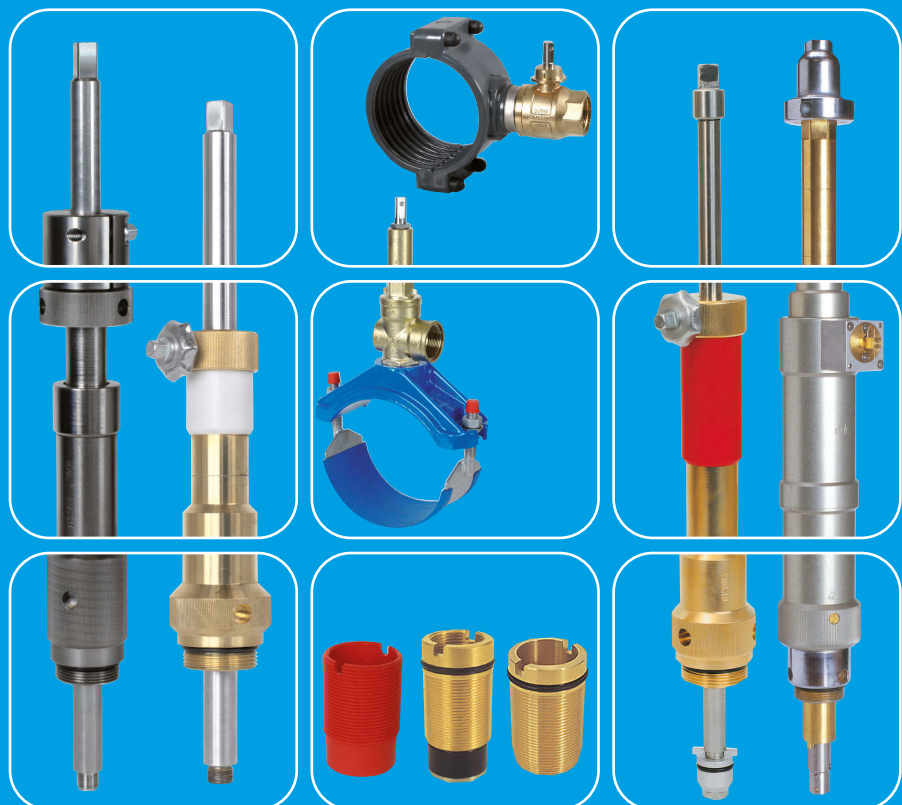




...thoroughly tried and tested!

Tapping and bushing with EWE tools



1. Details of product

1.1. Application field

EWE tapping units are for use with gas and water supply pipes made from (hot-dip galvanised) cast iron, (hot-dipped galvanised) steel, asbestos cement, PVC, PE and GRP.

1.2 Manufacturer's address

Wilhelm EWE GmbH & Co. KG

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Germany

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Fax: +49 (0)5 31 37 00 555

E-Mail: info@ewe-armaturen.de

www.ewe-armaturen.de

2. Safety instructions

The work required must be carried out according to legal regulations and accident prevention regulations as well as using recognised technical methods and procedures.

- The installation and operating instructions of the respective manufacturer must be observed.
- Should other devices, such as a motor drive, be used then their operating instructions must be complied with expressly.*
- The installation personnel must be trained for all work and be instructed in using and operating the devices.
- Before using the tapping devices checks must be carried out to ensure that the devices are in perfect condition, thus ensure safe working.
- Technical modifications or alterations to the tapping devices are not permitted.
- The tapping devices may only be used for the intended purpose.

3. Product description

EWE tapping tools are an integrated part of the EWE tapping system, they make tapping easier under pressure without additional special tools. Our product range offers two tapping devices for individual tapping of all types of pipe, for water PFA 16 and gas MOP 10.

- The EWE tapping device for asbestos cement, (hot-dipped galvanised) cast, (hot-dipped galvanised) steel, GRP and PE pipes, smooth-running, manual feed with enclosed bearing. Maximum tap diameter: 36 mm
- The EWE-MINI tapping device for PVC and PE pipes with automatic feed. Maximum tap diameter: 36 mm

To select suitable drills or cutters for the pipe type, please use our application help "which tapping tool for which pipe type". Only perfect and sharp drills or cutters should be used; if necessary re-sharpen them or replace them.

Detailed information on installation of tap fittings can be found in Appendix 1 and 2 of our application help on tapping procedure.

4. Service and maintenance

The material disk in the bit or cutter should only be ejected just before the next tapping. Up until then the disk protects the drilling tool from damage. Ejection is done after removing the drilling tool with an ejector onto which the bit or cutter has been screwed. Pull the rod right back and tighten the locking screw firmly. This reduces the risk of an accident or damaging the bit or cutter. Use of excessive force when installing and tapping is unnecessary and damages the tapping device and the bits/cutters.

The device should be cleaned after use. Check the thread for damage and check that the catch is working and check the state of the seals. Regular maintenance should also include checking of the O-rings on the clamping bolts and the clamping screw.

Caution: there is risk of injury if these components continue to be used when they have been damaged!

5. Additional information

We draw your attention to the fact that the devices are compatible with each other and only original EWE parts should be used. This compatibility of item ensures, trouble-free use, when used as instructed. If other, non-original EWE parts are used, we take no responsibility whatsoever and reject any warranty claims, indemnity claims or any other claims without exception.

Our staff is available on the telephone during working hours for any further information. For instruction on use of the products on site by our staff please arrange an appointment personally. The current edition of these installation and operating instructions can be found on our website: www.ewe-armaturen.de

*Here we refer you to the applicable EU law on CE marking: on site provided with a motor drive, the combination of tapping device and drive are subject to the "EU Machine Directive". This means that a risk assessment must be carried out by a properly qualified expert and compliance with the applicable current EU regulations must be confirmed by a declaration of conformity. The CE mark can then be affixed to the tapping device and the motor.

