## At CompPair, we provide prepregs to build healable and sustainable composites



Inspired by **nature**, CompPair Technologies Ltd. brings the **healing capability** to composites. Our vision is to bring **full circularity** to the composite industry, **extending the lifetime of composites by healing matrix** and enabling a **more efficient recycling** of the fibers at the end of life. HealTech<sup>™</sup> products by CompPair are **pre-impregnated textiles** available with multiple architectures and fibre types (see page 4 for more information).



At CompPair we believe in a **world without materials waste**. We support the **sustainable development goals**. Indeed, our vision is to contribute to take part in inclusive and sustainable industrialization, together with innovation and infrastructure, to promote responsible consumption and production and to act towards **climate action**.



We are a dynamic team of talents working with clients to produce products, that **last longer and produce less waste**. Our strong values, **dedication**, **honesty and curiosity**, help us achieve our goals. Based in Lausanne, CompPair Technologies is a **Swiss pioneer in the self-healing composites field**.

<u>Demo video</u> (available on our YouTube channel)



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# HealTech<sup>™</sup> prepregs enable in-situ matrix healing in minutes, with heat only

HealTech<sup>™</sup> prepregs are used to manufacture composite structures with the ability to **heal matrix damage autonomously in 1 to 5 minutes** by heating the part between **100°C and 150°C**. Parts made with HealTech<sup>™</sup> fully recover initial properties multiple times and stay structural during the healing cycle. Thanks to HealTech<sup>™</sup>, repairs can be done on-site with only a heat gun, in a few minutes, without affecting the parts' performances. HealTech<sup>™</sup> is compatible with **benchmark prepreg production processes** and is currently available with **glass and carbon reinforcements** in various architectures and areal weights.

#### HealTech<sup>™</sup> Carbon

HealTech<sup>™</sup> T300-TW200-42RW-1250 HealTech<sup>™</sup> T700-TW415-38RW-1250 HealTech<sup>™</sup> T700-UD200-36RW-300



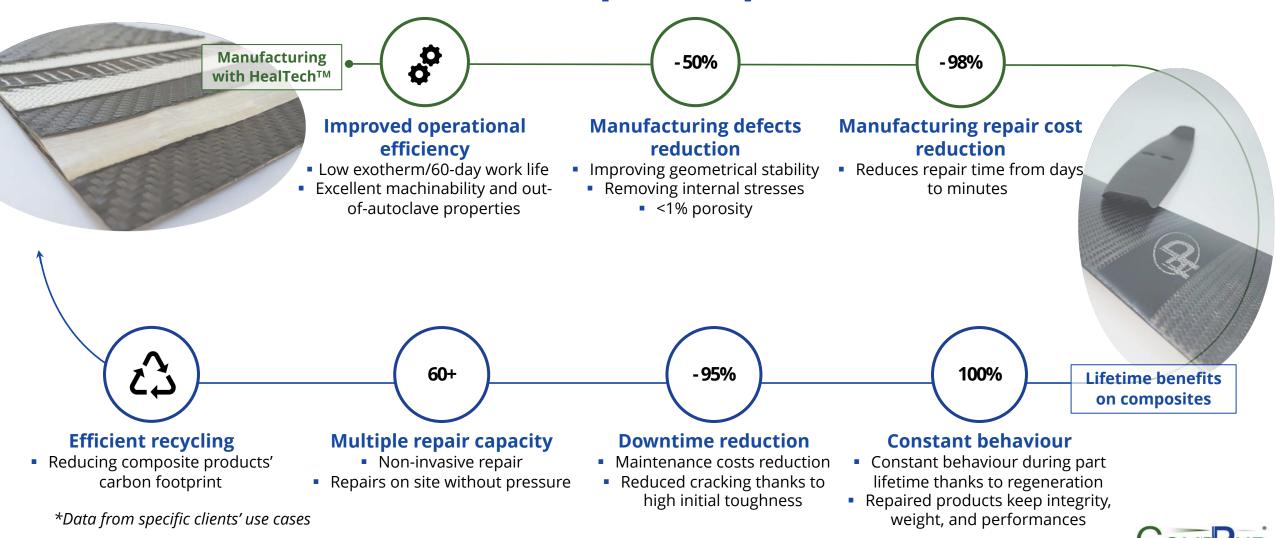
### HealTech<sup>™</sup> Glass

HealTech<sup>™</sup> GLASS-TW390-38RW-1250 HealTech<sup>™</sup> EGLASS-UD400-35RW-300 HealTech<sup>™</sup> GLASS-UD220-32RW-1000

#### HealTech<sup>™</sup> T300-TW200-42RW-1250 Product Fibre - Architecture – Areal weight - Resin weight % - Roll width



## HealTech<sup>™</sup> prepregs improves operational efficiency and extends the lifetime of composite products





### **Technical Data**

HealTech<sup>™</sup> is a toughened prepreg resin system with a special healing agent, giving FRPs the ability to **heal cracks and delaminations** in 1 minute by locally heating the part in a range of 100°C-150°C. HealTech<sup>™</sup> is compatible with prepregs production lines and is suitable for Autoclave, Out-of-Autoclave, and press curing.

|                                     | Yarn     | Architecture | Weight | Tensile        |               | Bending        |               | Toughness   |
|-------------------------------------|----------|--------------|--------|----------------|---------------|----------------|---------------|-------------|
|                                     |          |              | (g/m²) | Strength (MPa) | Modulus (GPa) | Strength (MPa) | Modulus (GPa) | (J/m²)      |
| HealTech EGLASS-<br>TW390-38RW-1250 | E-Glass  | Twill        | 390    | 487 ± 24       | 22 ± 1        | 576 ± 16       | 22 ± 0.2      | 1 365 ± 143 |
| HealTech EGLASS-<br>UD220-32RW-1000 | E-Glass  | Stitched UD  | 220    | 766 ± 154      | 40 ± 1        | 703 ± 19       | 37 ± 0.4      | 2 168 ± 188 |
| HealTech EGLASS-<br>UD400-35RW-300* | E-Glass  | UD           | 400    | N/A            | N/A           | N/A            | N/A           | N/A         |
| HealTech T300-<br>TW200-42RW-1250   | T300-3K  | Twill        | 200    | 728 ± 26       | 66 ± 2        | 705 ± 28       | 51 ± 0.6      | 1 243 ± 106 |
| HealTech T700-<br>TW415-38RW-1250   | T700-12K | Twill        | 415    | 955 ± 43       | 65 ± 1        | 559 ± 31       | 48 ± 2        | N/A         |
| HealTech T700-<br>UD200-36RW-300    | T700-12K | UD           | 200    | 2 657 ± 189    | 133 ± 2       | 1 015 ± 29.0   | 107 ± 3       | N/A         |

\*currently under assessment

The information provided in this document is without legal responsibility. Users are required to perform testing to confirm that the product meets their requirements.

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