The comprehensive KEIL drilling technique consists of a full range of machinery for all kinds of application purposes, from handheld drilling machines up to industrial drilling and from drilling tables with roller conveyors to automatic drilling, machines, warranting an optimum and fast application of the KEIL system.
Product information

- KEIL portable drilling machines are used for professional and mobile drilling and undercutting of small batches, infill and special size panels.
- The portable drilling machine is placed in an optional position on the façade panel and firmly connected via the vacuum base.
- Exact positioning can also be achieved via stop rails.
- The KSDV portable drilling machine has been developed for water cooled drilling with KEIL diamond tipped façade drills.
- The simple handling is supported by the low weight of this handheld machine and allows for its use on the building site.
- Panels of any size or weight can be drilled efficiently and undercut precisely.

Applications

- For drilling and undercutting.

Possible usage

- With KEIL diamond tipped façade drills.

Fitting drilling tools

- Diamond tipped façade drill bit (p. 28, 32)
- Diamond tipped façade drill bit with countersink (p. 29, 33)
- Drilling table with roller conveyor KRT (p. 44)

Spare parts

- Chuck for portable drilling machines (p. 52)
- Flushing chuck for KSDV, KRDV (p. 52)
- Grooved ball bearing (p. 52)
- Silencer (p. 52)
- Fastener set 1 (p. 53)
- Gasket for vacuum base (p. 53)
- Carbon brush set (p. 53)

Design

- Portable undercut drilling machine with vacuum base
- Professional design
- Flushing chuck
- Drilling chuck
- Vacuum base
- Venturi nozzle
- PRCD
- Electrical water locking
- Stop rail

Instructions for use

- Rotational speed approx. 10,000 rpm.
- Usage of the cooling lubricant 532 500 035 (p. 49) will prolong the life time of the diamond tipped façade drill bit significantly and protect the parts covered in cooling water from corrosion.
ACCESSORIES KSDV

Water pressure tank
Mobile stainless steel pressure tank 10 l with manual pump and connection for pneumatic line (p. 48).

Circulation water supply
Circulation water supply for one / several KEIL undercut drilling machines (p. 48).

Cooling lubricant
Anticorrosive additive for cooling water (p. 49).

Transport case
Sturdy wooden case for transport and storage (p. 51).

Air connection
Connecting hose (T-piece) for the simultaneous connection of the water tank and the machine to a compressed air supply (p. 49).

Whetstones
For whetting diamond tipped façade drill bits (p. 51).
PORTABLE DRILLING MACHINE KRDV

Product information

- KEIL portable drilling machines are used for mobile drilling and undercutting of small batches, infill and special size panels.
- The portable drilling machine is placed in an optional position on the façade panel and firmly connected via the vacuum base.
- Exact positioning can also be achieved via stop rails.
- The KSDV portable drilling machine has been developed for water cooled drilling with KEIL diamond tipped façade drills.
- The simple handling is supported by the low weight of this handheld machine and allows for its use on the building site.
- Panels of any size or weight can be drilled efficiently and undercut precisely.

Applications

- For drilling and undercutting.

Possible usage

- With KEIL diamond tipped façade drills.

Fitting drilling tools

- Diamond tipped façade drill bit (p. 28, 32)
- Diamond tipped façade drill bit with countersink (p. 29, 33)
- Drilling table with roller conveyor KRT (p. 44)

Spare parts

- Chuck for portable drilling machines (p. 52)
- Flushing chuck for KSDV, KRDV (p. 52)
- Grooved ball bearing (p. 52)
- Silencer (p. 52)
- Fastener set 1 (p. 53)
- Gasket for vacuum base (p. 53)
- Carbon brush set (p. 53)

Design

- Portable undercut drilling machine with vacuum base
- Flushing chuck
- Drilling chuck
- Vacuum base
- Venturi nozzle
- PRCD
- Electrical water locking
- Stop rail

Instructions for use

- Rotational speed adjustable up to approx. 6,500 rpm.
- Usage of the cooling lubricant 532 500 035 (p. 49) will prolong the life time of the diamond tipped façade drill bit significantly and protect the parts covered in cooling water from corrosion.
ACCESSORIES KRDV

Water pressure tank
Mobile stainless steel pressure tank 10 l with manual pump and connection for pneumatic line (p. 48).