Application help: Which tapping tool for which type of pipe?



kind of pipe	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223	drill bit with exchangeable insert order number 6123223
case iron pipe without a jacket	●	●	●	●	●		
cast iron pipe outside with PE-jacket	●	●	●	●	●		
cast iron pipe with cement inside and outside	●	●		●			
product „Fuchs“-pipe with cement inside and outside	●	(●)		●			
steel pipe with cement inside	●	(●)		●			
steel pipe without a jacket		(●)	●	●	●		
steel pipe outside with PE-jacket		(●)	●	●	●		
asbestos cement pipe	●	●	(●)				
PVC-pipe						●	
PE-HD-pipe							●
fiber glass reinforced pipe	●	●	●	●			

(●) with reservation suitable

Application help: Which flushing device for which fittings?

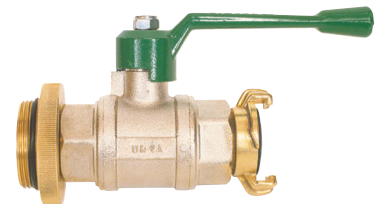
Fitting

Ball valve tap fitting and ball tap fitting



Flushing device

Flushing cock, order number 1130314



Fitting

Valve tap fitting



Flushing device

Flushing device, order number 1130113



Fitting

Ball cock tap fitting and piston slide valve tap fitting



Flushing device

Flushing part, order number 1130414



Application help: Which auxiliary shut off for which fitting?

Fitting

Ball valve tap fitting and ball tap fitting



Auxiliary shut off



Fitting

Valve tap fitting



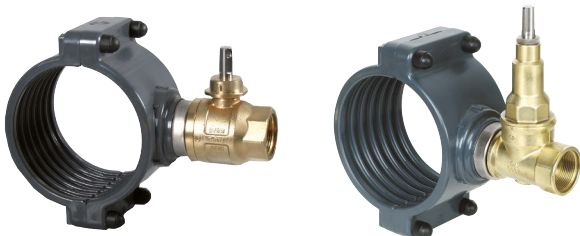
Auxiliary shut off

Flushing fitting, order number 1130113



Fitting

Ball cock tap fitting and piston slide valve tap fitting



Auxiliary shut off

Operating shut off = auxiliary shut off



Tapping with EWE-MINI tapping device

Tapping tools and accessories



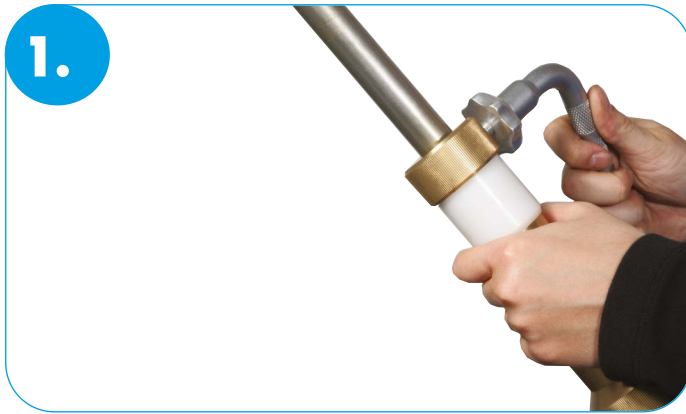
Tools and accessories for plastic pipes (PE or PVC pipes)

1. EWE-MINI tapping device, order number: 6120714
2. EWE tapping device key, order number: 6120301
3. EWE extension for EWE tapping device key, order number: 6120302
4. EWE flushing cock for ball (valve) tap fitting, order number: 1130314
5. EWE flushing part for side tapping, order number: 1130414
6. EWE flushing fitting for valve tap fitting, order number: 11301XX
7. EWE flushing hose, order number: 1130611
8. EWE carrying case, order number: 6121495
9. Tapping tool (HSS cutter or bit), depending on pipe type
10. EWE ejector unit for bits and cutters, order number: 6122800
11. Brass O-ring plugs for gas tapping, order number: 2400514

Tapping

with EWE-MINI tapping device - Example: valve tap fitting

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- Undo locking screw



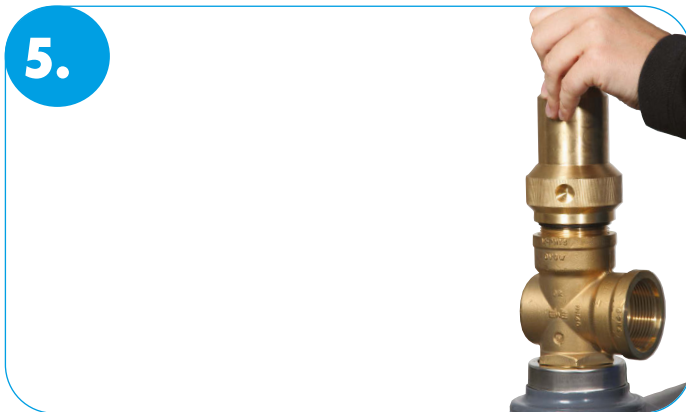
- Bring the feed part to the start position by turning until it is at the top marking on the MINI tapping device casing



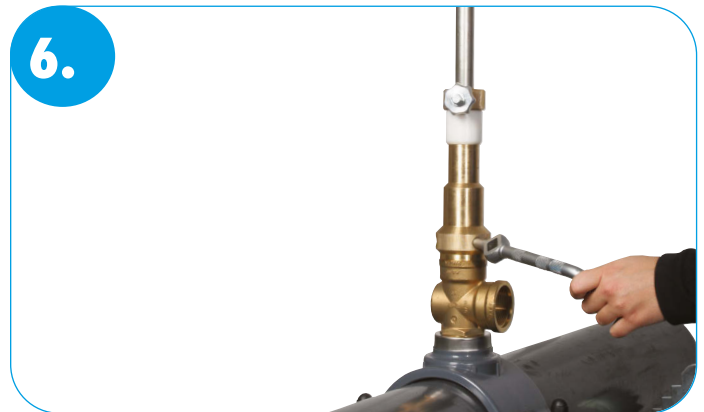
- Screw the appropriate bit or cutter onto the rod according to the pipe material type



