

1996

SIGRAFLEX®

50

1972
2022

Commissioning of 1,500 mm (59.1“) wide foil line in Meitingen

In the late 1980s to the early 1990s, the asbestos ban became effective in various European countries, which also affected fiber gaskets based on asbestos. Gaskets made of flexible graphite come closest to the application properties of asbestos in terms of temperature and chemical resistance. So, the ban further boosted the demand for graphite-based sealing materials - and thus for products made of flexible graphite.

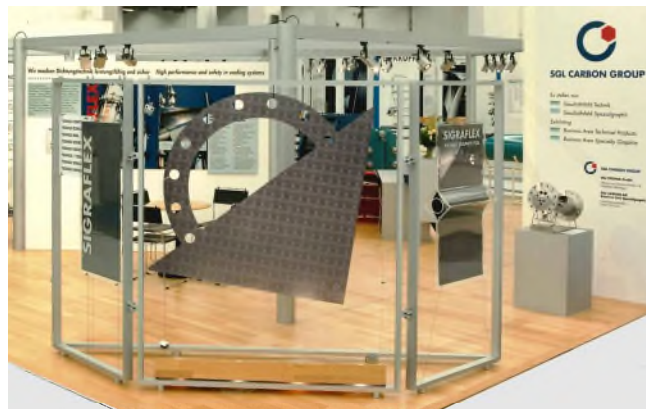
The SIGRAFLEX® production plant commissioned in Meitingen in 1986, which could manufacture foils up to a width of 1,000 mm, had already reached its capacity limits at that time. Furthermore, requests from European customers for larger-format SIGRAFLEX products accumulated. Such products had already been successfully produced since 1988 at our Valencia production site in the US with the 1,500 mm (59.1“) wide foil line (see 1988 milestone). With the existing equipment the increasing demand could no longer be satisfied.

As a result, a project team in Meitingen, headed by Günter Gabriel, the then SIGRAFLEX Production Manager, began planning the construction of an also 1,500 mm wide foil line.

Granting of HOCHDRUCK patent

Developing new SIGRAFLEX® products has always been geared towards the requirements of our customers and end users. Of course, we have also always kept an eye on latest developments in legal regulation, guidelines and directives. Our R&D department have put a lot of dedication and innovative force into this work over the years – from the Head of R&D to the engineers and lab technicians at both our sites in Valencia and Meitingen.

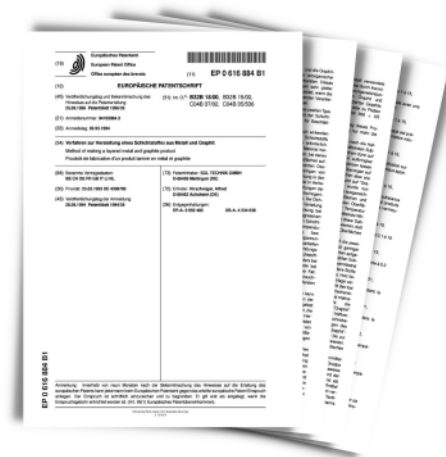
Patent applications are essential to protect our ideas, new technologies and products from imitation and copy. Those also help maintaining the market value of our products and our overall business success, our reputation and offer competitive advantages to our customers.



1,500 mm SIGRAFLEX® HOCHDRUCK gasket and sheet exhibited for the first time at ACHEMA 1997

It was finally put into operation in 1996. A foil width of 1,500 mm is still state of the art today.

The first new products that were manufactured on this line were presented to a wide audience at the ACHEMA in Frankfurt in 1997, including a 1,500 mm x 1,500 mm printed SIGRAFLEX HOCHDRUCK gasket sheet and a one-piece SIGRAFLEX HOCHDRUCK flat gasket with a diameter of 1,500 mm.



Especially the unique SIGRAFLEX HOCHDRUCK technology developed in the early 1990s in Meitingen, i. e. the method to produce high-strength adhesive-free layer bonds of highly pure graphite and stainless-steel foils needed patent protection.

Till today SIGRAFLEX HOCHDRUCK's performance is unrivalled when it comes to leak tightness under high pressure. SGL Carbon had filed the application at the European Patent Office in 1994. The patent was then granted in 1996 (Method of making a layered metal and graphite product).

Additionally, in 1996 SGL launched two new SIGRAFLEX sheet products: SIGRAFLEX EMAIL and SIGRAFLEX ANTI-STICK.

SIGRAFLEX EMAIL is a TA Luft compliant gasket sheet made of SIGRAFLEX high-purity flexible graphite foil reinforced with two layers of flat stainless-steel foil using the HOCHDRUCK technology. The sheet was developed especially for use in PTFE envelope gaskets e. g. for enamelled pipe work and vessels or steel pipework in the pharmaceutical industry.

SIGRAFLEX ANTISTICK is a gasket sheet made from flexible graphite reinforced with tanged stainless-steel and equipped with a special mineral-based antistick finish to improve handling and scratch resistance.