Circulation water supply
Circulation water supply for one / several KEIL undercut drilling machines (p. 48).

Cooling lubricant
Anticorrosive additive for cooling water (p. 49).

Transport case
Sturdy wooden case for transport and storage (p. 51).

Air connection
Connecting hose (T-piece) for the simultaneous connection of the water tank and the machine to a compressed air supply (p. 49).

Whetstones
For whetting diamond tipped façade drill bits (p. 51).
Product information

KEIL portable drilling machines are used for professional and mobile drilling and undercutting of small batches, infill and special size panels.

The portable drilling machine is placed in an optional position on the façade panel and firmly connected via the vacuum base.

Exact positioning can also be achieved via stop rails.

The KSDV portable drilling machine has been developed for dry drilling with KEIL carbide tipped façade drills.

The simple handling is supported by the low weight of this handheld machine and allows for its use on the building site.

Panels of any size or weight can be drilled efficiently and undercut precisely.

Application

For drilling and undercutting

Possible usage

With KEIL carbide tipped façade drill bits.

Fitting drilling tools

Carbide tipped façade drill bit (p. 34)
Drilling table with roller conveyor (p. 44)

Spare parts

Chuck for portable drilling machines (p. 52)
Grooved ball bearing (p. 52)
Silencer (p. 52)
Fastener set 1 (p. 53)
Gasket for vacuum base (p. 53)
Carbon brush set (p. 53)

Volts | Hertz | Plug | Article no.
--- | --- | --- | ---
230 V | 50 Hz | D | 532 550 000
115 V | 50–60 Hz | – | 532 550 002

Design

Portable undercut drill with vacuum base

Professional design

Chuck for dry drilling

Vacuum base

Venturi nozzle

Stop rail

Instruction for use

Rotational speed
230 V: 1,400–4,200 rpm.
115 V: 1,700–6,800 rpm.
ACCESSORIES KSHV

Transport case
Sturdy wooden case for transport and storage (p. 51).

Blow out nozzle
Nozzle for air ejection with cooling effect during drilling (p. 49).
Product information

- Drilling machine for efficient drilling of KEIL undercut drill holes for use in the workshop or on the building site (total weight approx 90 kg). The multidirectional roller conveyor (1,500 mm x 600 mm) with pneumatic panel fixing equipment warrants very good handling, simple operation and fast conversion to another hole distance.
- Once the insertion depth h, has been set, panels of different thicknesses can be drilled without further adjustments.
- The depth position of the undercut hole can be chosen in consistency with either the front or the back side of the panel. For undercut drillings in consistency with the front side of the panel the conversion set for front face related must be fitted.
- The portable undercut drilling machine can be disassembled and used with the vacuum base (without roller conveyor).
- Feet adjustable in height
- Machine can be used separately
- Max. panel format 1,200 x 600 mm

<table>
<thead>
<tr>
<th>Volt</th>
<th>Hertz</th>
<th>PRCD</th>
<th>plug</th>
<th>article no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>230 V</td>
<td>50 Hz</td>
<td>yes</td>
<td>D</td>
<td>532 500 201</td>
</tr>
<tr>
<td>115 V</td>
<td>50–60 Hz</td>
<td></td>
<td>on demand</td>
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</tr>
</tbody>
</table>

Application

- For drilling and undercutting.

Possible usage

- With KEIL diamond tipped façade drill bits.

