### **Netter**Vibration

Oct. 2022 No. 1716E Version 4

Page 1/8

Assembly instructions for gluing consoles of the series NKK

These assembly instructions apply to: NKK



### Scope of delivery

Please refer to the delivery note for the scope of delivery. Check the packaging for possible transport damage. In the event of damage to the packaging, check the contents for completeness and possible damage. Inform the carrier in the case of damage.

#### 1 General information

### Designation

The gluing consoles of the series NKK are hereafter referred to as "NKK".

### Use and storage

Before installing the NKK read these instructions carefully. It is the basis for any action when dealing with the NKK, and may be used for training purposes. The instructions should be subsequently stored at the operation site.

#### **Target group**

The target group for these instructions is technical staff, who have basic knowledge in mechanics.

Only complying technical staff, authorized by the operator may work on the NKK.

### Copyright

This documentation is protected by copyright.

**Netter**Vibration reserves all rights such as translations, reprinting and reproduction of the instructions, as well as parts thereof.

### Limitation of liability

All technical information, data and instructions for installation, operation and maintenance in these instructions are based on the latest information available at the time of printing and take our past experience to the best of our knowledge into account.

No claims can be derived from the information, illustrations and descriptions in these operating instructions.

The manufacturer does not assume liability for damages resulting from:

- failure to observe the instructions,
- improper use,
- unauthorised repairs,
- technical modifications,
- use of non-permissible spare parts.

The durability of the NKK can only be guaranteed if only vibrators from *Netter*Vibration are used.

For the possible combinations, please refer to the brochure of the NKK at www.**Netter**Vibration.com.

Translations are made to the best of our knowledge.

**Netter**Vibration does not assume liability for translation errors, even if the translation was made by us or on our behalf. Only the original German text remains binding.

### 2 Safety

#### Intended use

The gluing consoles of the series NKK are fastening devices for pneumatic and electric vibrators from *NetterVibration*.

They can be glued to metal surfaces with the following properties:

- free from varnishes and coatings,
- free from corrosion,
- free from grease and dust.

Mounting on other materials is only permitted after consultation with *NetterVibration*. Typical application is the mounting on bunkers and silos. Any other use is considered improper.

### Safety devices

There are no separate safety devices.

# Qualification of qualified personnel

Installation, commissioning, maintenance and troubleshooting of the NKK may only be performed by authorised qualified personnel.

All handling of the NKK is the responsibility of the operator.

### **A WARNING**

### Falling parts

Errors during assembly, non-observance of the operating conditions and the use of incorrect vibrators can cause parts to fall and thus injure people.

- Observe the specifications in these assembly instructions.
- Mount the NKK exclusively with the original components for the bonding process from NetterVibration.
- > Only mount vibrators from *NetterVibration* that are suitable for the respective NKK.

### **IMPORTANT**

### **Mounting surfaces**

The NKK may only be glued to surfaces that comply with the required properties in the section "Intended use". Mounting on other materials is only possible after consultation with *NetterVibration*.

### **IMPORTANT**

#### **Data sheets**

Before use, read the technical data sheets and safety data sheets of the primer (adhesion agent), glue and cleaner for precautions and safety instructions. The safety data sheets are available on the manufacturer's website.

The applicable safety regulations must be observed.

### **IMPORTANT**

### Safety instructions for the vibrator

The safety instructions for individual vibrators can be found in the operating instructions of the respective vibrator.

#### 3 **Technical data**

**Permissible** operating conditions

Operating temperature	-20 °C to 100 °C
Processing temperature	15 °C to 40 °C

#### Series name

The following NKK types are available:

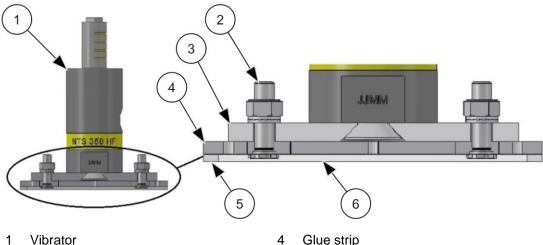
NKK G for flat, smooth surfaces

for cylindrical surfaces NKK R

for conical surfaces NKK K

#### **Design and function** 4

### Design



- 1
- 2 Mounting bolt
- Adapter plate (depending on vibrator type)
- Glue strip 4
- 5 Glue
- NKK

### **Function**

NKK are fastening devices for pneumatic or electric vibrators from *Netter*Vibration, which are glued to mounting surfaces.

The elastic glue transfers the vibration evenly and gently to the mounting surface. A previously applied primer increases adhesion of the glue to the gluing surface.

### 5 Transport and storage

### Transport conditions

Special conditions of transport are not required.

### **Packaging**

The NKK are packed and ready for assembly. Accessories and add-on parts are delivered unmounted, unless otherwise agreed upon.

The packaging protects the NKK from transport damage. The packaging material has been selected from an environmentally safe and technically disposable point of view and is therefore recyclable.

The return of packaging to the material cycle conserves raw materials and reduces the amount of waste.