- Then pull the rod right back and fix using the locking screw



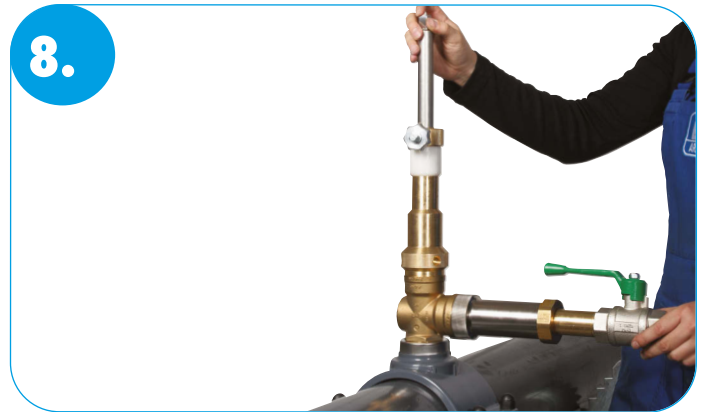
- Screw the MINI tapping device into the tap fitting
- **Caution: Left hand thread!**



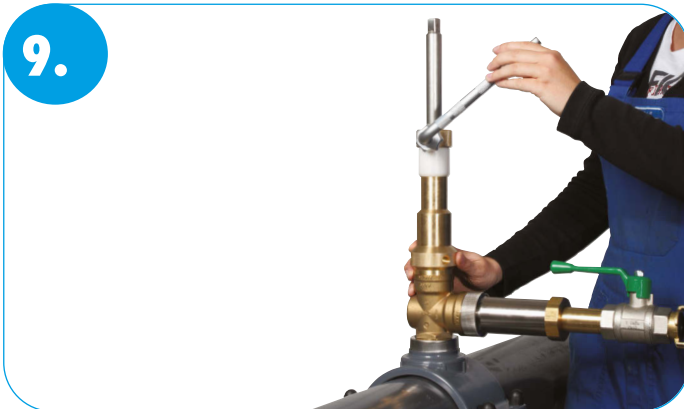
- Tighten with the tapping device key in the drilled hole



- Screw in the flushing device



- Set the rod with the bit or cutter slowly and without pressure on the soffit



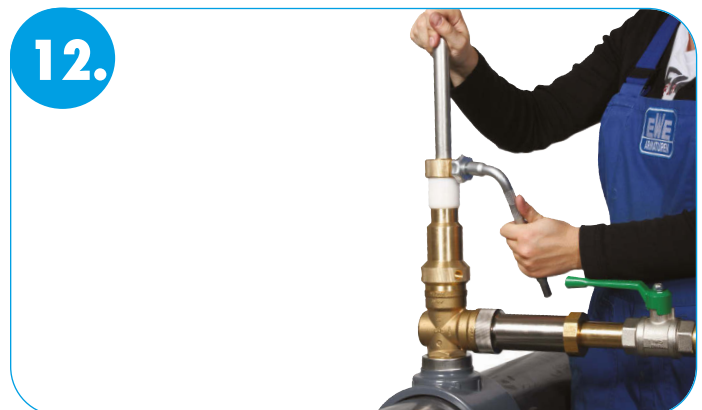
- Tighten the locking screw on the tapping unit with the tapping device key



- Put the drive on the rod and tap
- The auxiliary shut off should be in the open position
- Here the particular installation and operating instructions for the tap fitting being used must always be observed



- By turning to the right the pipe is cut through, the tap feed is automatic
- The tapping process is completed when the pipe wall is cut completely through.

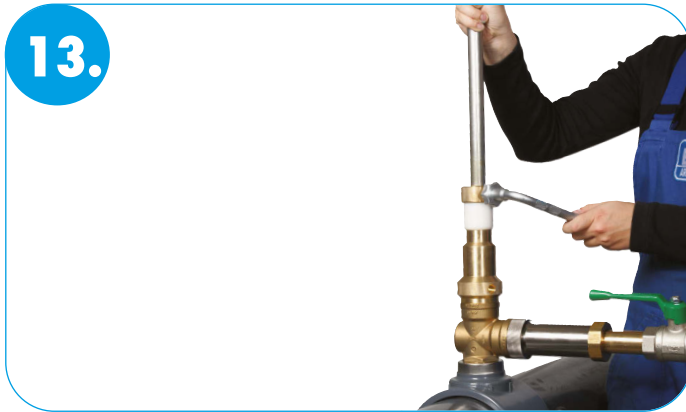


- Adequate flushing is required when tapping water
- In the case of gas tapping ensure that the tapping is leak free
- Undo the locking screw

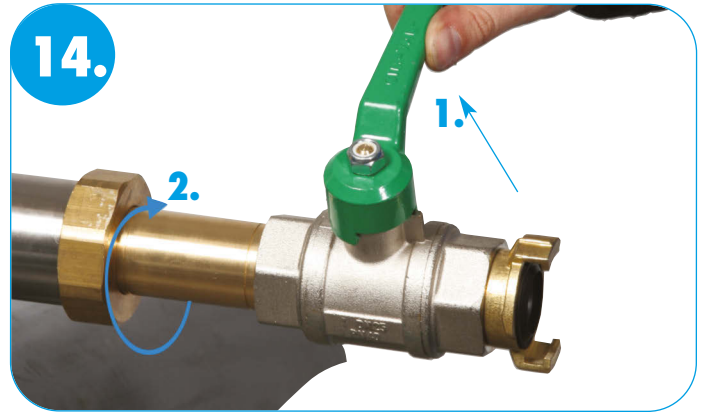
current information at: www.ewe-armaturen.de

