

OPERATION & SAFETY MANUAL



WARNING

These instructions are for your personal safety. Always ensure that you have read and understood these instructions before using the equipment.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

TABLE OF CONTENTS

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

| TOPIC | PAGE |
|--|------|
| Safety Information | 3 |
| General Operation & Safety | 4 |
| Environment, Transport, Storage & Disposal | 5 |
| General Product Information | 6 |
| Operating Pressures: 3D Packers | 7 |
| Operating Pressures: Bendy Packers | 8 |
| CE Declaration of Conformity | 9 |
| Operating Instructions | 10 |
| Before Operation | 10 |
| Make a Test Run | 10 |
| Navigation Accessories | 11 |
| Connection of Push Rods | 12 |
| Measuring Distance using CCTV Camera | 13 |
| Preparing the Pro Packer | 13 |
| Locating the Repair on the Pro Packer | 14 |
| Supporting Packer - Full Length of Pro Packer | 15 |
| Supporting Packer - Ends of the Pro Packer | 16 |
| A Typical Repair Installation Method | 17 |
| Inflating the Pro Packer | 20 |
| Removing the Pro Packer (Post Installation) | 20 |
| Maintenance, Service & Repair | 21 |
| Products, Accessories & Spare Parts - US | 22 |
| Products, Accessories & Spare Parts - EU / ROW | 25 |
| Warranty Policy & Procedure | 34 |

To watch practical demonstration videos, take a course, or to download an electronic copy of these Instructions, please visit www.picoteinstitute.com. Please note that videos and courses are not intended as a replacement or alternative to this operating and safety manual, but only as an additional learning tool.

SAFETY INFORMATION

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

WARNING

This section contains important safety information.
Failure to comply could result in serious injury or death.

Safety Symbols



Danger risk of serious injury, follow instructions.

Personal Protective Equipment (PPE)

Safety symbols are used throughout this manual to draw attention to potential hazards.



Suitable eye protection to protect against injuries and chemicals from irritating eyes.



Suitable chemical resistant gloves. Do not use gloves which can become entangled.



Suitable respirator to prevent any dust or fumes being inhaled or consumed, which could cause occupational asthma or dermatitis.



Suitable ear protection to protect against hearing loss.

Operational Safety

1. **Always wear eye protection and chemical resistant gloves.** Other personal protective equipment, such as dust mask, and protective clothing should be worn when necessary.
2. **Before each use** inspect the Pro Packers carefully for any potential damage.
3. Only use the Pro Packers with the official accessories and spare parts offered by Picote Solutions. Accessories and spare parts should only be used in the manner intended and as described by Picote Solutions.

GENERAL OPERATION & SAFETY

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This section contains important safety information.
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Picote Pro Packers are only intended for use in pipes with circular profiles.

The Pro Packers are designed for the installation of Trenchless Point Repairs such as Localized, Spot, Point or Patch Repairs in damaged or separated pipes and pipe bends. A resin wet-out patch is placed on the Pro Packer, pushed into the pipe and aligned over the damaged section and then inflated using compressed air. The repair is then left inflated to harden based on the selected resin systems requirements.

3D Packers Pro Packers are designed for straight repairs in pipes and can repair multiple dimensional offsets. These packers can be pushed through several bends to the renovation location through the innovative and patented Front Wheel Drive system which allows them to travel longer distances and navigate through multiple 90 degree bends.

Bendy Pro Packers expand from the middle first and then spread expansion evenly allowing the repair to smoothly expand and press against pipe wall. This enables a near wrinkle-free end result.

Every renovation job is different and selecting the correct method requires experience & skill.

Installation of a point repair may not be appropriate in all cases as it may cause further damage to the line.

Choose correct size Packer for the job. Only use in pipes of the intended diameter.

Before each use always inspect the Packer and associated installation tools carefully for any potential wear or damage.