#### Storage

Observe the following conditions when storing the NKK:

- Store the NKK in a dry and clean environment.
- Protect the glue kit during storage from exposure to UV, weather and ozone.
- The storage time of the glue in the unopened original container is 9 months, that of the primer 12 months.
- The permissible storage temperature of the primer and the adhesive is 10 °C to 25 °C.

### 6 Installation



Observe the safety instructions in chap. Safety, from page 3 on.

# Required components, tools and auxiliaries

Scope of delivery NKK:

NKK with bolts or nuts, adhesive tape, adapter plate (optional).

Delivery by *NetterVibration*:

Vibrator, dispensing applicator, static mixer, glue cartridge(s), primer and applicator, special cleaner.

Provision by customers:

Gloves, residue-free cleaner (recommendation: special cleaner from *NetterVibration*), torque wrench, paper towels, folding rule.

### QR code for installation

For the online assembly instructions of the NKK scan the following QR code or use the link:



or https://www.youtube.com/watch?v=AkO-kw0fpa8

#### **Procedure**

When installing the NKK, carry out the following steps in succession:

### Pre-cleaning surfaces

- 1. Remove any coatings, paints, etc. from the surface before gluing.
- 2. Put on clean gloves.
- 3. Clean the surfaces onto which the glue is applied with a residue-free cleaner. We recommend the special cleaner from *NetterVibration*.
- 4. Repeat the procedure if contamination is still visible. Both surfaces must be clean, dry and free of grease.

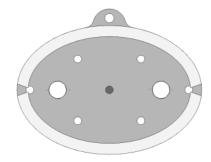
### Applying primer

- 1. Apply the primer thinly and evenly to the container wall and the NKK.
- 2. Wait 5 minutes until the primer has dried on the surfaces.

### Attaching glue strips

Press the supplied glue strips all around on the bottom surface of the NKK so that a small gap of ca. 3 mm between both ends remains open.

The glue strips ensure that the required distance (3 mm) between the NKK and the mounting surface is maintained.



NKK with glue strips (bottom surface)

### **Pre-gluing**

Press the NKK evenly against the mounting surface. The entire surface of the gluing strip must adhere to the mounting surface.

# Tips for processing the glue

### Preheat glue:

To improve the flow of the glue and reduce the force needed to apply it, the glue can be preheated, e.g. in a water bath. The temperature should not exceed 30°C. The increased temperature of the glue shortens the processing time.

#### Optimise mixing tube:

To reduce the manual force when applying the glue, the mixing tube of the glue cartridge can be cut as shown in the illustration.



### Preparing glue

- 1. Open the cartridge and unscrew the static mixer.
- 2. Insert the cartridge with static mixer into the appropriate dispensing applicator.
- 3. Discard the first 2 cm of the glue strand which emerge from the static mixer.

#### Filling in glue

Only for vibrators of the series PKL:

Close the insert nuts with screws.

- 1. Fill the glue in the drill holes of the NKKStart in the middle of the NKK, if vertically mounted at the bottom.
- 2. Add glue to each drill hole until glue emerges from at least one other drill hole.
- 3. Remove the leaked glue only after it has cured.

The static mixer should be replaced if the application is interrupted for more than 5 minutes at 23 °C.

### **Curing of glue**

The NKK are ready for use after 12 hours. This applies for temperatures from 15 °C to 40 °C. The curing time of the glue is shorter at higher temperatures, at lower temperatures the curing time of the glue is prolonged. Remove the leaked glue after curing.

# Sealing drilled holes (optional)

If necessary NKK can be sealed for certain applications. To do this, carry out the following steps in succession:

- 1. Drill out the glue residues in the drill holes.
- 2. Seal the glue holes and the space between the edge of the NKK and the mounting surface with a suitable silicone.

### Mounting vibrator

If an adapter plate is supplied: Mount the adapter plate on the NKK.

For vibrators of the PKL series: Mount the EE kit. Observe the operating instructions of the vibrator.

Screw the vibrator to the NKK. Observe the operating instructions of the vibrator.

### Checklist installation

Ensure that the following steps have been performed:

Surface pre-cleaned?	
Primer applied?	
Glue strips attached?	
NKK pre-glued to mounting surface?	
Glue prepared?	
Glue filled in drill holes?	
Glue cured?	
If required: Drill holes sealed?	
Vibrator mounted, according to the specifications in the vibrator operating instructions?	

### 7 Accessories

### Possible accessories

The following accessories are available for the NKK:

Component	Description
Glue	For gluing the NKK to a mounting surface
Dispensing applicator	
Static mixer	For mixing the glue components
Primer	To increase the adhesive strength of the glue
Special cleaner	For cleaning the mounting surface

### 8 Disposal

The gluing consoles are intended for permanent attachment to mounting surfaces. Disposal must be carried out as part of the disposal of the affixed component/machine.

Residues and waste (glue cartridges, primer, glue strip) are to be disposed of in an environmentally friendly manner in accordance with the manufacturer's specifications. Information on disposal can be found in the safety data sheets of the manufacturer.

The safety data sheets are available on the manufacturer's website.