Tapping with EWE-MINI tapping device - Example: valve tap fitting

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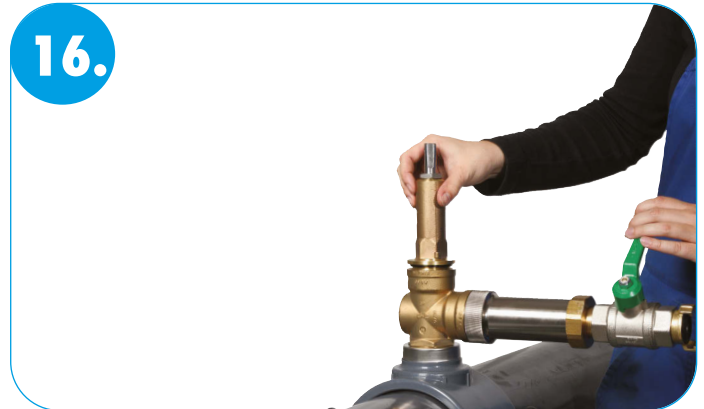
- Pull the rod upwards until it stops
- **Caution: pressure may cause the rod to shoot upwards!**



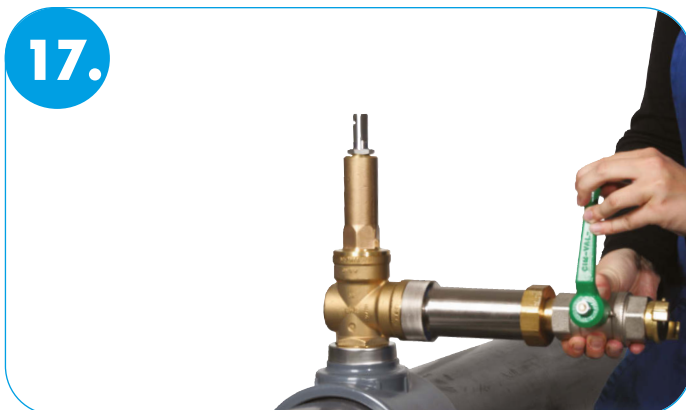
- Close flushing device (1.)
- Allowing for the installation instruction the tap fitting close the auxiliary(2.)



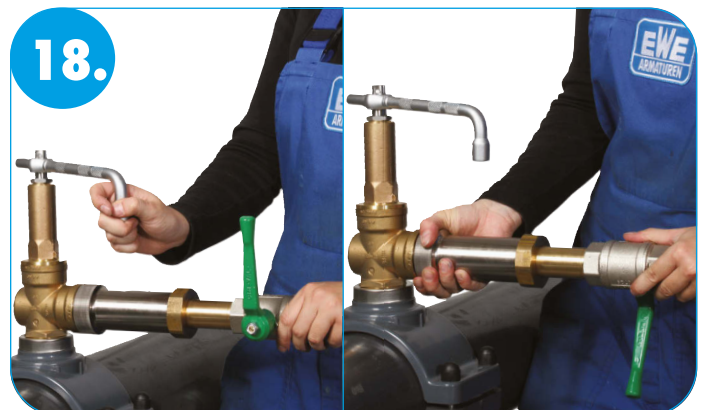
- Take off MINI-tapping device



- Install the upper part of the tap fitting firmly



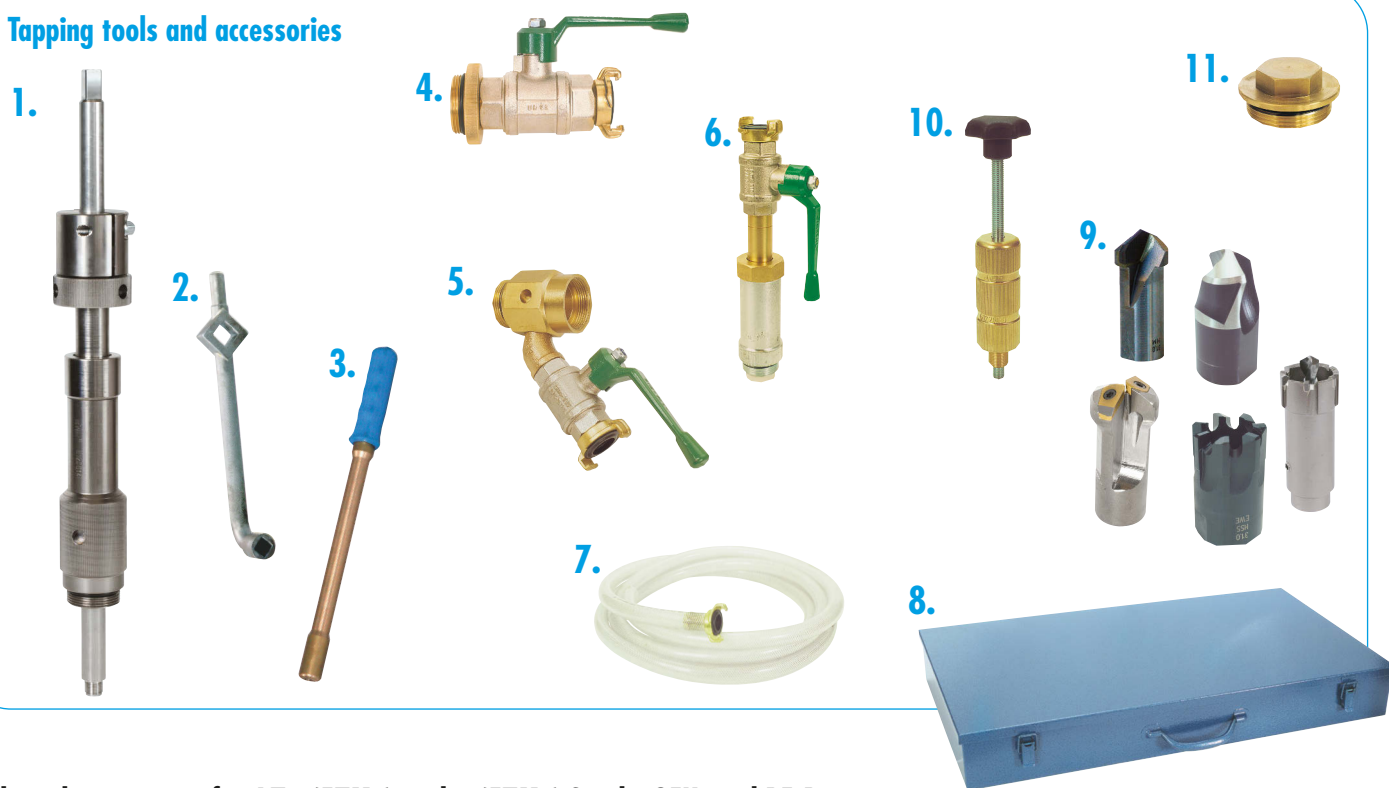
- Open the auxiliary



- Then close the fitting with the aid of the EWE-tapping device key
- Remove EWE-flushing device or plugs

