

FOR IMMEDIATE RELEASE

CompoSIDE releases 1,200+ composite materials and plies

CompoSIDE Ltd., the engineering simulation and data management platform with dedicated composite design and analysis software, releases a database of over 1,200 composite materials and plies, full datasets of properties and micro-mechanical values.

London and Cowes, UK – Monday 7th March 2016 - CompoSIDE Ltd., the engineering simulation and data management platform with dedicated composite design and analysis software, releases a database of over 1,200 composite materials and plies, full datasets of properties and micro-mechanical values.

“Composite materials and plies characterization can cost up to tens of thousands of Euros forcing companies to invest heavily on coupon testing, or limit the choice of available composite materials for their products and application” says Lorenzo Bossi, Sales & Marketing Manager at CompoSIDE Ltd. “This release of CompoSIDE’s CMDB adds over 1,200 materials and plies, characterised with “fit for design mechanical properties” or characteristic values to help companies identify and use the best set of materials for their products. Manufacturers of Fibre Reinforced Plastics (FRP) products across Aerospace, Automotive, Rail, Marine, Civil, Renewables, Oil and Gas and other Industrial applications can benefit from a dedicated composite design software with a large database of available materials for faster and cheaper product development.”

Working with Composite Materials

The development of composite parts and products differs greatly from working with metals and plastics. For the latter the material selection and manufacturing process is well known and established, the various grades of materials are well characterised and data is publically available. Moreover the properties are isotropic. With composite materials, the material selection, manufacturing process and design activities are heavily correlated. CompoSIDE makes the management of the complexity inherent to composite materials easy. It allows to include the process and manufacturing particulars at the early stages of the design therefore helping the feasibility assessment of a composite solution. This in turn fast tracks composite material application development.

Reducing Costs of Composite Materials Selection

As part of the characterisation of 1 composite material 3 main testing phases are required, firstly the material sourcing and coupon manufacture generally costing in excess of €1,500. Further on, the basic set of composite material properties are evaluated using static tests, such as fibre volume fraction (FVF), density, tensile, compression and Interlaminar Shear Strength (ILSS) test and others, this phase costs in excess of €6,500 EUR. These initial tests, totalling over €8,000 are generally accepted for numerous industries such as marine, but wind and tidal energy, aerospace or

automotive applications would require fatigue tests to be conducted, often sometimes tens and sometimes hundreds of thousands of Euros depending on the industry.

Introducing CompoSIDE's CMDB Addon

CompoSIDE's CMDB Addon features in excess of 1,200 composite materials and plies with a full set of composite materials properties and micro-mechanical analysis features. The large database is built on years of experience, tests and publically available data, to provide a single source of reliable data for the design and analysis of composite parts and products. The materials selection includes composites (resin, fibre, core materials. etc.), metals, woods and plastics, to answer requirements of hybrid constructions. The full set of materials includes both vendor specific and independent materials data, useful to avoid dependence from a given manufacturer.

Search by properties and materials comparison features are helpful during the material selection phase, to identify the most suitable material. Ply generation is included within CompoSIDE's PlyGen, allowing the development of new plies sets and analytical analysis. CompoSIDE is a web-based SaaS software allowing multiple users to collaborate across projects, regardless of the physical location.

Using Composite Materials Properties in the Design of Composite Parts

CompoSIDE features a fully integrated platform for the conception, design and analysis of composite parts and products, it also includes an integrated reporting engine for automatic generation of engineering and manufacturing Bill of Materials (BoM). The availability of data from CompoSIDE's material database (CMDB), whether these are core materials or plies, is readily available in the laminate design tool LAMINASpace, which is built upon extension of the Classical Lamination Theory (CLT). Laminates, or both materials and plies, can be used within the preliminary design phase in SECTIONSpace, the dedicated module to sections and beams design and analysis. Complex models can be loaded into the 3D modelling and 3D FEA environment FESpace. FESpace allows modelling of complex 3D shapes and features a unique and dedicated FEA solver to working with layered materials such as composites. The designs made within CompoSIDE can be extracted to form reports and bill of materials automatically, the platform is able to source and consolidate all materials and plies used within the project, into a single report, also providing the actual and wastage material quantities according to the selected manufacturing process.

