



**Accessories**  
**Releasing Compounds**  
**Presses**  
**Lubrication Grooves**  
**Sealing**

# Releasing Compounds

## SKC 12 Releasing Compound

The releasing compound SKC 12 is a dispersion of waxes in a mixture of solvents.

This releasing compound can be used for most of the cases of application. Applied with a rag or a brush and re-polished with a soft cloth after drying, this releasing compound is generating a highly-effective releasing film dimensionally not determinable.

## SKC 14 Silicon Releasing Compound

The silicon releasing compound SKC 14 is used for all forming-to-size jobs. In particular, for the moulding of arbors or components with an overall coating, the lubrication effect of the releasing film allows a simple removal of the coated component. However, care has to be taken in the proximity of components which have to be lacquered later on, as removal of the silicon releasing compound is difficult and residues strongly affect the ability of lacquering.

## SKC 13 W Release Wax

The release wax SKC 13 W is used to obtain releasing films thicker than those which can be obtained with other releasing compounds of the series SKC 12 and SKC 14. As SKC 12, it is applied with a cloth. The release wax enables closing of even small pores in the surface to be formed.

For high-precision formings to size, however, this release wax cannot be recommended. But it can be used for forming jobs from very rough counter surfaces.

## SKC 12 TRS Release Spray

The releasing compound SKC 12 can also be obtained as a spray. The main field of application are complex components to be formed to size, having inaccessible points which can be reached much more easily by applying a spray.

## SKC 14 TRS Release Spray

The silicon releasing compound SKC 14 can also be obtained as a spray.

## Application

The counter guideways and the surfaces to be formed are to be cleaned carefully. With a rag or a brush, the releasing compound is applied or sprayed on (SKC 12 TRS and SKC 14 TRS). Following, the surfaces are re-polished with a soft cloth. Before coating, all areas where compound may escape during the moulding process and has to be removed after hardening, have also to be treated with a releasing compound.

When using the release sprays, absolute care has to be taken that - when applying the releasing compound - all the components to be coated are carefully covered, thus being protected from spraying mist.

Determination of the quantity (guide value):

For the application of about 10 kgs of SKC-compound about 1 kg of the releasing compound is required.

### **Important**

If the releasing compounds are repeatedly applied on the same component (forming-to-size templates or masters), they all tend to build up hard layers.

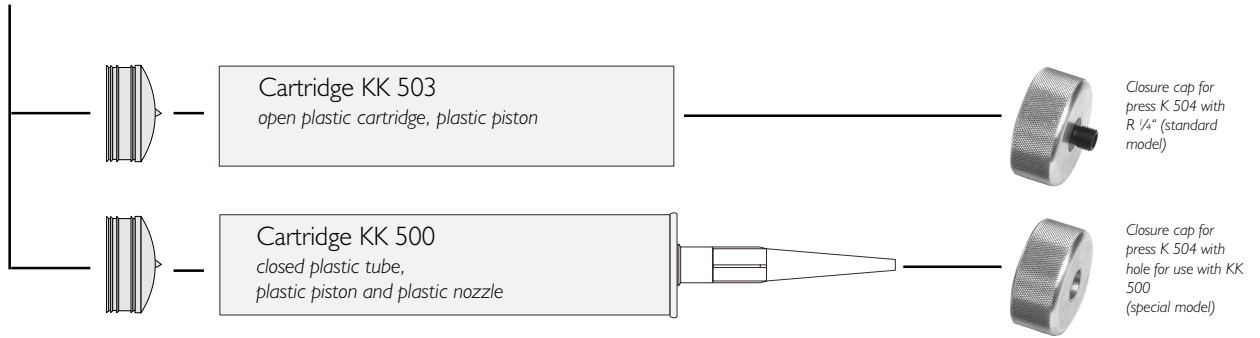
These layers can be removed by applying suitable solvents or silicon-removing compounds.