Tapping with EWE-tapping device

Tapping tools and accessories



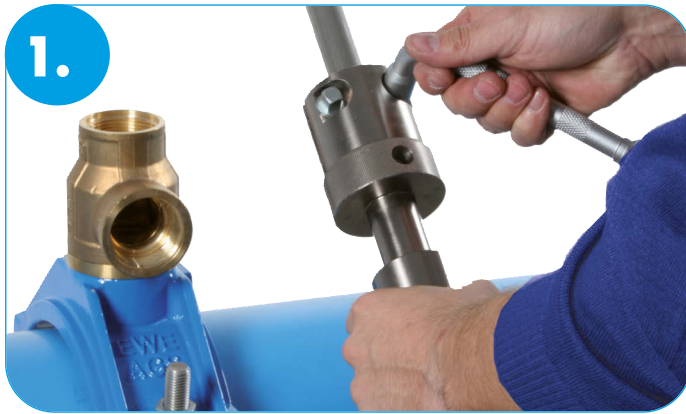
Tools and accessories for AZ-, (FZM-) gush-, (FZM-) Steel-, GFK- and PE-Pipes

1. EWE-tapping device, order number: 6120714
2. EWE tapping device key, order number: 6120301
3. EWE-Knarre, Bestellnummer: 6121198
4. EWE flushing cock for ball (valve) tap fitting, order number: 1130314
5. EWE flushing part for side tapping, order number: 1130414
6. EWE flushing fitting for valve tap fitting, order number: 11301XX
7. EWE flushing hose, order number: 1130611
8. EWE carrying case, order number: 6121499
9. Tapping tool
10. Brass O-ring plugs for gas tapping, order number: 2400514

Tapping

with EWE tapping devices - Example: ball valve tap fitting

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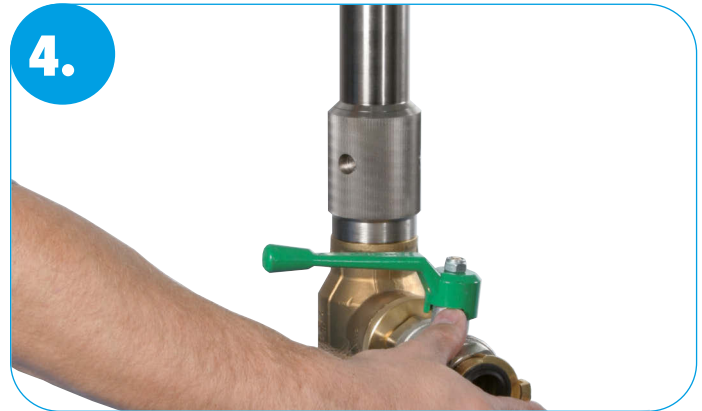
- Undo both locking screw at the EWE-tapping device
- bring the feed part to the start position by turning left until it is blocked



- Screw the drill, cutter or appropriate bit onto the rod to the pipe material type
- Then pull the rod right back and fix using the locking screw



- screw the EWE-tapping device in the tapping fitting
- fix it with the key-grip, it is insert of the bore
- **Caution: Left hand thread!**



- Screw in the EWE-flushing device



- attach the rod with the drill slowly and without pressure on the soffit



- get on both locking screws alternately with the tapping device

current information at: www.ewe-armaturen.de



- attach the actuation on the rod
- put the key grip from the tapping device in to the bore of the feed part and drill it on
- **Here the particular installation and operating instructions for the tap fitting being used must always be observed**



- the auxiliary has to be in open position
- with one hand use the actuation and with the other one give the accordant feed with the aid of the insert tapping device key by turning right until the pipe wall is all through



- enough flushing is needed for the water-tapping
- In the case of gas tapping ensure that the tapping is leak free



- after enough flushing pull the rod up until it is blocked - for that both four cornered keys needs to be lifted
- **Caution: because of the pressure the rod can be fitfully getting up!**



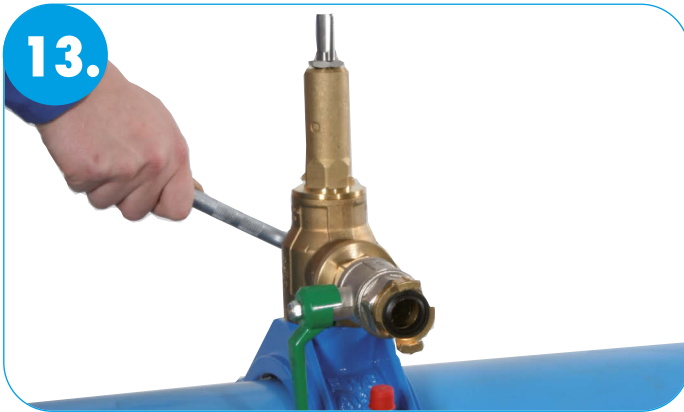
- close the EWE-flushing device
- Under the observance of the particular instruction for the tap fitting close the auxiliary shut off



- Take off the EWE-tap fitting and install the upper part of the tap fitting

Tapping with EWE tapping devices - Example: ball valve tap fitting

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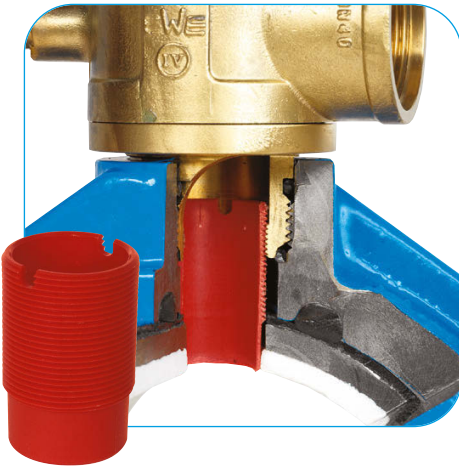


- Open auxiliary shut off



- Close the fitting with the aid of the EWE-fitting device keys
- Remove the EWE-flushing device or plugs

Application help: Which bush for which pipe type?



