

## Lifty TEX



## Application Instruction

# Our products from the division BUILDING SOLUTIONS

## SERVICES

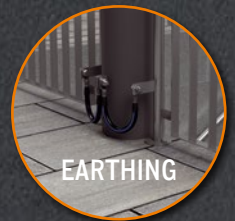
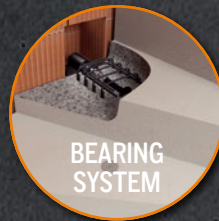
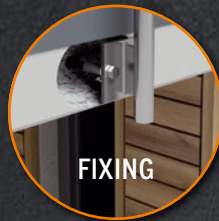
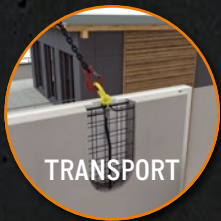
- » On-site tests -> we ensure that your requirements are properly covered by our planning.
- » Test reports -> for your safety and documentation.
- » Trainings -> the knowledge of your employees from planning and production is enhanced by our experts on site, online or via webinar.
- » Planning support -> latest design software, planning documents, CAD data and much more can be downloaded any time from [www.philipp-group.de](http://www.philipp-group.de).

## HIGH DEMANDS ON PRODUCT SAFETY AND PRACTICALITY

- » Close cooperation with notified bodies and - if necessary - approval of our solutions.

## TECHNICAL DEPARTMENT

- » Our expert-team will support you at any time during your planning phase with detailed advice.



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## THE LIFTY TEX



The Lifty TEX is a powerful combination of the well-known Lifty lifting device and a high-performance textile round sling including protective sleeve. Suitable for all load directions, the Lifty TEX is ideal for use with light to medium-weight concrete elements that need to be “protected” during hoisting against damages from hardware (e.g. prefab stairs).

### YOUR BENEFITS AT A GLANCE:

- » Available in sizes RD12-36, max. load bearing capacity 5 t
- » Suitable for all load directions (axial, diagonal and lateral tension)
- » Lightweight and flexible textile sling, easy to handle
- » Chemical-resistant textile, does not absorb water



## THE PHILIPP LIFTY TEX

The Lifty TEX is part of the PHILIPP Transport anchor system and complies with the VDI/ BV-BS Guideline "Lifting inserts and lifting systems for precast concrete elements" (VDI/ BV-BS 6205). The use of the Lifty TEX requires the compliance with this Application Instruction, the Installation and Application Instruction for the particular threaded anchor as well as the General Installation and Application Instruction. The Lifty TEX is suitable for axial, diagonal and lateral tension.

TABLE 1: DIMENSIONS

Ref. no.	Type	perm. F 0° - 90° (kN)	Dimensions							Weight (kg)
			RD	h (mm)	EWL (mm)	e (mm)	h <sub>1</sub> (mm)	l <sub>U</sub> (mm)	Øs (mm)	
62LI12TEX	RD 12	5.0	12	522	500	18	38	300	15	0.31
62LI16TEX	RD 16	12.0	16	522	500	23	38	300	15	0.31
62LI20TEX	RD 20	20.0	20	531	500	29	53	300	20	0.81
62LI24TEX	RD 24	25.0	24	531	500	34	53	300	20	0.81
62LI30TEX	RD 30	40.0	30	540	500	43	72	300	28	1.97
62LI36TEX	RD 36	50.0	36	540	500	51	72	300	28	1.97

- Also available with M thread
- The dimensions h, l<sub>U</sub> and Øs are standard values and can vary
- The weight of 1.0 t corresponds to 10.0 kN

### MATERIALS

The Lifty TEX consists of a forged ring bolt with a thread and a sewn-in round sling with a textile sleeve for an additional protection.