# Press- & Cartridge-Systems



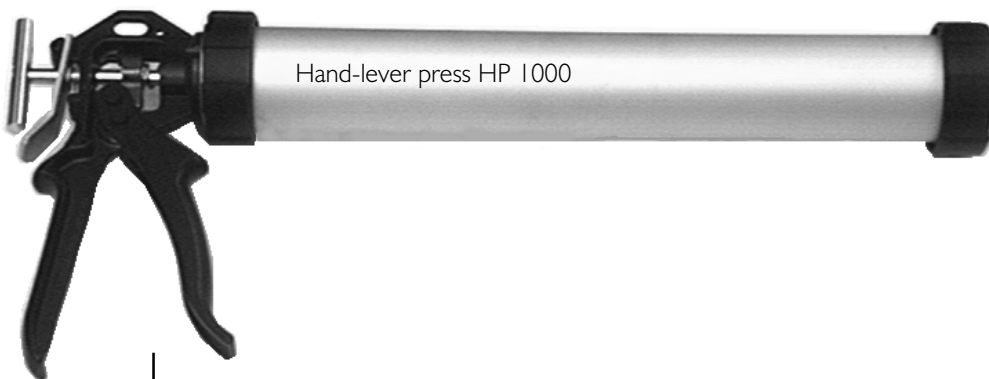
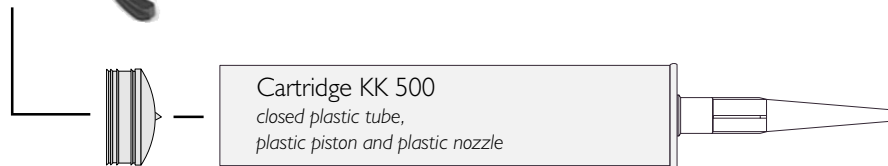
Spindle press K 504

spindle press for the application of sideway coatings and coating for joint faces where a high injection pressure is required or desired



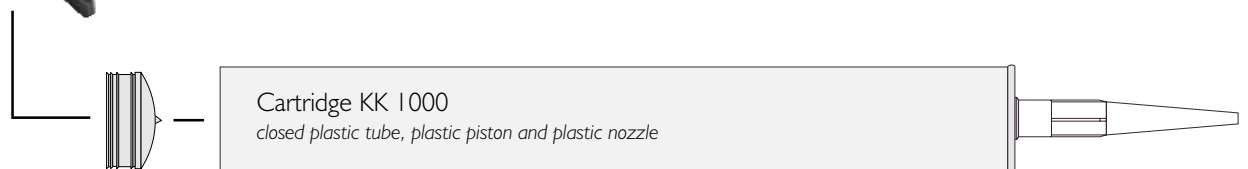
Hand-lever press HP 500

standard press for the application of all the sideway coatings and coatings for joint faces suitable for application by injection. Volume of the cartridge: about 0.5 kgs of compound



Hand-lever press HP 1000

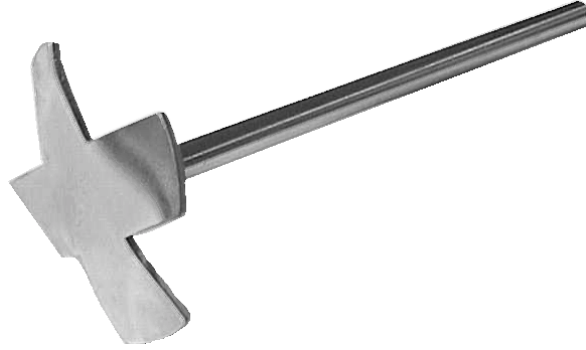
as HP 500, volume approx. 0.85 kgs of compound