Tap hole bush

- for EWE tap fittings for cast and steel pipes
- in plastic
- keeps tap hole free
- avoids the tap hole closing up from incrustation
- easy installation under pressure with the appropriate tap hole bush application device



Tap hole seal bush

- for EWE tap fittings
- seals — especially ZM pipes — but also all other pipes directly in the tap hole against the pipe wall
- avoids the tap hole closing up from incrustation
- no need for the complicated removal of the outer sleeving in the case of multilayer pipes or reinsulation
- avoids the corrosion protection being destroyed
- easy installation under pressure with the appropriate tap hole bush application device



PE bush

- for EWE tap fittings
- these bushes have screwable tap fittings with them, used for PVC pipes, can also be used for PE pipes
- bush cuts itself into the tap hole in the PE pipe with its conical thread
- avoids the PE pipe "running away" from the seal
- easy installation under pressure with the appropriate tap hole bush application device
- no need to weld, installation is independent of the weather conditions

Applying bushes

tap hole and PE bushes

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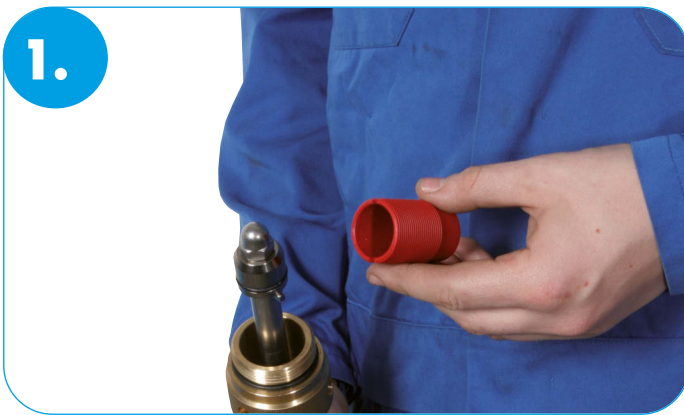
Applying bushes with EWE tap hole bushes and PE bush application device

Tools and accessories



Tools and accessories

1. EWE tap hole and PE bush application device, order number: 6126414
2. EWE tap hole bush
3. EWE PE bush
4. EWE adapter for tap hole bush with "tap hole bush" engraved on it, diameter 28mm,
EWE adapter for tap hole bush 2" with tap hole bush 2" engraved on it, diameter 32mm
EWE adapter for tap hole bush with "tap hole bush" engraved on it, diameter 26mm
5. EWE tapping device key, order number: 6120301



- 1.
- push the EWE tap hole bush onto the EWE bush application device adapter



- 2.
- check the correct positioning of the tap hole bush



- 3.
- Pull back the spindle with the tap hole bush as far as it will go



- 4.
- Fix the spindle with the locking screw



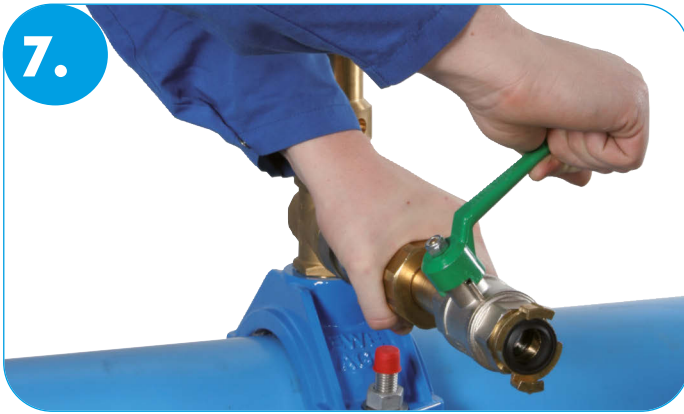
- 5.
- Screw the tap hole bush application device onto the tap fitting and tighten with the tapping device key



- 6.
- Take care that the device and the seals are properly seated

Applying bushes tap hole and PE bushes

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- Open auxiliary shut off
- Close the flushing device



- Undo the spindle arrestor with the locking screw



- Press the spindle against the pressure until there is a noticeable stop



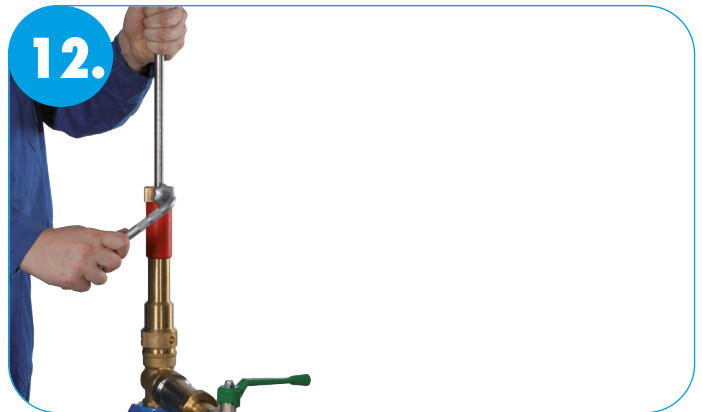
- Fix the spindle again with the locking screw and screw the bush into the tap hole until it stops



- Undo the spindle arrestor with the locking screw, if necessary release the tap hole bush application device by gently moving it backwards and forwards