Fitting drilling tools

- Diamond tipped façade drill bit (p. 28, 32)
- Diamond tipped façade drill bit with countersink (p. 29, 33)
- Carbide tipped façade drill bit HM (p. 34)
- Portable drilling machine KRDV (p. 40)
- Portable drilling machine KSHV (p. 42)

Design

Drilling table with multidirectional roller conveyor 1,500 mm x 600 mm incl. portable undercut drilling machine KSDV

- Stainless steel
- With pneumatic panel fixing (manual control)
- 2 stop rails
- 4 swivelling stops
- Service unit
- Max. edge distance of drill hole in y = 150 mm
- Wooden crate

Instructions for use

- Rotational speed approx. 10,000 rpm.
- Usage of the cooling lubricant 532 500 035 (p. 49) will prolong the life time of the diamond tipped façade drill bit significantly and protect the parts covered in cooling water from corrosion.

www.keil-fixing.de/en
ACCESSORIES DRILLING TABLE WITH ROLLER CONVEYOR KRT

Collection basin
Basin for collecting the cooling water (p. 48).

Circulation water supply
Circulation water supply for one / several KEIL undercut drilling machines (p. 48).

Cooling lubricant
Anticorrosive additive for cooling water (p. 49).

Water pressure tank
Mobile stainless steel pressure tank 10 l with manual pump and connection for pneumatic line (p. 48).

Air connection
Connecting hose (T-piece) for the simultaneous connection of the water tank and the machine to a compressed air supply (p. 49).

Conversion set KRT
“Front face related drilling“ (p. 49).

Whetstones
For whetting diamond tipped façade drill bits (p. 51).
AUTOMATIC DRILLING MACHINE TYPE KG

Product information

- KEIL offers automated drilling machines for automated drilling and undercutting with KEIL undercut technique in cooperation with renowned machine manufacturers.
- The individual customer request regarding computer assistance, panel size, automatic panel transport and so on forms the basis of the design of your machine.
- Best handling of the panels to be worked.
- Materials like natural stone, ceramics, laminate (HPL), fibre cement, glass etc. can be worked (max. panel size e.g. 3500 mm x 1800 mm).
- The simultaneous processing of two panels warrants efficient working conditions. While the drillings are being carried out all-automatically in panel 1, panel 2 can be checked and re-edited. Simple programming of the drilling patterns.

Application

- For drilling and undercutting.

Possible usage

- With KEIL diamond tipped façade drill bits.

Fitting drilling tools

- Diamond tipped façade drill bit (p. 28, 32)
- Diamond tipped façade drill bit with countersink (p. 29, 33)

Spare parts

- Fastener set 1 (p. 53)

Design

Automatic drilling machine for undercut drilling.
- Customized table size / panel size.
- Incl. rack.
- Incl. bridge.
- Available with one or two KEIL undercut units.
- Programmable logic controller (SPS)
- Positioning accuracy approx. +/- 0.2 mm
- Consistant distance from front or back side of the panel.

article no. 532 200 050

Design by arrangement.
Drilling unit KG
For drilling plants incl. water supply and pneumatic drill feed (p. 50).

Control drill unit KG
SPS control incl. touchpanel and frequency converter for drilling unit KG (p. 50).

Circulation water supply
Circulation water supply for one / several KEIL undercut drilling machines (p. 48).

Cooling lubricant
Anticorrosive additive for cooling water (p. 49).

Water pressure tank
Mobile stainless steel pressure tank 10 l with manual pump and connection for pneumatic line (p. 48).

Air connection
Connecting hose (T-piece) for the simultaneous connection of the water tank and the machine to a compressed air supply (p. 49).

Whetstones
For whetting diamond tipped façade drill bits (p. 51).
MACHINE ACCESSORIES

Circulation water supply

Usage
Circulation water supply for one / several KEIL undercut drilling machines.

Design
Stainless steel two-chamber water container
Strong industrial pump
Filter control
Incl. Fu switch and Y connector

Product information
The stainless steel water container with two chambers collects the cooling water and returns it to the system with steady pressure ready for drilling and undercutting with diamond tipped façade drill bits.

The bore dust will settle due to the two chamber system. The filter makes clean cooling water available at all times. The filter control will indicate, if the filter needs cleaning resp. changing.

