties Development and Standardization* (MMPDS) handbook is the pre-eminent source for aerospace component design allowables relating to alloys and fasteners. Contains over 2,600 records of statistically-derived design data for aerospace alloys in various forms and thicknesses, as well as information on the temperature dependence of mechanical properties. Also contains a complete fastener database comprising over 425 sheet-metal/fastener combinations.

Updates include:

- Two new aluminum alloy records (7097 and 7160) and updated 7140 record
- Additional records for specific thicknesses of Inconel 718
- New fatigue equation parameters for A286 heat-resistant alloy
- Newly calculated shape factors for 2050 aluminum alloy

Benefits:

- Get access to the most up-to-date version of this critical source of design allowables for the global aerospace sector

3.2. ASME BPVC 2019 Edition

This dataset is part of the *Advanced Materials – Metals* data bundle.

The ASME Boiler and Pressure Vessel Code (BPVC) is a standard for the design, fabrication, and inspection of boilers and pressure vessels. It provides over 4,000 datasheets covering various forms, thicknesses and heat treatments for seven material families. The latest release includes:

- 438 new material records, including
 - 62 carbon steels and cast irons
 - 38 nickel steels
 - 159 high alloy steels
 - 21 aluminum alloys
 - 123 copper alloys
- New functional (curve data) attributes
 - Maximum allowable stress (Section IV)
 - Maximum allowable stress (lined water heaters)
 - Maximum allowable stress (unlined water heaters)

Benefits:

- Access the latest version of Part II-D of this authoritative source of design data for boilers and pressure vessels

3.3. ASM Medical Materials

This dataset is part of the *Advanced Materials – Medical* data bundle, and is an online subscription accessible through links in relevant *MaterialUniverse* records.

ASM Medical Materials brings to your desktop a comprehensive and authoritative set of mechanical, physical, biological response, and drug compatibility properties for the materials and coatings used in medical devices. The latest update has:

- Expanded the database to include medical devices essential to the global COVID-19 response, including ventilators, respirators and facemasks, and life-sustaining devices.
 - 2,339 510(k) and 633 PMA devices
 - New *Anesthesiology* category
- *Emergency Use Authorizations* references to help identify COVID-related devices and get the latest FDA information.
- Full coverage of pre-1996 FDA-approved medical devices (43 Premarket Approvals added).
- Been updated with the latest 510(k) and PMA approvals, recalls, FDA guidance documents, and producers.

Benefits:

- Access the latest information on FDA-approved medical devices, including links to the materials, coatings and drugs used in their construction.

4. Refreshed Quick Start tutorial videos

The tutorial videos have undergone a visual refresh and update, plus the addition of a **Tools used** section in each introduction.

Getting Started with GRANTA Selector
Identify a substitute material using Find Similar

In this video...

Tools used

- Search
- Find Similar
- Reference Record
- Limit Stage
- Comparison Table

Selection Scenario
Case study: Butterfly valve

Design requirements:

- Higher strength
- Other properties same or better
- Process: Metal casting

Ansys

Benefits:

- Simplified introductions combined with training exercises make it even easier for new users to get up to speed with key features.

Feedback

Granta Design Limited would welcome your feedback on any improvements you would like to see in the *GRANTA Selector* system, its data or documentation.

Please send your ideas using the **Feature Request** button on the main toolbar. Alternatively, you can email your suggestions to support@grantadesign.com.

www.grantadesign.com

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