- **Immediately replace any damaged equipment.**
- **Never inflate the Pro Packers outside of the pipe.**
- **Do not stand near or place your face or body in/near the pipe opening while the Pro Packers or inflated inside. If the Pro Packer were to burst, flying debris and harmful noise volume levels could occur.**
- **Do not over pressurize the Pro Packers!**
- **Never leave the Pro Packers inflated inside the pipe while unattended.**
- **Only use the Pro Packers with accessories and spare parts offered by Picote Solutions.**
- **Accessories and spare parts should only be used in the manner intended and as described by Picote Solutions.**

ENVIRONMENT, TRANSPORT, STORAGE & DISPOSAL

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

ENVIRONMENT

Operational Ambient Temperature Range: 0°C to +50°C (32°F to 122°F), condensation free environment.

Storage Ambient Temperature Range: -20°C to +50°C (-4°F to 122°F), condensation free environment.

TRANSPORT & STORAGE

Pro Packers should be transported unpressurized in a protective tube to protect them from the elements and prevent any premature wear that could cause accidents and/or bladder malfunctions.

The Pro Packers should be stored indoors for protection from rain and sunlight in an area with a consistent ambient temperature.

If a Pro Packer has been stored for a long period of time it will need to be slowly filled/unfilled with compressed air a few times to recondition the rubber bladder before being used on the jobsite. This helps the elastic materials to stretch, enabling the Pro Packers perform properly.

If a Pro Packer has been stored in an environment colder than 0°C (**32°F**), the packer should be allowed to warm to room temperature for approximately 2 hours prior to use.

DISPOSAL

The two end caps, lock plate, connectors, bolts and wires can be recycled in metal waste collection points. The hoses can be disposed of as rubber waste.

Always follow local waste handling rules and regulations.

GENERAL PRODUCT INFORMATION

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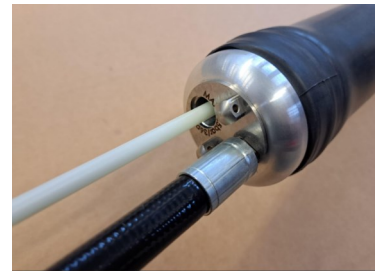
The Pro Packers in sizes DN70-100 (3-4") to DN150-250 (6-10") are fitted with a short connection hose which allows the attachment of the Picote Push Rods. The number of push rods required will vary by installation length and project requirements.

The use of the Picote Push Rods enables the operator to push / pull the Pro Packers through the pipe, rotate, inflate and deflate. (Picote Push Rods sold separately).



For Pro Packers in sizes DN70-100 (3-4") to DN150-250 (9-10") you can insert an additional glass fiber rod through the Pro Packer and all the way to the front End Cap.

This is referred to as the "front wheel drive" system and it helps navigate the Pro Packers through pipes and can be used in combination with Picote Push Rods when required for difficult jobs such as those with multiple bends and/or long distances.



OPERATING PRESSURES - 3D PACKERS

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Before use: ensure correct (maximum) operating pressure for the packer. Excessive pressure can cause the 3D Packer to fail or explode. The correct operating pressure is also marked on the packer End Cap.

Picote 3D Packers are only intended for use in circular profiles.

| Model | Maximum Operating Pressure | Color of End Caps |
|-------------------|----------------------------|-------------------|
| DN50-75 (2-3") | 4.2 Bar (60 PSI) | BLACK |
| DN70-100 (3-4") | 3.5 Bar (50 PSI) | GREEN |
| DN100-150 (4-6") | 2.5 Bar (36 PSI) | BLUE |
| DN150-250 (6-10") | 2.5 Bar (29 PSI) | RED |

| Model | Packer Lengths (Metres) | Packer Lengths (Feet) |
|-------------------|--------------------------------|---|
| DN50-75 (2-3") | 1, 1.5, 2, 2.5, & 3 | 3.3, 4.9, 6.6, 8.2, & 9.8 |
| DN70-100 (3-4") | 1, 1.5, 2, 3, 4, & 5 | 3.3, 4.9, 6.6, 9.8, 13.1, & 16.4 |
| DN100-150 (4-6") | 0.6, 1, 1.5, 2, 3, 3.5, 4, & 5 | 2, 3.3, 4.9, 6.6, 9.8, 11.5, 13.1, & 16.4 |
| DN150-250 (6-10") | 1, 1.5, 2, 3, 4, & 5 | 3.3, 4.9, 6.6, 9.8, 13.1, & 16.4 |