- **Caution: The spindle can shoot upwards!**

current information at: www.ewe-armaturen.de



- Fix the spindle with the locking screw



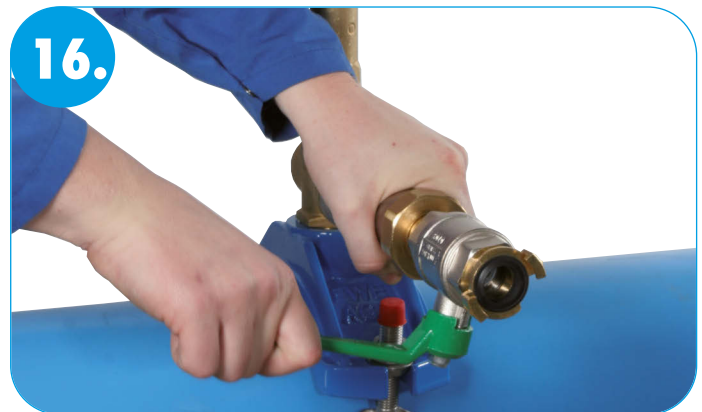
- Close the auxiliary shut off



- Undo the EWE tap hole bush application device with the EWE tapping device key and dismantle



- Install the upper part of the tap fitting valve firmly



- Open the auxiliary shut off



- Close the tap fitting operating shut off



- Remove the EWE flushing device from the outflow of the tap fitting by unscrewing

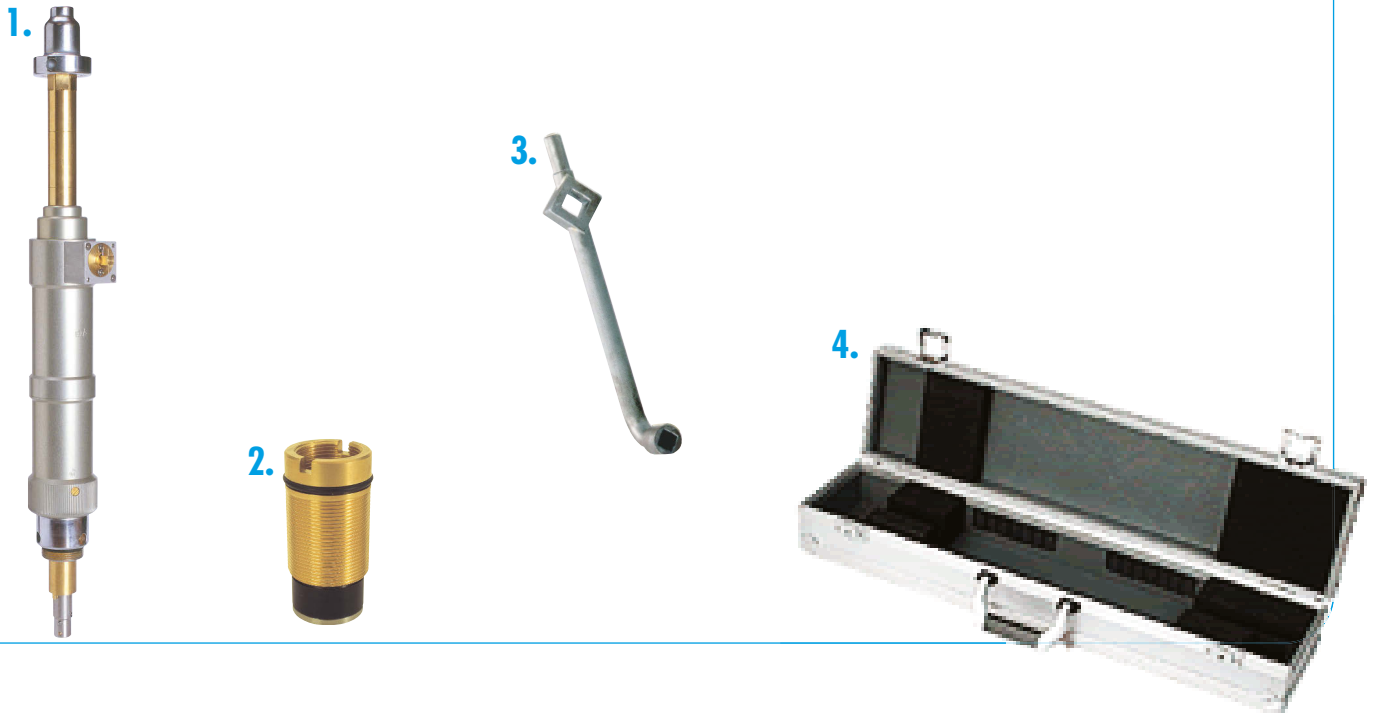
Inserting bushes tap hole sealing bush

06/2010 Edition



Inserting bushes with EWE tap hole sealing bush insertion device

Tools and accessories



Tools and accessories only for water

1. EWE tap hole sealing bush insertion device, order number: 6126314
2. EWE tap hole sealing bush
3. EWE- tapping device key, order number: 6120301
4. EWE carrying case for tap hole sealing bush insertion device, order number: 6121490



- Position the EWE tap hole sealing bush on the inner and outer spindle of the EWE tap hole sealing bush insertion device



- Check the correct positioning of the tap hole sealing bush
- Both fingers of the inner and outer spindles must fit into the grooves of the brass and stainless steel bushes



- Pull the spindles back with the positioned tap hole sealing bush until it stops



- Screw the EWE tap hole sealing bush insertion device onto the tap fitting



- Tighten the EWE tap hole sealing bush insertion device with the EWE tap fitting key
- Ensure the correct seating of the device and he seals



- Open auxiliary shut off
- Close flushing device

Inserting bushes tap hole sealing bush

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7.



- Open switchover valve
- Spindle travels down automatically, if necessary help with the hand

8.



- Screw in the EWE tap hole seal bush over the bell of the EWE tap hole sealing bush insertion device in the tap fitting until it stops (approx. 19-21 turns)

9.



- Press down the bell head of the EWE tap hole sealing bush insertion device

10.



- Place the EWE tapping device key on the square head of the inner spindle
- Then by turning until it stops the tap hole bush is tightened into the tap hole (approx. 1–3 turns)

11.