Centralized Materials Database

CompoSIDE's CMDB acts as the centralised composite materials properties database within organisations. The materials database is fully integrated within CompoSIDE's environment and features enterprise level connectivity for seamless interaction with most common IT, CAD and FEA packages. CompoSIDE's CMDB can act as the central repository for all composite and non-composites materials, the library includes properties for metals, woods and plastics, making it ideal for any manufacturer. Clients can interact with CMDB in a variety of ways, directly working within CompoSIDE allows for new materials definition, materials comparison and search and select. Selected materials can be used within CAD/FEA systems via straightforward export functionalities

while enterprise clients looking for a seamless integration can benefit from the API based connectivity.

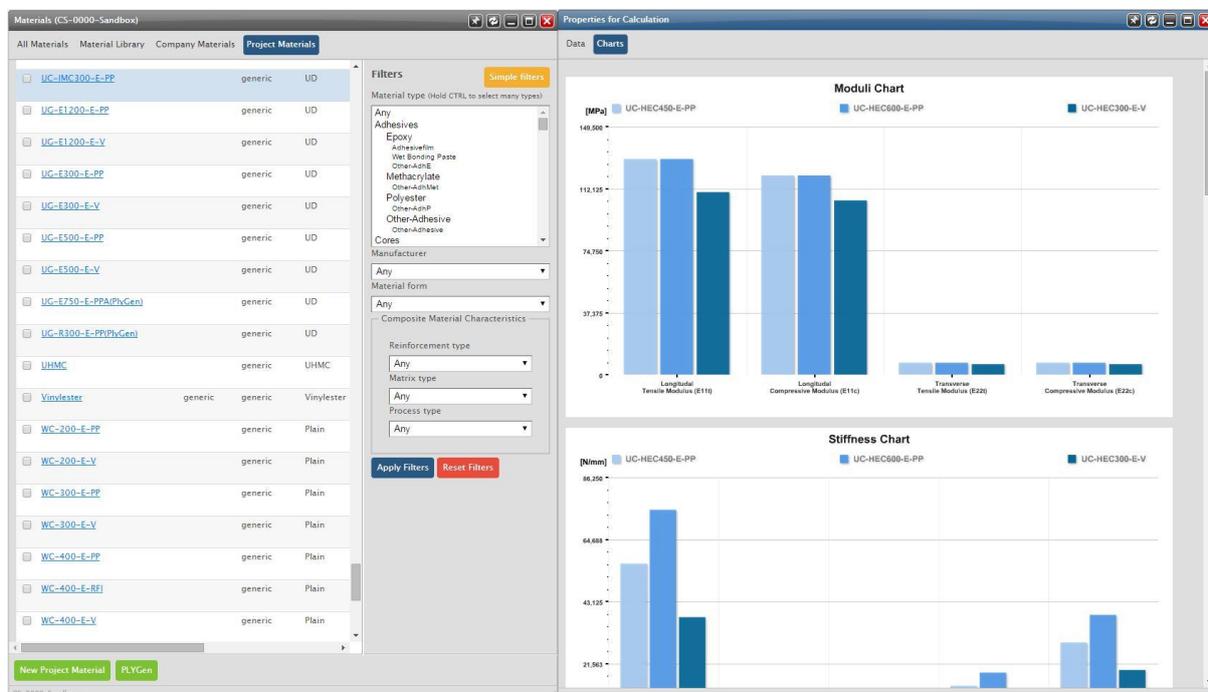
Pricing and Availability

CompoSIDE is the only full cycle software for composite design and analysis featuring materials management, laminate calculation, beam section design and 3sD FEA modelling with integrated reporting and bill of materials generation, that is affordable and ready available to companies of all sizes. CompoSIDE platform is built on SaaS model and is licenced on a monthly or annual subscription basis with unlimited number of users. Subscriptions start at €2,500 EUR a year for all core modules, the CMDB Composite Materials Properties Database is available at €4,500 EUR a year. Free 30-days trial is available from CompoSIDE website: <http://www.composide.com>

About CompoSIDE Ltd.

CompoSIDE is an integrated suite of web-based design engineering modules and data management tools that significantly reduce development time and cost for composite applications. Our solution can reduce our clients' design time by up to 75%, and cut up to 40% from project costs. Unlike existing software products, we focus on delivering a secure, web-based collaborative solution that integrates seamlessly with our clients' existing systems and quality standards. www.composide.com

Image



CompoSIDE's CMDB – Composite Materials Properties Database features over 1,200 Composite Materials and Plies with full set of mechanical properties, micro-mechanical analysis capabilities and composite materials manufacturing process integration.