The strong, industrial pump will ensure a constant supply pressure, even if several drilling machines are connected.

Usage of the cooling lubricant 532 500 035 will prolong the life time of the diamond tipped façade drill bit significantly and protect the metal parts covered in cooling water from corrosion.

Suitable for
KSDV / KRDV / KRT
Article no.
532 800 010

Volt
400 V, 3~

Hertz
50 Hz

Water pressure tank

Usage
Portable stainless steel pressure tank for the cooling water supply during drilling and undercutting with diamond tipped façade drill bits.

The tank can not only be connected to the manual pump, but also to a compressed air supply, keeping the water pressure constant from the first up to the last drop.

Water pressure should be set to more than 4 bar.

Suitable for
KSDV / KRDV / KRT
Article no.
532 800 032

Design
Portable stainless steel pressure tank 10 l
With manual pump and connector for pneumatic line.

Filter cartridge

Usage
Filter for the circulation water supply

Design
Tray for collecting the cooling water.
Stainless steel.
Dimensions: 1420 x 655 x 40 mm
With hose connector.

Possible applications
Filter for the circulation water supply

Suitable for
Circulation water supply
Article no.
532 870 020

Volt Hertz article no.
400 V, 3~ 50 Hz 532 800 010
MACHINE ACCESSORIES

Air connector

suitable for

<table>
<thead>
<tr>
<th>Design</th>
<th>article no.</th>
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<tbody>
<tr>
<td>1 x 532 500 032</td>
<td>532 800 023</td>
</tr>
</tbody>
</table>

Usage

- Connecting hose (T-piece) for simultaneously connecting a water tank and a machine to a compressed air supply.

Design

- Compressed air hoses with T-piece, 2 clutches and one plug

Cooling lubricant

Product information

- KEIL recommend usage of cooling lubricant in addition to the cooling water. This is an anticorrosive additive, which is added to the cooling water (approx. 2 %)

Advantages:

- The machine parts covered in cooling water are protected from corrosion, which can significantly prolong the lifetime of the diamond tipped façade drill bits, especially when used for very hard and dense panel materials (e.g. fine porcelain stoneware).

suitable for

<table>
<thead>
<tr>
<th>Design</th>
<th>article no.</th>
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</thead>
<tbody>
<tr>
<td>KRT</td>
<td>532 500 135</td>
</tr>
</tbody>
</table>

Usage

- Anticorrosive additive for cooling water.

Instructions for use

- Check the tolerance of the cooling lubricant to the panel material before use.

Blow out nozzle for KSHV

suitable for

<table>
<thead>
<tr>
<th>Design</th>
<th>article no.</th>
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<tbody>
<tr>
<td>KSHV</td>
<td>532 500 106</td>
</tr>
</tbody>
</table>

Usage

- Nozzle for air ejection with cooling effect during drilling

Design

- Flexibly adjustable nozzle head.
- Control for discharge pressure.

Conversion set KRT

"Front face related drilling"

suitable for

<table>
<thead>
<tr>
<th>Design</th>
<th>article no.</th>
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</thead>
<tbody>
<tr>
<td>KRT</td>
<td>532 500 135</td>
</tr>
</tbody>
</table>

Usage

- Connecting hose (T-piece) for simultaneously connecting a water tank and a machine to a compressed air supply.

Design

- Compressed air hoses with T-piece, 2 clutches and one plug

Instructions for use

- Necessary for front face related drilling for balancing tolerances in panel thickness with the KEIL drilling table with roller conveyor KRT.
MACHINE ACCESSORIES

Drilling unit KG

Usage
- For drilling and undercutting.

Possible applications
- With KEIL diamond tipped façade drill bits.

Instructions for use
- Usage of the cooling lubricant 532 500 035 (p. 49) will prolong the life time of the diamond tipped façade drill bit significantly and protect the metal parts covered in cooling water from corrosion.