## Stirrer for SKC-coatings

Simple accessory to mix components of resin and of hardener

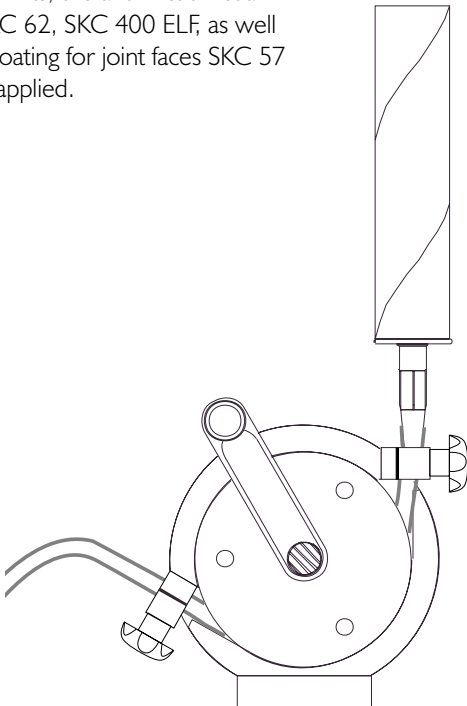
By the special position of the blades, sucking of the air into the stirred compound is reduced. All the data about application, in particular about stirring time and stirring speed (rpm), refer to this stirrer. Therefore, the use of other types of stirrers is not recommended.



## Hose Pump SP 170

The hose pump SP 170 - developed by SKC - has been designed to feed continuously and via only one filling bore bigger quantities of a compound into a gap. Compared with the use of cartridges, no repeated putting on of the press is required.

The thin liquid anti-friction coating SKC 90 and the coating for joint faces SKC 58 can be used. Within certain limits, the anti-friction coatings SKC 62, SKC 400 ELF, as well as the coating for joint faces SKC 57 can be applied.



Dimensions approx.  
180 x 200 x 120 mm

Application is similar to that of the pouring technique (see guidelines of application 'Slideway Coatings'). Into the injection bore a short tube of an outer diam. of 12mm has to be screwed or to be adhered, on which the PVC tube (inside diam. 12 x 2 mm and lying in the pump) will be plugged on. On the suction side of the pump, a cartridge (we recommend a full-plastic cartridge type VK 500) complete with nozzle is to be inserted and clamped by means of the setting screw. When coating, care has to be taken that sufficient compound is available in the cartridge, thus preventing air from being sucked in.

# Mouldable Lubrication Grooves

## Advantages

- ▶ cost effective
- ▶ avoidance of post treatment
- ▶ lots of different types

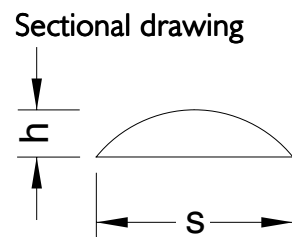
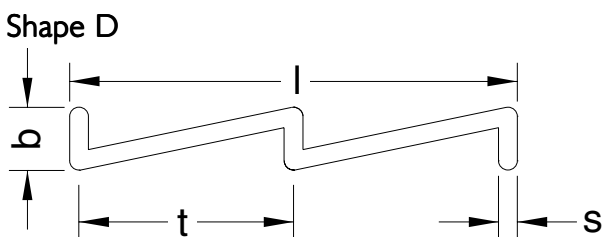
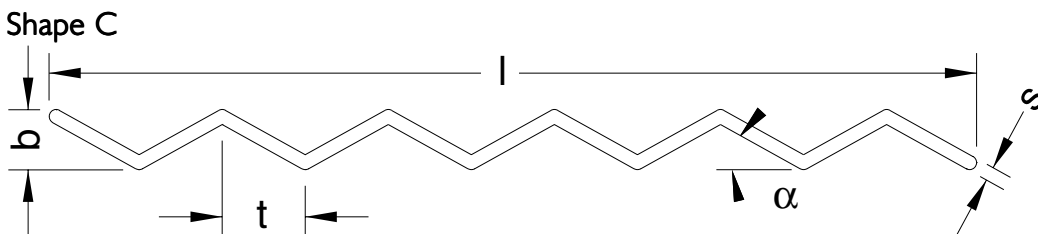
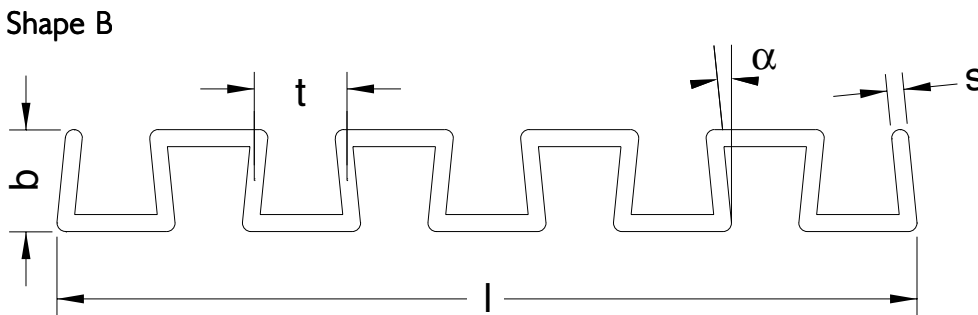
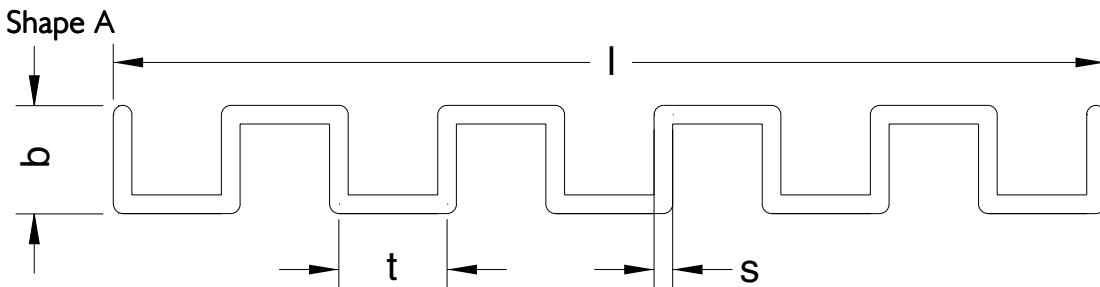
In the production of guideways even more cost savings can be achieved when the moulds for lubrication grooves are used, as the later provision of lubrication grooves is no longer required.