- Open the tap hole sealing bush insertion device switchover valve via the control
- **Caution: Spindle moves upwards!**

12.



- **Caution: water escapes from the relief hole on the device!**
- If the spindle does not move upwards on its own, release the rod from the bush grooves by gentle movements

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13.



- Close tap fitting auxiliary shut off
- Reduce built up pressure through the EWE flushing device

14.



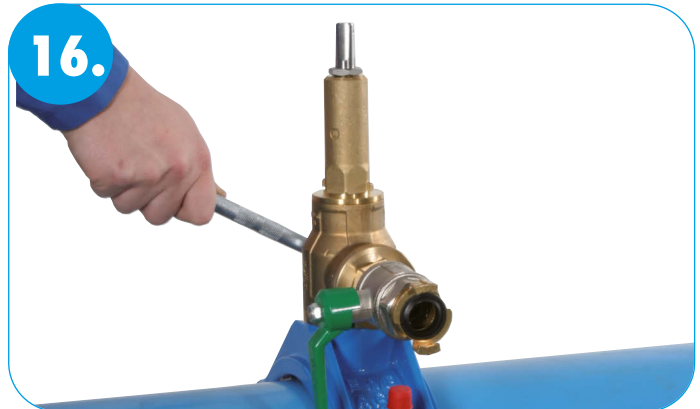
- undo EWE tap hole sealing bush insertion device with the EWE tapping device key and dismantle

15.



- Install the upper part of the tap fitting valve firmly

16.



- Open the tap fitting auxiliary shut off

17.



- Close the tap fitting operating shut off

18.



- Unscrew the EWE flushing device from the tap fitting outflow

Further useful accessories for tapping and bushing

Tools and accessories

1.



2.



Tools and accessories

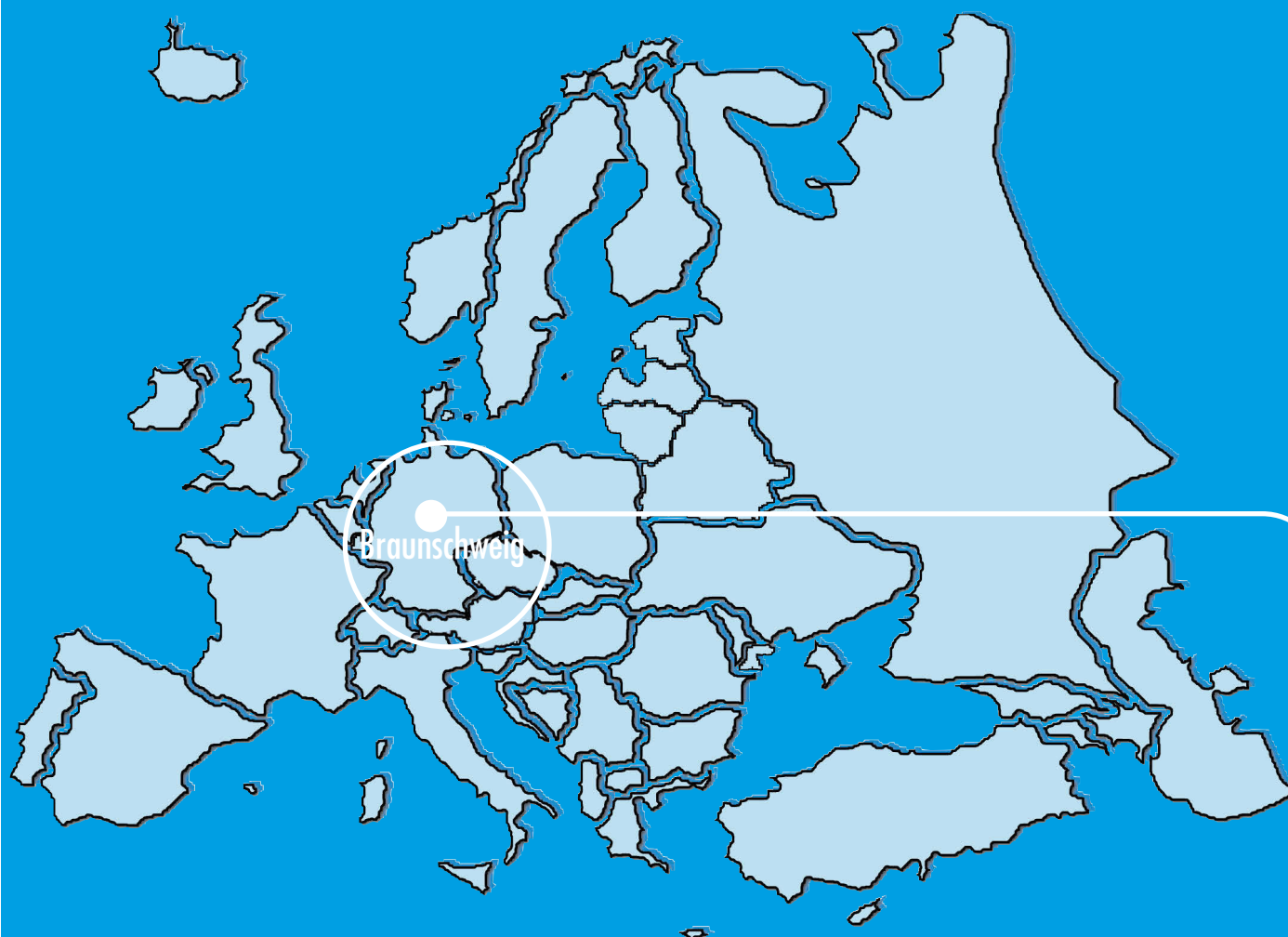
1. EWE test fitting, order number: 1130012
2. EWE cocking lever for gas tappings, order number: 6122900

Service of EWE tools and EWE tapping devices

Additional service:

- Checking EWE tools and EWE tapping devices and accessories
- Professional disassembly and cleaning
- Testing operation and leak tightness testing of parts and if necessary replacement of defective parts

Our office and field staff will be pleased to answer any further questions. Please get in touch with us.



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