OPERATING PRESSURES - BENDY PACKERS

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Picote Bendy Packers are only intended for use in circular profiles.

| Model | Maximum Operating Pressure | Color of End Caps |
|------------------|----------------------------|-------------------|
| DN50 (2") | 4.2 Bar (60 PSI) | BLACK |
| DN70 (3") | 4.2 Bar (60 PSI) | WHITE |
| DN75-100 (3-4") | 3.5 Bar (50 PSI) | GREEN |
| DN100-150 (4-6") | 2.5 Bar (36 PSI) | BLUE |
| DN150-200 (6-8") | 2.0 Bar (29 PSI) | RED |

| Model | Packer Lengths (Metres) | Packer Lengths (Feet) |
|------------------|-------------------------|------------------------|
| DN50 (2") | 0.6 & 1 | 2 & 3.3 |
| DN70 (3") | 0.6 & 1 | 2 & 3.3 |
| DN75-100 (3-4") | 0.6, 1, 1.2, 1.5, & 2 | 2, 3.3, 3.9, 4.9 & 6.5 |
| DN100-150 (4-6") | 1, 1.2, 1.5, & 2 | 3.3, 3.9, 4.9, & 6.5 |
| DN150-200 (6-8") | 1.5 & 2 | 3.3 & 6.5 |



CE DECLARATION OF CONFORMITY

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

We Picote Solutions Oy Ltd as the responsible manufacturer, declare that the following Picote Solutions Oy Ltd point repairing tool:

Picote Pro Packers

Models: DN50 (2"), DN70 (3"), DN75-100 (3-4"), DN100-125 (4-5"), DN125-150 (5-6") & DN150-200 (6-8")
are of series production and

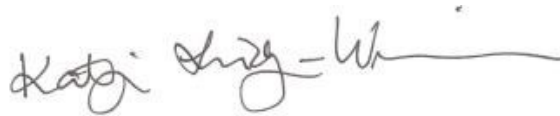
Conform to the following EU Directive:

2014/68/EU

The technical documentation is kept by our authorised representative in Europe who is:

Picote Solutions Oy Ltd, Pienteollisuustie 24
06450 Porvoo, Finland

4th October 2022



Katja Lindy-Wilkinson
C.E.O.

Picote Solutions Oy Ltd
Pienteollisuustie 24, 06450 Porvoo, Finland

OPERATING INSTRUCTIONS

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BEFORE OPERATION:

Use CCTV inspection camera to:

- check the severity and extent of the damage.
 - measure the diameter of the pipe and length of the repair required.
 - check possible changes in pipe diameter and any holes or damage over 25mm (1")
1. Confirm that a point repair is the correct repair method for the job.? If damage is too severe and/or spread over a wide area, other repair methods should be considered.
 2. Select the correct diameter and length of Pro Packer for the repair. If longer repairs are required you can overlap multiple repairs, but to take into account that this reduces the internal diameter of the pipe.
 3. If there are connections, transitions or large areas of pipe damage on the repairable area the Pro Packer must be properly supported using suitable material to prevent the bladder from over expanding. The Pro Packer can swell out and burst if no supporting calibration tube/liner etc. is used.
 4. Ensure that you have selected the correct size Pro Packer for the job and visually inspect it for signs of damage or wear. Make sure that there is a air regulator on the air supply line. Use the air regulator to adjust the pressure precisely and control the inflation speed.
 5. The pipe must be clean and free of any dirt, burrs, sharp edges etc. Depending, on the resin system being used, the inner wall on the pipe should be dry.
 6. When installing a repair in a plastic pipe it is worth abrading the inside of the pipe, using the Picote Smart Cutter[™], as this will help the repair to better physically bond to the pipe.
 7. Keep your working area clean and prevent unauthorized access to the work site.
 8. Ensure proper ventilation and lighting.
 9. Make a test run:
 - It is important to make a test run, prior to installing the repair to ensure you're able to set-up & navigate the Pro Packer to the desired spot within the cure time of the resin. Do not attempt to repair the pipe using this method if the installation time exceeds the curing time.
 - Consider whether or not you need to pull or push the Pro Packer into the correct position.
 - Take suitable measurements and then mark the pushrods and/or pulling in rope to use as an aid to help locate the Bendy Packer in the correct position within the pipe.

