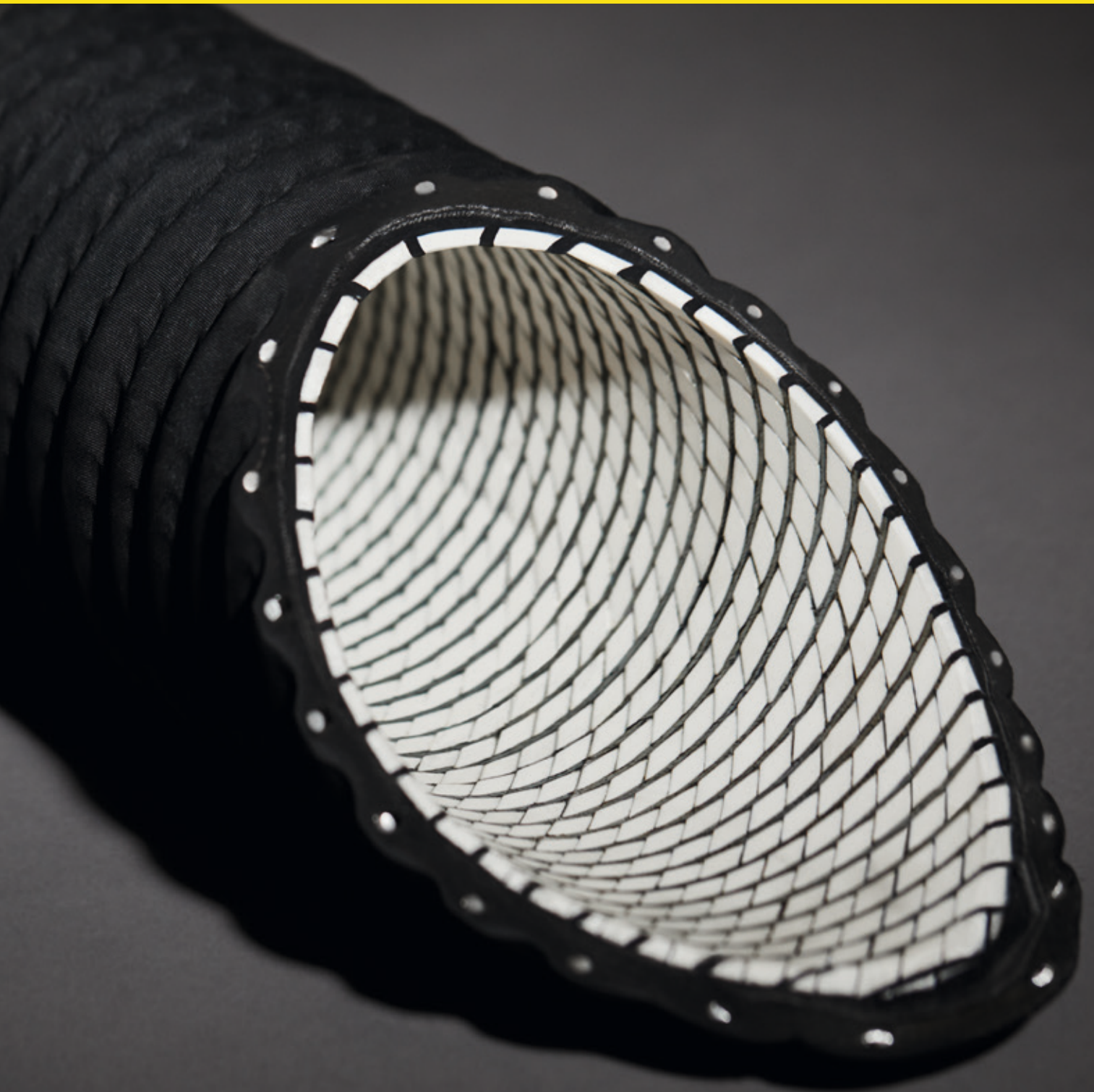


KALFLEX
WEAR-PROTECTED AND FLEXIBLE HOISING SYSTEMS

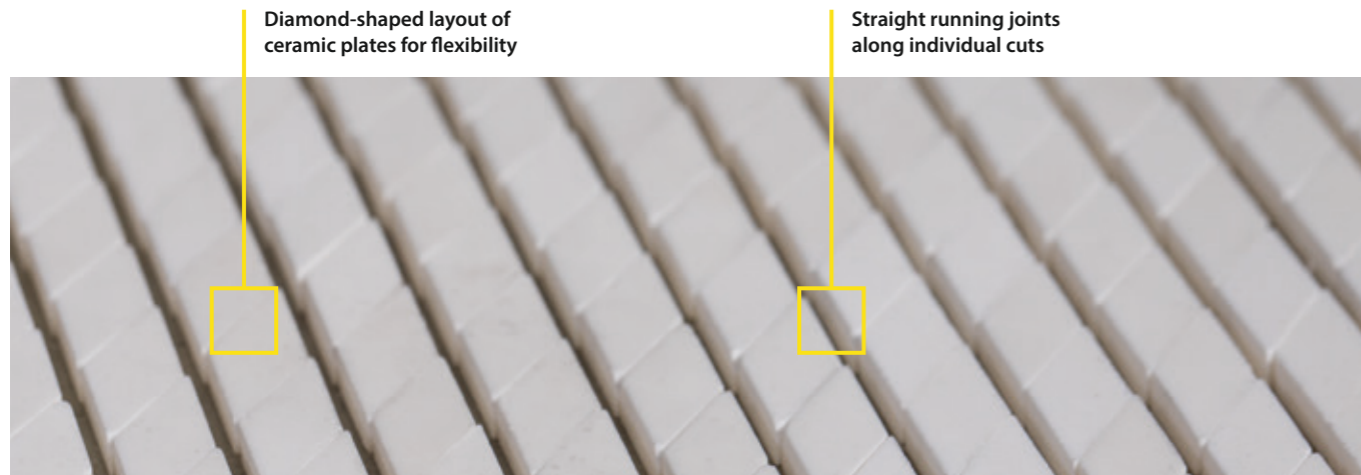


WHAT IS KALFLEX?

The hose system that handles any bend

Wear-protected KALFLEX hoses are used where flexibility of radius and angle are required. They are suitable for the passage of highly abrasive materials such as granules, quartz sand, slurry, powdered lime or coal dust. This means you can avoid maintenance shut-downs and the need to replace hoses.

The outer sleeving of KALFLEX hoses is made of rubber. The embedded woven inlay with spirals of steel keeps the hoses stable. The inner surface of the hosing has diamond-shaped ceramic plates made of KALOCER embedded into it as part of a vulcanisation process. This provides excellent protection against frictional wear and also makes it possible to achieve the tight radius and sharp angles of hosing systems in all directions.



Diamond-shaped layout of ceramic plates for flexibility

Straight running joints along individual cuts

The diamond-shaped ceramic pieces enable a very tight hosing radius to be achieved

SAMPLE APPLICATION: STEEL INDUSTRY

KALFLEX transport hoses for recycling dust

Objective

In an installation for the steel industry, flexible hosing systems without wear protection were used for a dust return system. The client needed a flexible and wear-proof transport hose with a diameter of 100 mm and a flange conforming to DIN 2642. It must withstand a pressure of 10 bars at an operating temperature of 50 °C.

Solution

Kalenborn supplied high-performance KALFLEX flexible hosing and installed them with matching connectors. The flanges matched those of the previously existing fixed pipes, which simplified the installation.

Benefits

With KALFLEX, customers have the option to customise their hosing further. In this instance, KALFLEX achieved a lifetime more than three times longer than conventional rubber hoses.



Wear-protected flexible hoses for rapid, simple and inexpensive installation

TECHNICAL DATA

Flexible – in terms of variants too

Kalenborn supplies KALFLEX hoses starting from an internal diameter of 50 mm. The product range includes hoses of lengths from 500 up to 10,000 mm and it is also possible to cut them cleanly to length.

