SIGRABOND Chemical is a modern high-strength, temperature and corrosion resistant composite material made of carbon fibers within a plastic or carbon matrix. Applying the SGL Carbon production process for carbon composites different material grades of SIGRABOND Chemical are available to realize a new benchmark for internals within state-of-the-art column design.

1. Spool of carbon fibers mainly used for production of cylindrical parts
2. Carbon fiber fabric mainly used for production of carbon fiber plates
3. Phenolic based resin for pre-impregnation of carbon fibers or fabrics before shaping
4. Semi-automated winding of pre-impregnated carbon fibers following a specified build-up sequence
5. Lamination of pre-impregnated fabrics following a specified build-up sequence
6. Compacting and curing of winded components at temperature and vacuum
7. Pressing and curing of laminates at temperature and pressure to plates
8. Carbonization of cured "green" products to convert phenolic matrix material into carbon
9. Densification of carbon fiber components by impregnation with phenolic based resin or pitch
10. Densification through chemical vapor deposition (process step not part of standard route)
11. Machining of carbon fiber cylinders or plates to single parts and assembly of components

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The data contained herein represent the current state of our product knowledge and are intended to provide general information on our products and their application spectra. In view of the variety and large number of application possibilities, these data should be regarded merely as general information that gives no guarantee of any specific properties and/or suitability of those products for any particular application. Consequently, when ordering a product, please contact us for specific information on the properties required for the application concerned. On request, our technical service will supply a profile of characteristics for your specific application requirements without delay.