Applying an adhesive spray, the shapes of the lubrication grooves are glued on the counter guideway, pressed-on well and then treated with a releasing compound.

After removal of the coated components, the lubrication grooves can be loosened easily from the slide-way coating by means of a pointed tool.

When adhering the lubrication grooves, care has to be taken that they lay tightly on the surface, preventing any infiltration of slideway compound. Precise instructions are to be seen on the instructions of application for the adhesive spray.

*Mouldable lubrication grooves are available in the shapes shown opposite. For dimensions please see following pages.*



# Mouldable Grid Lubrication Grooves

## Advantages

- ▶ low oil consumption
- ▶ optimized surface wetting
- ▶ favourable friction conditions
- ▶ cost saving by forming-to-size technique
- ▶ no re-machining required
- ▶ special designs
- ▶ grid 15 x 10 mm

Developed especially for vertical guideways, this layout of lubrication grooves offers some advantages:

- the oil consumption required to generate a lubrication film is by 60 % less
- capillary forces retain the oil within the grooves at the vertical guideways
- close cross sections provide an immediate distribution of the oil on the sliding surface, whilst - with conventional systems - have to be filled first
- the position of the injection bore has not to be determined exactly

- grids are also available for the vertical faces of horizontal cross slides (shape MH)
- In order to have a sufficient quantity of lubricant available at high speeds to generate a hydrostatic lubricating film, grids should be designed with additional feeder grooves transverse to the sliding direction. The grooves can be added later by hand or included in the moulding process. Our production programme does include numerous grids with additional transverse grooves (see below on L.H. side).

## Application

1. Cut the grid of lubrication grooves to the size required (with a pair of scissors or a knife). For this, note the following:  
All the channels should be open at the edge of the guide. The distance to the edge of the guide path should be at least 10 mm.

2. Applying an adhesive spray on the surface of the counter guideway which has been marked before and been treated with a releasing compound, following the guidelines of application, the grid of the lubrication grooves has to be glued on and to be pressed on tightly with a rubber- or a foam plastic roller.