Control for drilling unit KG

Usage
- SPS control incl. touch panel and frequency converter for drilling unit KG.

Design
- For controlling the drilling unit KG.

suitable for
- 1 x 532 200 055
- 2 x 532 200 055

article no.
- 532 200 051
- 532 200 052

Undercut unit HSE

Product information
- The KEIL undercut unit for drilling plants is the optimal automated unit for drilling and undercutting.
- Nearly all available drilling and milling systems can be retrofitted with this unit.
- The undercut unit will receive the diamond or carbide tipped façade drill bit, depending on the panel material.
- As soon as the preselected drilling depth has been reached, the drill head will be pneumatically deflected for undercutting. When the diamond tipped façade drill bit is in use, water will be supplied centrally through the shaft.
- The KEIL undercut unit is carried by the carriage of the machine with frequency controlled engine, allowing for the engine’s rotational speed to be adjusted to drilling with the carbide tipped façade drill bit (approx. 2,000 rpm) or with the diamond tipped façade drill bit (approx. 7,000 rpm).

Usage
- Usage
- For drilling and undercutting

Possible applications
- With KEIL diamond tipped façade drill bits.

Suitable drilling tools
- Diamond tipped façade drill bit (p. 28, 32)
- Diamond tipped façade drill bit with countersink (p. 29, 33)

Spare parts
- Chuck HSE
- Flushing head HSE
- Fastener set 2
- Fastener set 3

Design
- For drilling plants with flushing chuck
- Dimensions: 500 x 110 x 170 mm

Notes
- 2,100–8,730 rpm.
- Driven by frequency converter (not included in delivery)

Volt Hertz article no.
230 V, 3~ 37.5–150 Hz 532 200 055

Volt Hertz article no.
230 V, 3~ 37.5–150 Hz 532 200 023
MACHINE ACCESSORIES

Chuck P

Product information

- The chuck can be attached to any available drilling or milling plant (mount according to customer’s demand).
- Several connection requirements have to be fulfilled for the KEIL chuck P with pneumatic deflection to be mounted to existing machines.
- The rotational speed of the shaft must be approx. 6,000–7,000 rpm. for water cooled drilling with the diamond tipped façade drill bit and approx. 2,000 rpm for drilling with the carbide tipped façade drill bit. Bearing at zero clearance and flawless running of the drill shaft are requirements for a precise undercutting and a long lifetime of the façade drill bits. Locking in the different feed directions is required as well.
- For drilling with the diamond tipped façade drill bit, water is supplied through the drill shaft (water pressure > 4 bar). We recommend the use of a water filter in order to avoid possible water outages, which may lead to unsoldering of the diamond surface.

To be carried out by the customer:
- Screwing chuck in or inserting it into the collet chuck.
- Mounting spin-lock for chuck.
- The chuck can be controlled either mechanically or programme controlled, depending on the machine. For the mechanical control, a KEIL pneumatic unit has to be mounted, which is controlled by an end switch for starting the undercutting process.

Variant | Suitable for | Article no.
--- | --- | ---
R 1/2" | KSDV / KSHV / KRDV | 532 500 120

Usage
- For drilling and undercutting.

Possible applications
- With diamond tipped KEIL façade drill bits.

Instructions for use
- Usage of the cooling lubricant 532 500 035 (p. 49) will prolong the lifetime of the diamond tipped façade drill bit significantly and protect the metal parts covered in cooling water from corrosion.

Accessories
- Fastener set 2 (p. 53)
- Fastener set 3 (p. 53)

Design
- Chuck for mounting to suitable drilling / milling / CNC machines.
- Pneumatic deflection of the façade drill bit.
- Drive R 1/2"
- Water supply through shaft
- For drilling plants
- With integrated support and throttle check valve.
- Façade drill bit not included.

Transport case for KSDV, KSHV, KRDV

Application
- Sturdy wooden case for transport and storage.