### MARKING

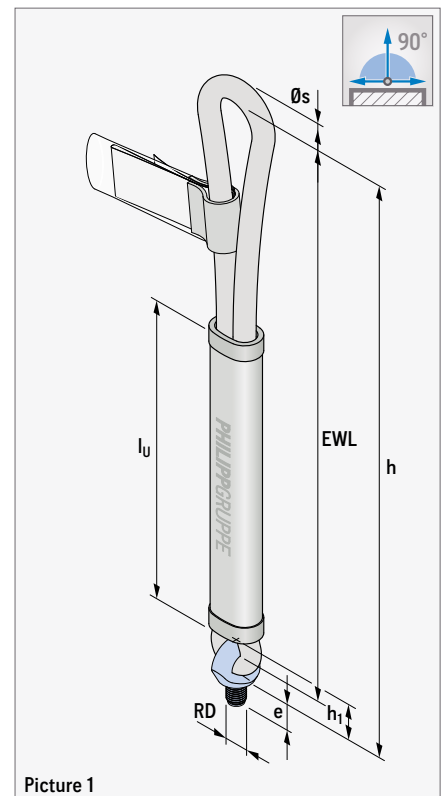
The ring bolt of the Lifty TEX is colour-coded. Additional information are given on a tag:

#### FRONT SIDE

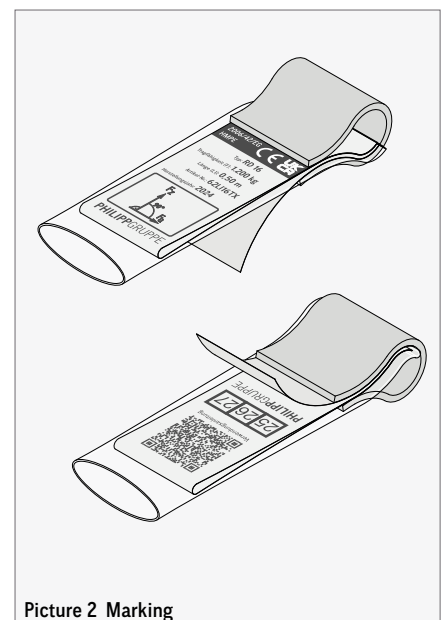
- » Manufacturer (PHILIPP)
- » Type (system / load class)
- » Max. load bearing capacity
- » Length (m)
- » Reference number
- » Year of manufacturing
- » CE / UKCA mark
- » Permissible load directions

#### BACKSIDE

- » Manufacturer (PHILIPP)
- » QR code (Application Instruction)
- » Year numbers (for test certificate)
- » Integrated RFID chip



Picture 1



Picture 2 Marking



### EC DECLARATION OF CONFORMITY

The Declaration of Conformity (DoC) of the Lifty TEX can be downloaded from our website [www.philipp-group.de](http://www.philipp-group.de) or is available on request.



## APPLICATION

The Lifty TEX is a lifting device of the threaded transport anchor system and is supplied with a round thread (with metric pitch) or a metric thread. It must be screwed into the Threaded transport anchor tightly until the bottom part of the ring bolt has continuous pressure contact to the recess created before in the concrete unit. Therefore an optimal load transfer into the cast-in anchor is given, as the ring bolt is supported by the concrete in case of loading (picture 3). During rigging the loop of the Lifty TEX must point to the tensile direction all the time. In order to align the Lifty TEX into the correct position it is allowed to screw it back for half a turn at the most.

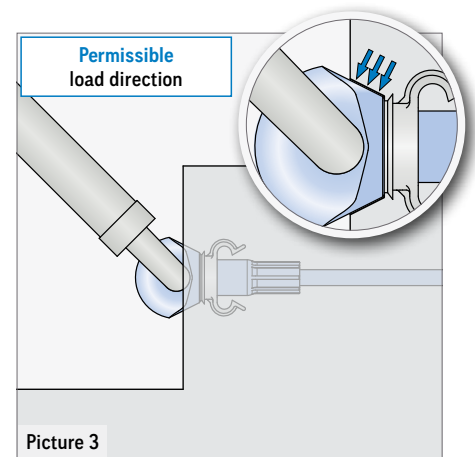
The Lifty TEX can only be used with transport anchors installed recessed by one of the following recess formers:

### KHN system:

- » Plastic: 72KHN12 - 72KHN36
- » Steel: 72KHN12STK - 72KHN36STK
- » Magnetic: 72MAXKHN12 - 72MAXKHN36

### Nailing plate for diagonal tension system:

- » Plastic: 72KHN16-SZ15 - 72KHN36-SZ15
- » Steel: 72KHN16-SZ15ST - 72KHN36-SZ15ST



Picture 3



### WARNING!

A use of inadmissible recess formers can lead to a reduction of the bearing capacity and to a failure of the Lifty TEX or the transport anchor.



