

### **Nexus Materials**

Cloud-based data management and enrichment of material data



Nexus Materials empower organisations with modern, powerful and accessible engineering tools to leverage material data more effectively, adding flexibility and scalability, increasing innovation and improving productivity.

**Materials Connect** is Hexagon's first-in-class cloud-native visualisation and data management solution.

- It is hosted in a cloud-based environment supplying all material data in a single and central repository that is accessible to all data consumers to enhance collaboration and connectivity across smart manufacturing.
- The database allows to easily import, manage and structure all types of data with intuitive and interactive data and information visualisation to quickly identify the material of interest.

**Materials Enrich** leverages and enriches existing material data to drive faster product design and development.

- By combining material modelling with machine learning technologies, Materials Enrich is the best-in-class solution to augment material data efficiently and intelligently with accurate predictions.
- The fast and high-fidelity enrichment of material data is very easy-to-use thanks a streamlined and productive workflow powered by efficient cloud computing resources.

### **Value**

- Access data seamlessly anywhere and at any time thanks to a cloud-based environment
- Get data-driven insights with modern and flexible visualisation tools to make informed decisions
- Reduce time, cost and waste of lengthy and costly physical experimental tests
- Accelerate innovation with augmented databases and enriched material properties
- Increase productivity by delivering faster material information
- Enhance smart manufacturing collaboration through connected workflows

Nexus is an open platform enabling digital engineering and manufacturing collaboration by connecting people, technologies, and data, accelerating innovation and time to market.

### **Enhance collaboration through connected workflows**

Materials Connect and Materials Enrich provide a flexible and scalable access to material data to address the most demanding engineering and manufacturing challenges. The end-to-end solution facilitates the connection of data between stakeholders, enhancing smart manufacturing collaboration.

## Cloud-native visualisation and data management solution

**Accessible -** Provide seamless access to material data with connections to and from the cloud

**Intelligible –** Unlock data-driven insights with intuitive data presentations

**Flexible –** Import, store and manage material data from a wide variety of data types and formats

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# Generation of material data with machine learning

**Intelligent –** Enrich material properties with physics-based simulation and Al-driven predictions

**Cloud –** Leverage cloud computing resources to accelerate the generation of material data

**User-friendly –** Enjoy a streamlined and easy-to-use workflow that democratises the underlying enabling technologies







Try out the app on the Nexus Portal nexus.hexagon.com