Whetstones

<table>
<thead>
<tr>
<th>Variant</th>
<th>Suitable for</th>
<th>Article no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 175 x 10</td>
<td>e.g. fine porcelain stoneware</td>
<td>532 110 351</td>
</tr>
<tr>
<td>155 x 82 x 25</td>
<td>e.g. natural stone</td>
<td>532 110 352</td>
</tr>
</tbody>
</table>

Application
- For whetting diamond tipped façaded drill bits.

Main Point Karlin, Prag, Cz. Ditz Fejer © Rieder Group
SPARE PARTS

Chuck for portable drilling machines

<table>
<thead>
<tr>
<th>suitable for</th>
<th>variant</th>
<th>thread/ connection</th>
<th>article no.</th>
</tr>
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<tbody>
<tr>
<td>KSDV</td>
<td>M14</td>
<td></td>
<td>581 000 017</td>
</tr>
<tr>
<td>KSHV</td>
<td>M14</td>
<td></td>
<td>581 000 018</td>
</tr>
<tr>
<td>KSDV</td>
<td>replacement chuck</td>
<td>M14</td>
<td>581 000 028</td>
</tr>
<tr>
<td>KRDV</td>
<td>replacement chuck</td>
<td>M14</td>
<td>581 600 028</td>
</tr>
</tbody>
</table>

Possible applications
➤ Chuck with / without flushing chuck for use in KEIL portable drilling machines.

Flushing chuck for KSDV, KRDV

<table>
<thead>
<tr>
<th>suitable for</th>
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<tbody>
<tr>
<td>chuck KSDV / KRDV</td>
<td>581 000 012</td>
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</table>

Possible applications
➤ Flushing chuck for undercut units

Grooved ball bearing

<table>
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<th>article no.</th>
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<tr>
<td>581 001 320</td>
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</table>

Possible application
➤ Undercut bearing for chuck unit

Chuck for undercut unit HSE

<table>
<thead>
<tr>
<th>suitable for</th>
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<th>article no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>undercut unit HSE</td>
<td>cone MK1</td>
<td>581 000 020</td>
</tr>
</tbody>
</table>

Possible applications
➤ Pneumatic chuck for use in KEIL undercut unit.

Flushing chuck for undercut unit HSE

<table>
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<tr>
<th>suitable for</th>
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<tr>
<td>undercut unit HSE</td>
<td>581 000 026</td>
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Possible applications
➤ Flushing chuck for undercut unit

Silencer

<table>
<thead>
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<th>article no.</th>
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<tr>
<td>532 500 059</td>
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Possible applications
➤ For venturi nozzles.
## SPARE PARTS

### Fastener set 1
![Fastener set 1](image)

**Possible applications**
- For KEIL façade drill bits.

**article no.**
585 900 001

### Fastener set 2
![Fastener set 2](image)

**Possible applications**
- For KEIL façade drill bits without countersink in chuck P for HSE.

**Gasket for vacuum base**

**suitable for**
- KSDV / KSHV / KRDV
- KSDV / KSHV

**variant**
- 735
- 600

**article no.**
- 532 500 108
- 532 500 110

**Possible applications**
- Portable machines with vacuum base.

**Note**
- 735 = default
- 600 = inner groove

### Fastener set 3
![Fastener set 3](image)

**Possible applications**
- For KEIL façade drill bits with countersink in chuck P for HSE.

**article no.**
585 900 003

### Carbon brush set
![Carbon brush set](image)

**suitable for**
- KSDV 230 V 50 Hz
- KRDV 230 V 50–60 Hz
- KRDV 120 V 60 Hz

**article no.**
- 532 500 040
- 532 600 040
- 532 600 042

**Possible applications**
- Replacement carbon brushes for portable drilling machines

**Note**
- Please always state machine type with order.

---

**Possible applications**
- For KEIL façade drill bits.

**Possible applications**
- For KEIL façade drill bits with countersink in chuck P for HSE.

**Note**
- 735 = default
- 600 = inner groove

---

**possible applications**
- Portable machines with vacuum base.

**Note**
- Please always state machine type with order.