

KLINGER® SEALEX

Quick, easy to assemble – sealing on a roll



KLINGER® SEALEX

Einbauhinweise
 Reinigen Sie den Flansch, schneiden Sie ein Stück KLINGER®SEALEX-Band ab, das etwas länger als der tatsächliche Umfang der Dichtfläche ist. Lösen Sie den Schutzstreifen von der Klebefläche der Dichtfläche des SEALEX-Bandes im Bereich eines Schraubenloches. Überkreuzen Sie die beiden Enden des SEALEX-Bandes im Bereich eines Schraubenloches. Montieren Sie dann den Gegenflansch und schrauben Sie die Flanschverbindung fest, indem Sie die empfohlene Gesamtschraubkraft aufbringen.

SEALEX Breite mm	minimale/maximale Anpresskraft für die Abdichtung bei Raumtemperatur*		minimale/maximale Anpresskraft für die Abdichtung bei 100°C*	
	Flüssigkeit N/mm	Gas N/mm	Flüssigkeit N/mm	Gas N/mm
3	85 - 400	170 - 400	150 - 400	350 - 400
5	125 - 500	250 - 500	215 - 500	400 - 500
7	170 - 750	340 - 750	300 - 750	550 - 750
10	220 - 950	435 - 950	375 - 950	650 - 950
14	280 - 1000	560 - 1000	490 - 1000	750 - 1000
17	300 - 1200	600 - 1200	525 - 1200	825 - 1200
20	395 - 1450	785 - 1450	685 - 1450	900 - 1450
25	510 - 1600	1000 - 1600	900 - 1600	1200 - 1600

* Richtlinie für Anpresskraft pro mm Länge

You are prepared for every eventuality with KLINGER® SEALEX – "safe sealing on a roll".
 Under service conditions of -196 °C up to +260 °C and pressure of up to 150 bar KLINGER® SEALEX offers secure sealing on a roll.

KLINGER –
 The global leader in static sealing

KLINGER® SEALEX

The universal sealing solution

What's so unique about KLINGER® SEALEX?

KLINGER® SEALEX is a PTFE product manufactured from a unique, physically networked fibrillated material. It is composed of specially prepared fluorocarbons with excellent resistance to aggressive chemicals as well as offering secure sealing under high pressures, even permitting the use of the material in applications up to 150 bar internal pressure ratings.

KLINGER® SEALEX can be applied to any sealing face, giving excellent sealing performance even at low bolt loads.

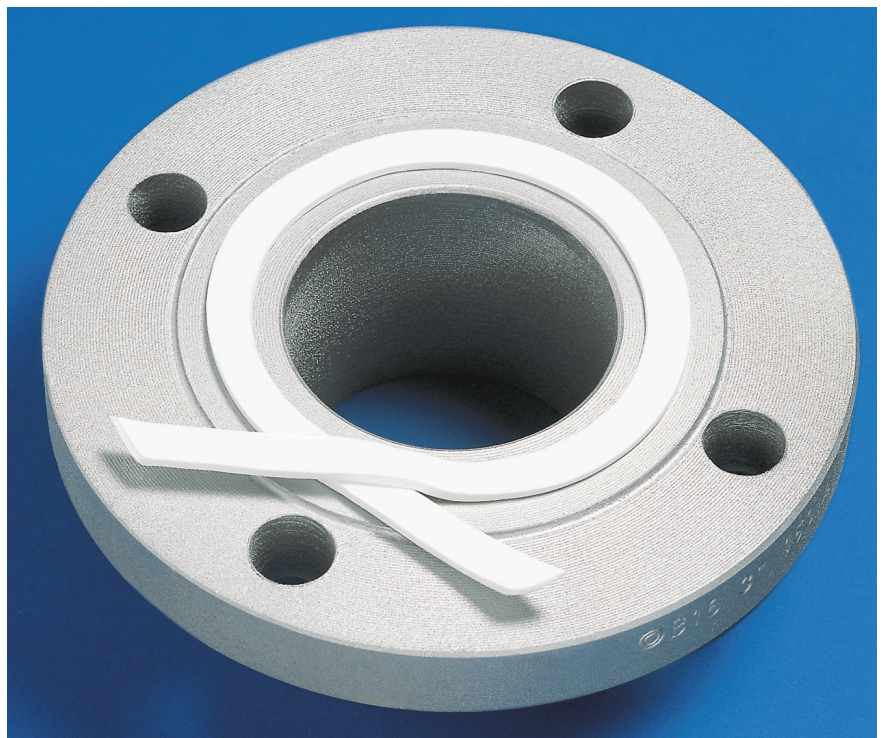
The benefits to repair and maintenance routines

You are prepared for every eventuality with KLINGER® SEALEX – the seal on a roll. Maintenance Engineers have already benefited from the versatility of KLINGER® SEALEX, since it can be used practically anywhere.