### PLEASE NOTE!

Loading the Lifty TEX right-angled to the ring bolt axis – as shown below – is inadmissible.



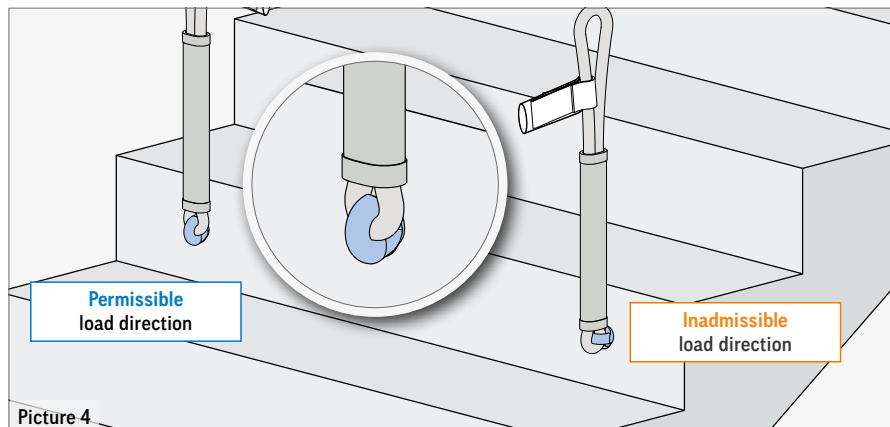
### APPLICATION INSTRUCTION

The Application Instruction for the KHN system or the Installation and Application Instruction of the Nailing plate for diagonal tension system must be observed!

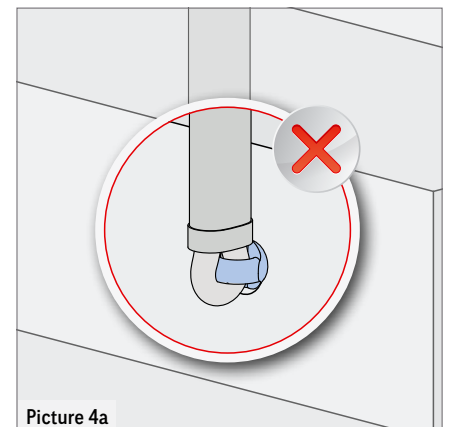


### LOADING - ONLY IN TENSILE DIRECTION

Loading the Lifty TEX is only admissible in the tensile direction of the ring bolt axis according to picture 4.



Picture 4



Picture 4a



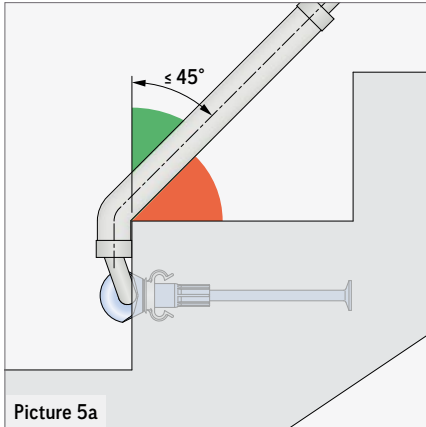
### USE OF ONLY ONE LIFTING DEVICE

Using only one Lifty TEX in order to lift concrete elements attention must be paid that the Lifty TEX is protected against unscrewing (e.g. by using a guy or guide rope at the concrete element).