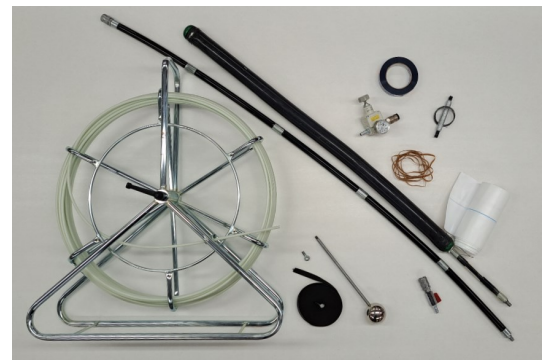
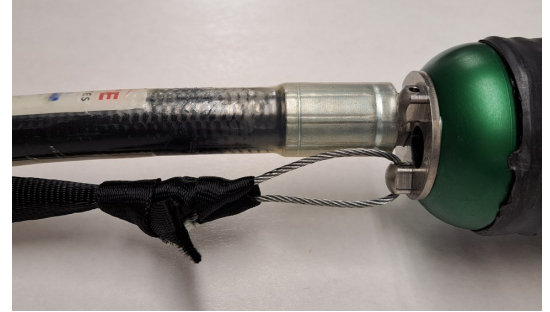
OPERATING INSTRUCTIONS

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

NAVIGATION ACCESSORIES

The following range of accessories will assist in pushing / pulling the Pro Packer through the pipe to locate the repair.

- A pull rope can be attached to the Filler Cap to assist pulling the Pro Packer out of the pipe.
- An M8 eye bolt and pull rope can be fitted to the Filler Cap to enable the operator to pull the Pro Packer into the position.
- A Navigation Guide can be screwed into the End Cap to help guide the Pro Packer around bends when pushing the Pro Packer into place.
- Picote offers a wide range of packer installation equipment and accessories. See pages 22-27 for part numbers and additional details.



OPERATING INSTRUCTIONS

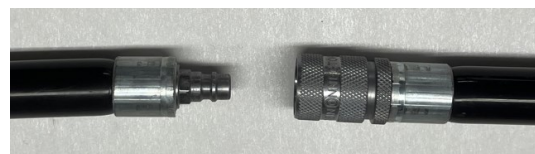
SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

CONNECTING PICOTE PUSH RODS

Using Picote Push Rods gives you possibility to push, pull, rotate, inflate and extend the install length of the repair. Each push rod is 1.5 metres (5 feet) in length

Align Push Rod Fittings Hex Sockets

- Left: Male-type connector
- Right: Female-type connector with turning lock ring



Join Push Rods

- To join the rods together you align the hex socket, push fittings together and then tighten the locking ring.
- Ensure fittings are completely pushed together and won't come loose if you try to pull them apart.



Loosen the Rocking Ring

- The fittings can be disconnected by pulling the collar from the female-type fitting towards lock ring.



Secure the Push Rods

- Picote Push Rods have to be secured with the locking ring which is located on the rear of the female-type fitting.
- Tighten locking ring until it's completely against the collar.



Taping

- Wrap protective tape around each fitting to prevent resin from getting inside.



OPERATING INSTRUCTIONS

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MEASURING DISTANCE USING CCTV CAMERA

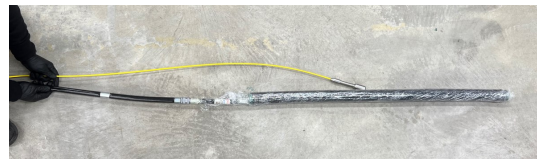
Carefully push camera through the pipe until the camera head is centered in the damaged section of pipe where the repair is to be installed.

Mark the distance on the camera cable using a piece of PVC tape. Make sure the tape is secure and cannot move.