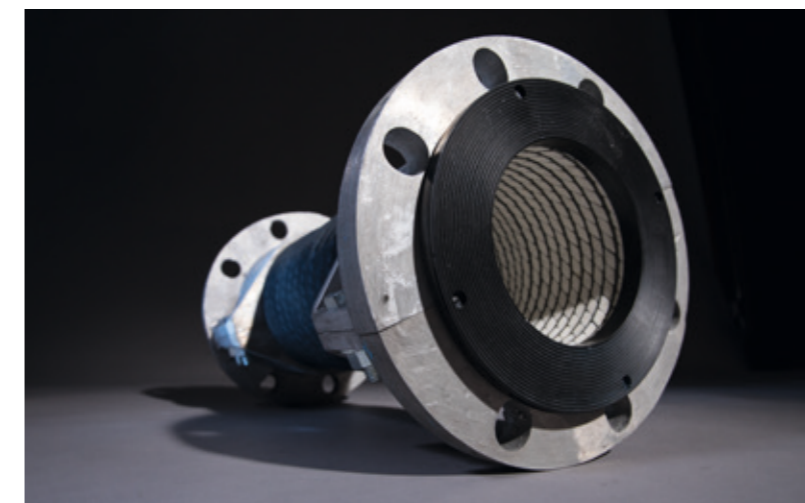
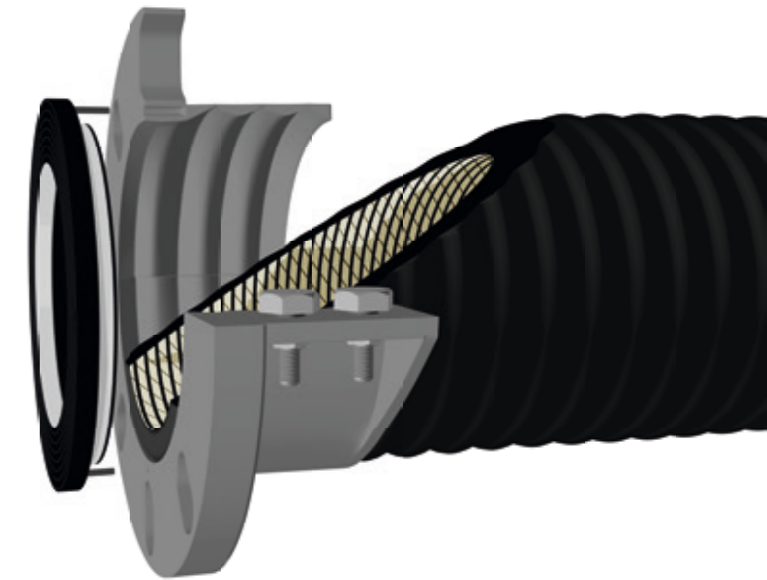
KALFLEX hoses vulcanised with oxide ceramic are used for hydraulic and pneumatic transport of abrasive materials in all sectors of industry. Thanks to their flexibility, they are also suitable for components which are intentionally subject to motions, vibrations or temperature fluctuations.

Temperature ranges:

-40 °C to +80 °C

Design:

- > Interior: highly wear-proof ceramic lining
- > Reinforcement: woven inlay with steel spirals
- > Rubber sleeving: weather-resistant and durable EPDM



Segment of hose with connecting clip: the reusable coupling system ensures perfect sealing and also outstanding resistance to pressure.

Large selection of variants for all areas of application:

Dimensions			Pressure		Weight kg/m
Internal diameter mm	Radius R min. mm	Ceramic thickness mm	Operating pressure max. bars	Pressure below atmospheric max. bars	
50	200	4	10	0.9	4.8
65	300	4	10	0.9	5.8
80	350	4	10	0.9	6.7
100	400	4	10	0.9	8.2
125	600	4	10	0.9	10.1
150	700	4	10	0.9	11.9
200	1300	4	10	0.9	16.7