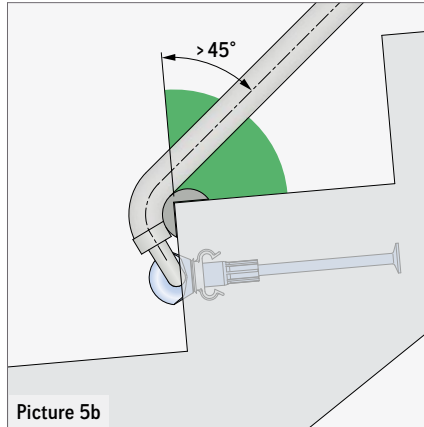
## APPLICATION / SAFETY NOTICE

### APPLICATION

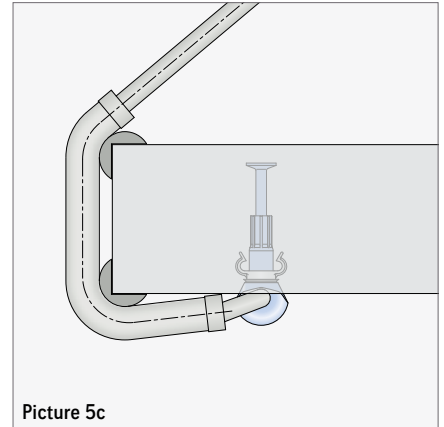
If the Lifty TEX is loaded over a component edge when lifting an element, this should be done only in the area of the sleeve. Here, the angles given in picture 5a and 5b shall be observed. For loads as shown in picture 5b or 5c, an edge protection should be used ideally.



Picture 5a



Picture 5b



Picture 5c

### SAFETY NOTICE

As each other lifting equipment and lifting device the Lifty TEX is subject to an annual inspection (acc. to German DGUV regulation 109-017, para. 8.2). This inspection lies within the responsibility of the owner and has to be done by an expert. Depending on the working conditions of the Lifty TEX inspections might be necessary in a shorter interval than once a year. This might be caused by frequent use, increased wear, corrosion or heat treatment. In general, the current accident prevention regulations must be observed.



#### WELDING

Welding or other strong heat influences on the Lifty TEX are not allowed.



#### PLEASE NOTE!

The continued use of damaged lifting devices or equipment already met the discard criteria is not permitted!

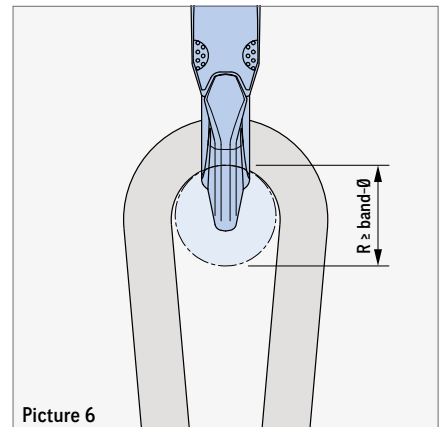
The correct hook size and form should be considered in order to extend the durability.



#### ROUNDING RADII OF THE LOAD HOOKS

The rounding radii of the load hooks must be at least the sling diameter of the Lifty TEX (picture 6 and table 1). The use of too small, too large or sharp-edged hooks leads to a reduced lifetime of the lifting device (replacement criteria).

If the Lifty TEX is loaded with extreme loads (e.g. by an event causing damage) which may have influenced the bearing capacity it must be examined extraordinarily by an expert. The criteria are given in section "Replacement state and inspection service".



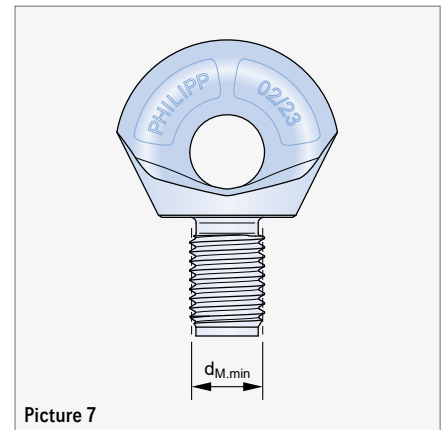
Picture 6

## REPLACEMENT CRITERIA AND INSPECTION SERVICE

The replacement state of the Lifty TEX follows the German regulation DGUV 109-017, para. 8.4. Prior inspection the Lifty TEX must be cleaned. During inspection the following points have to be considered. If one is fulfilled the Lifty TEX has reached its replacement state and must not be used anymore.

- » Unreadable or missing tag
- » Damage due to the effects of aggressive media
- » Deformation due to heat influence
- » Cracks or the capacity reducing corrosion pits
- » Welding or other strong heat influences
- » Dropping below the permissible test dimensions (at the right)
- » Broken or worn seams in the outer shell (yellow, red, orange), exposing the core fibres
- » Damaged or broken core yarn
- » Carbonisation or weld spatter on parts of the sling
- » Knots at any point on the sling
- » Discolouration, brittle or stiff areas on parts of the sling that indicate damage caused by chemicals, heat or sunlight

During inspection of the ring bolt, the wear of the bolt diameter shall be checked. The replacement state for this part is reached when the forged ring bolt has a diminution according to picture 7 and table 2.

