

## **CVI MANUFACTURING ROUTES OF NON-OXIDE CMCS**

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There is no single manufacturing route for CMCs that works for every application. The decision is influenced by component geometry, end application and processing costs to name a few. Chemical vapour infiltration (CVI) is a variation on the chemical vapour deposition (CVD) coating technique that can be employed in manufacturing of CMCs through application of the fibre interphase, protective/binding coatings, matrix densification and thicker external barrier layers. Thorough understanding of the CVI technique, coupled with precise knowledge of the components' end application is required for the correct manufacturing route to be selected. CMCs can be made by creation of a complex geometry component in a batch-based process, or by continuous deposition directly onto fibres. This talk aims to discuss the benefits and limitations of each route, highlighting the need for multi-disciplinary input in every stage of component creation: design, manufacture and installation.