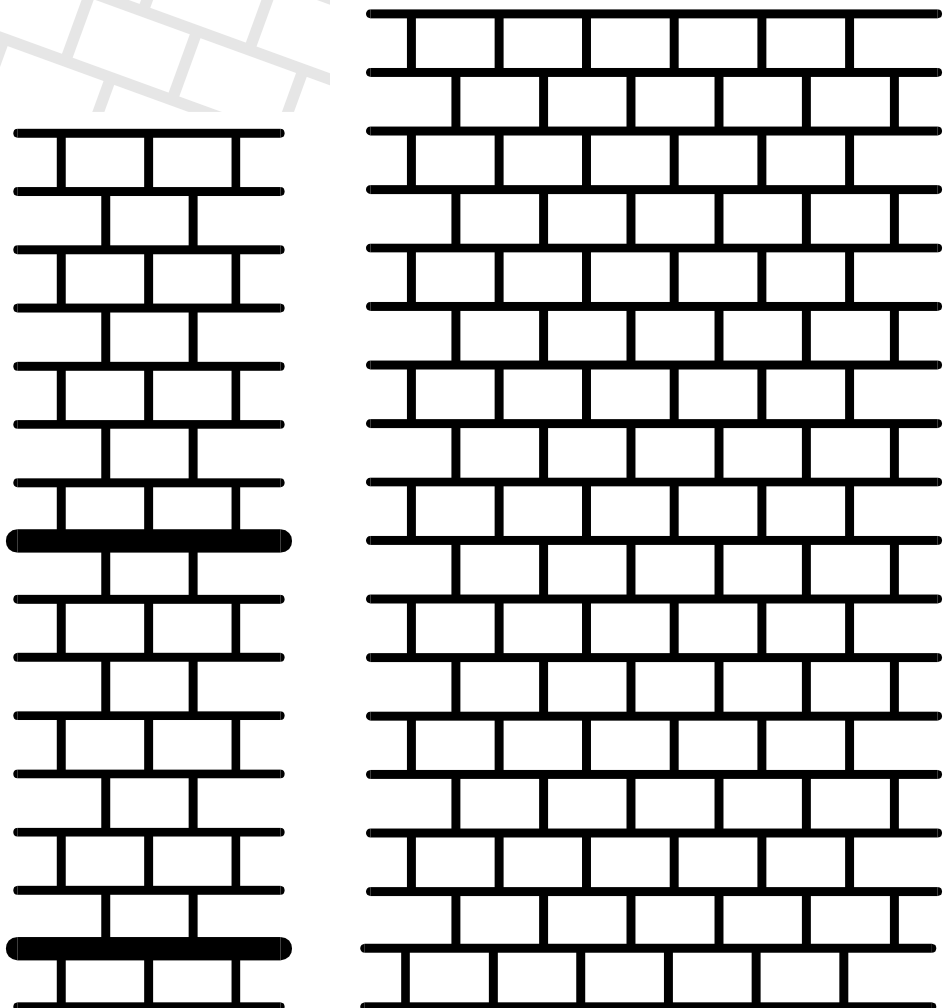
3. The grid has already been pre-treated with SKC releasing compound. Polish the layer of releasing agent with a short bristle brush.

4. During scraping, the grids remain in the layer, as the layer - not interrupted by grooves - can be scraped without any problem.



5. After moulding lift the grid with a pointed tool and remove carefully.

Grid Lubrication Groove MV 100 (detailed)