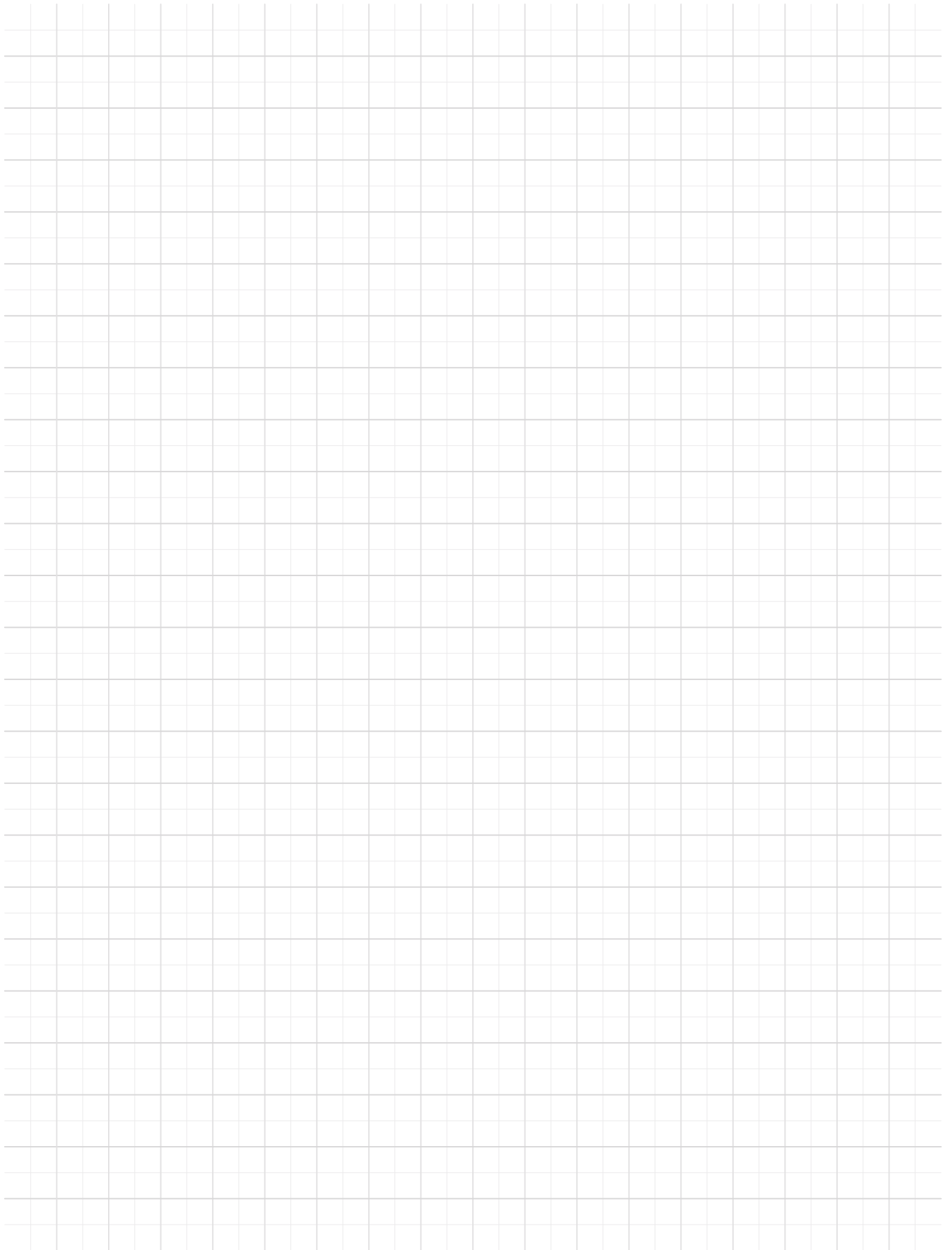


**TABLE 2: TEST DIMENSIONS OF THE RING BOLT**

Load class	$d_{M.min}$ (mm)
12	11.50
16	15.45
20	19.40
24	23.40
30	29.40
36	35.40



## NOTES



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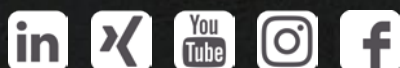
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