When replacing defective seals, first clean flange as thoroughly as possible. Since one of the strengths of the products is its ability to com-

pensate for non-ideal flange conditions, a small amounts of residue material on the flange face is permissible.

Next apply the strips of sealant straight from the roll onto the flange surface, as shown in both the photographs. Apply the tape either overlapping at the ends or cut acutely and abutted – as shown in the photograph on the right. That's all there is to it!



Replacement of conventional gasket materials

KLINGER® SEALEX offers particular advantages in applications which prove difficult for conventional materials:

- When the sealing surface or the stability of the flange prevents the successful use of a conventional seal.
- When the geometry of the flange seating demands an intricate gasket shape, which is both difficult to assemble and uneconomic to manufacture.

- When the flange material only permit the use of low bolt loads to seat the gasket but the media in the system and the associated interior pressure demands a high integrity seal.

These are just some of the areas in which you can use KLINGER® SEALEX . You may have other ideas for its use, either as a replacement for conventional gasketing or as a hidden reserve for unforeseen circumstances. Please call us for a sample and associated technical information on the product.

Nothing is left to chance with KLINGER® SEALEX .

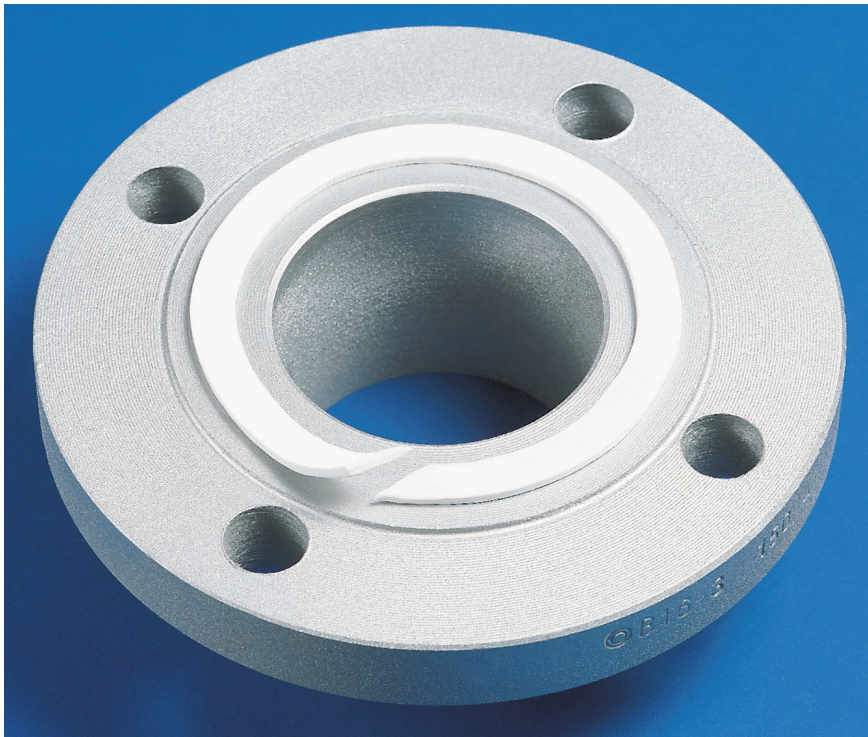
Should it be required, you can use two strips of tape bonded over one another.

When re-assembling the flange, you can work with the usual assembly torque – then fit and forget.

There is no need to re-tighten the bolts with KLINGER® SEALEX.

However, if it is possible to re-tighten the flange assembly after 24 hours, then you can reduce the applied bold load by half.

Despite its versatility and ease of handling, KLINGER® SEALEX should not be viewed as a temporary solution, but as a high grade permanent seal with unique characteristics.