# Shapes and Dimensions Mouldable Lubrication Grooves

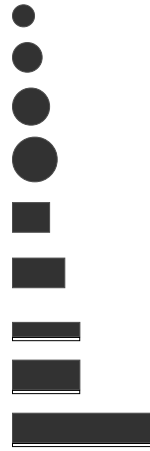
Part-No.	Shape	Width b	Length l	Space t	Angle $\alpha$	Gage h	Width s
300500	A	10	500	50		0,8	3,5
300510	A	13	500	50		0,8	3,5
300530	A	16	530	35		0,8	3,5
306810	A	22	525	25		0,8	3,5
306360	A	29	265	30		1,2	5,0
308480	A	35	525	35		0,8	3,5
301210	A	43	335	30		1,2	5,0
301060	A	45	395	65		1,2	5,0
301090	A	47	555	25		1,2	5,0
306820	A	52	180	25		1,2	5,0
301070	A	63	530	75		1,2	5,0
301080	A	63	550	25		1,2	5,0
301100	A	70	350	70		1,2	5,0
306390	A	79	555	25		1,2	5,0
306350	B	13	500	50	15°	0,8	3,5
306380	B	17	550	35	15°	0,8	3,5
306410	B	19	520	25	10°	0,8	3,5
309050	B	22	550	30	15°	0,8	3,5
308170	B	30	475	28	5°	1,2	5,0
306370	B	35	536	35	10°	1,2	5,0
306430	B	40	610	120	10°	1,2	5,0
306420	B	43	600	31	10°	0,8	3,5
306890	B	50	550	30	10°	0,8	3,5
306880	B	61	605	40	10°	1,2	5,0
306400	B	74	595	30	5°	1,2	5,0
307000	B	100	550	60	5°	1,2	5,0
308300	C	15	520	21	30°	0,8	3,5
308310	D	17	120	58		1,2	5,0
308320	D	38	120	58		1,2	5,0
305200	Rod		520			1,2	5,0
309980	MH 100	100	500			0,6	1,5
309990	MV 100	100	500			0,6	1,5
309070	MV 100 S	100	500			0,8	1,5

## Foam Rubber

For the injection or pouring technique, foam rubber profiles are used universally to seal the gap. By compressing the foam rubber profiles to about 50 % of their original thickness, an optimal sealing effect is obtained.

Examples of application are shown under chapter 'Guidelines for Designing'.

- Round cord Ø 3 mm, 1 m
- Round cord Ø 4 mm, 1 m
- Round cord Ø 5 mm, 1 m
- Round cord Ø 6 mm, 1 m
- Square 5 x 4 mm, 1 m
- Square 7 x 4 mm, 1 m
- 9 x 2 mm, self-adhesive, 10 m
- 9 x 4 mm, self-adhesive, 10 m
- 19 x 4 mm, self-adhesive, 10 m



Foam rubber-rings for sealing of bore holes (fix with spray-on glue or a quick adhesive):

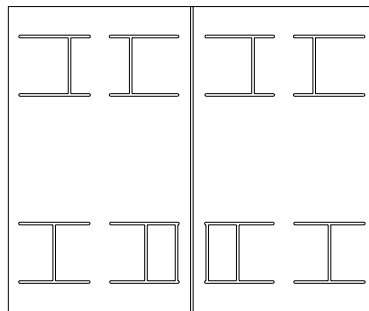
size	Ø <sub>i</sub>	Ø <sub>a</sub>
M 8	10	18
M 10	12	20
M 12	15	22
M 16	17	26
M 20	22	30
M 24	27	34
M 32	34	42
M 36	37.5	46



gage: 5 mm

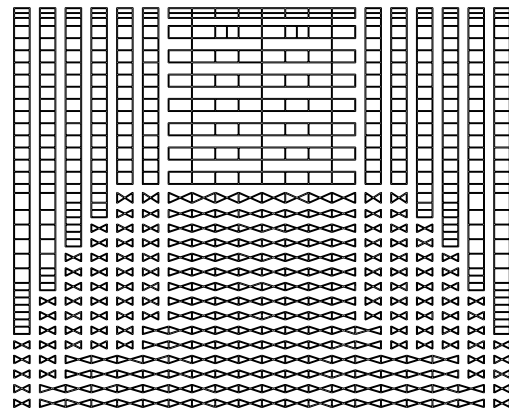
## Groove Foil

- ▶ sophisticated surface structures are possible
- ▶ easy application by an auxiliary assembly foil
- ▶ thickness of layer ~.2mm
- ▶ compatibility of drawing files possible (dxf-format)



foil for lubrication grooves  
(size 500 x 400 mm)

groove system formed-to-size for a vacuum supply  
(total size 1200 x 860 mm)



## Magnetic Foil

To generate pockets of a larger depth - in particular on hydrostatic guideways - preferably magnetic foils are used. Thanks to the magnetic adhesive force, the cut pieces are easily positioned and cover the whole surface. They can be used many times. Cutting can be done with a sharp knife or scissors.

- Available sizes::
- 20 x 0.85 mm
  - 615 x 0.6 mm
  - 615 x 0.85 mm

(in various length, details on request)