TRANSFERRING MEASUREMENTS

- Place the camera head and Pro Packer (with Push Rods attached) side by side. Make sure that the camera is positioned in the middle of the packer and replicate/transfer the distance to the Push Rods.
- Using the tape marker on the camera cable as a guide, fasten another piece of PVC marking tape onto the Picote Push Rod string to indicate the correct distance to push the repair into the pipe.



PREPARING THE PRO PACKER

- Start with Pro Packer unpressurised.
- Outer surface of the Pro Packer has to be covered with a stretch film. This reduces the need for cleaning and helps increase the packer lifespan.
- Before covering the Pro Packer with the stretch film, attach pull ropes or accessories etc.
- Ensure that the threaded connectors, on either of the End Cap ends, are not covered.
- Apply the stretch film at 45 degrees to the packer.
- Ensure the **whole length of packer is covered** with film.



OPERATING INSTRUCTIONS

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

LOCATING THE REPAIR ON THE PRO PACKER

Due to the structure of the Pro Packers, both ends of the Packer must be liner/patch free as the rubber does not fully inflate around the end caps. If the liner/patch is located too close to the end caps, the Packer will not fully inflate and the liner/patch will not make full contact against the inner wall of repairable pipe.

Therefore it is recommended to use following measurements and Off Limits Zones, at minimum. This Off Limits Zone is measured from the end of the Packer bladder where it meets the end caps **(Refer to photograph and table below):**

| PRO PACKER SIZE | MEASURE FOR OFF-LIMIT-ZONE |
|--------------------------|----------------------------|
| DN50 (2") - Bendy Packer | 7.5cm (3") |
| DN75 (3") - Bendy Packer | 10cm (4") |
| DN75-100 (3"-4") | 15cm (6") |
| DN100-125 (4"-5") | |
| DN125-150 (5"-6") | |
| DN150-200 (6"-8") | 17.5cm (7") |



- Check the Off Limits Zone measurements from the table and mark the distance on the surface of the film using a suitable marker pen.
- Cut the required amount of liner/patch to ensure the size of the repair stays within the section between the Off Limit Zones.



OPERATING INSTRUCTIONS

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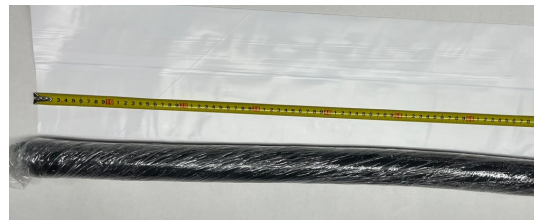
! WARNING

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If there are any connections, transitions, major pipe damage or brittle pipe on the repairable area the Pro Packer must be properly supported using a suitable restricting material such as a length of Calibration Tube! Depending on jobsite needs, the supporting tube can be installed on one end, both ends or for the whole length of the Pro Packer.

SUPPORTING THE PACKER - FULL LENGTH OF PRO PACKER

- Measure out the supporting Calibration Tube and cover the Pro Packer from the End Cap to the Adapter Hose located on the Filler Cap.
- Fold Calibration Tube neatly around the End Cap.
- Secure the Calibration Tube in position by taping it to the End Caps.
- Do not cover the threaded connectors on the End Caps.
- Finally, use (doubled over if needed) rubber bands, approximately every 25cm (10"), to secure the Calibration Tube onto the bladder.



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If there are any connections, transitions, major pipe damage or brittle pipe on the repairable area the Pro Packer must be properly supported using a suitable restricting material such as a length of Calibration Tube! Depending on jobsite needs, the supporting tube can be installed on one end, both ends or for the whole length of the Pro Packer.

CALIBRATION TUBE: ENDS OF THE PRO PACKER

- When using support only on the ends, the Calibration Tube should be measured in such a way that it will reach at **minimum of 10 cm (4")** under the patch repair area.
- Same rule applies when patches are shorter than full length.
- Secure the Calibration Tube by taping it to the metal End Cap and use a doubled over rubber band at the far end.
- Copy the Off Limits Zone measurement and mark on the surface of the Calibration Tube using a marker pen.



TYPICAL REPAIR INSTALLATION EXAMPLE

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Personal Protective Equipment (PPE)

Use Personal Protective Equipment including:



Suitable eye protection to protect against injuries and chemicals from irritating eyes.