As can be seen, with just a few rolls of KLINGER® SEALEX you have the same level of security as with conventional gaskets. With the ability to solve a problem quickly, the small

stock of tape will very soon pay for itself. Furthermore, you have the security knowing that you are equipped for all eventualities.

Important approval certifications and tests:

DVGW:

Registration No. DG-5127BR0551

BAM/oxygen:

Tested for oxygen at 60 bar and 60°C (not for liquid oxygen)

TA-Luft: tested (at 150°C)

FDA conform (including adhesives)

Should you have queries concerning the suitability of KLINGER® SEALEX for your application, we will gladly assist you with our experience. You may contact us through our fax service. Let us have the details of your particular application requirements and you will receive reliable response and all necessary information within 24 hours.

You can request a questionnaire for submitting fax enquiries direct from our works.

Width/mm	Thickness/app. mm	Roll length/mm	Flange/DN
3	1.5	30	up to 50
5	2.0	20	up to 200
7	2.5	15	up to 600
10	3.0	8	up to 1500
14	5.0	5	from 1500
17	6.0	5	from 1500
20	7.0	5	from 1500
25	8.0	5	from 1500

KLINGER® SEALEX

The universal sealing solution

The following applications of KLINGER® SEALEX will give you some idea of the innovative uses of this product. Further references are available on request.

In turbine construction

Operating conditions:
8 bar at 240°C.

A sealing material was required for a number of flanges in the low-pressure area of the turbine house of a nuclear power station. KLINGER® SEALEX succeeded in replacing the traditional seals and reduced the time needed to clean the flange faces giving savings of some 40-workforce hours every time the joints were replaced. These savings are in addition to the savings made in dismantling and assembling the joint and in the cost of materials, which would otherwise have been used.

In dryer kilns:

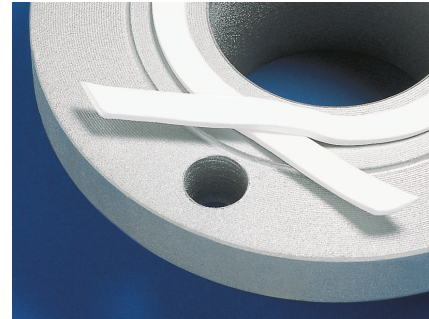
Operating conditions: 230°C

Tunnel kilns for the kiln drying of coated/lacquered steel and aluminium metal elements on the air flow feed and air extraction sides are sealed with the new "miracle of the roll". KLINGER® SEALEX replaces woven tape fabric, flocked side panel cladding and other insulation materials with or without asbestos. KLINGER® SEALEX adjusts extremely well to all flange sealing conditions and possess outstanding resistance to paint solvents and cleaning agents.

KLINGER® SEALEX as a temporary solution in pipeline systems

Operating conditions: Aggressive agents at 5 bar and 32°C

An extremely aggressive mixture of distilled water, vulcanisation agents, carrier agents and pigments is conveyed via a pumping station and associated piping system. KLINGER® SEALEX is also employed here for repairs in emergencies. The results are surprising. An emergency solution becomes a permanent fixture.



Installation instructions:

Clean flanges, cut off a length of KLINGER® SEALEX slightly longer than the actual circumference of the seal. Peel off the adhesive protection strip and press KLINGER®

SEALEX into position. Cross the free ends of KLINGER® SEALEX adjacent to a bolt hole and bolt up the mating surfaces using the recommended clamping force and bolt tightening patterns.

Clamping force

KLINGER® SEALEX	Minimum/Maximum clamping force to effect seal at ambient*		Minimum/Maximum clamping force to effect seal at 100° C*	
	Width/mm	Liquid N/mm	Gas N/mm	Liquid N/mm
3	85-400	170-400	150-400	350-400
5	125-500	250-500	215-500	400-500
7	170-750	340-750	300-750	550-750
10	220-950	435-950	375-950	650-950
14	280-1000	560-1000	490-1000	750-1000
17	300-1200	600-1200	525-1200	825-1200
20	395-1450	785-1450	685-1450	900-1450
25	510-1600	1000-1600	900-1600	1200-1600

* Guideline for clamping force for mm of length

Certified according to
DIN EN ISO 9001:2008



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