Suitable chemical resistant gloves. Do not use gloves which can become entangled.



Suitable respirator to prevent any dust or fumes being inhaled or consumed, which could cause occupational asthma or dermatitis.



Suitable ear protection to protect against hearing loss.

PATCH WET OUT

The following pages contain an example of one type of resin and liner.

- Always check your country regulations, requirements and application restrictions regarding the use of liner and resin for this application. Follow the instructions provided by the liner and resin manufacturers.
- The resin and liner used in this manual are presented for educational purposes only to make the photos visually easily to understand.
- Wear protective equipment always when handling resin! Chemicals and fumes may cause eye, skin and lung irritation. Ensure good ventilation at area where resin is mixed and handled.
- Always do test run before installing the wet out patch so that you are certain that you can set-up and navigate the Packer to desired spot within the resin system curing time.
- Curing time depends on the resin that is used and prevailing temperature. Always read the resins and patches specification to ensure compatibility and proper operating. Do not use resin that has not been properly stored or has expired/is past its shelf life.
- Ensure that you have all the necessary equipment available and everything is set-up before wet out for ensuring good end results.

TYPICAL REPAIR INSTALLATION EXAMPLE

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Depending of the type of the patch/liner used, patch can be wet out on or off the Packer.

Usually patch is easier to wet out thoroughly off the Packer.

- Ensure that your working area has been covered with protective film/cardboard etc.



- After resin is mixed according to the instructions, pour a portion on the surface of the patch material.



- Apply resin in portions and work it thoroughly into the material.



- Ensure that patch is properly wet out and the resin has absorbed evenly.



- Pull patch carefully on top of the Packer.



TYPICAL REPAIR INSTALLATION EXAMPLE

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

- Position patch on center of the Packer.
- Use the lines that you marked earlier, ensure the patch is centered and doesn't extend into the Off Limits Zones.
- Fold patch neatly.
- There are few ways to secure the patch on the Packer.
- In this example patch is secured with rubber bands.
- Start securing it from the edge, starting on the End Cap side using (doubled over if needed) rubber bands.
- Apply 3-4 rubber bands, setting them approximately 1.25 cm (1/2") apart.
- After end caps side has been secured, start applying rubber bands every 10-15 cm (4-6").
- It is recommended to secure also the other end with 3-4 rubber bands, approximately 1.25 cm (1/2") apart.



TYPICAL REPAIR INSTALLATION EXAMPLE

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

- Depending of job site: install navigation Guide ball or pull rope to the connector on the end cap if needed.
- Attach needed amount of Push Rods.



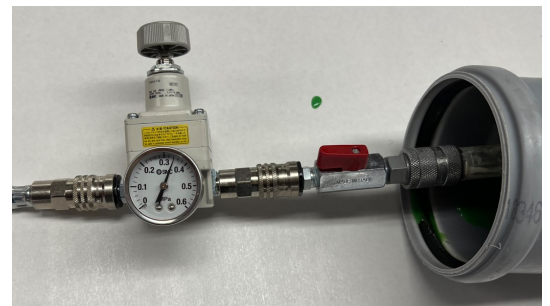
- Insert prepared point repair packer into pipe.



- Navigate the Packer until you meet the tape mark on your Push Rods.
- Packer should be in the proper renovation location if you have accurately marked the correct distance on Push Rods.
- Use inspection camera for to help verify that the patch is properly positioned.



- Inflate the Packer using the Pressure Regulator until it has reached its operating pressure.
- Prevent unauthorised access to the work site to ensure tools stay untouched during the curing process.
- Keep the Packer pressurized until patch is cured completely.
- Resins curing time depends of type of resin used and temperature. Curing can take longer in a cold environment.



REMOVING THE PACKER (POST INSTALLATION)

- Once the patch has fully cured, release the pressure from the Packer.
- Once the Packer has fully deflated, pull it from the pipe using the Picote Push Rods and/or pulling rope.
- Use a CCTV camera to confirm that Patch has fully cured and is wrinkle free.
- If there is no need to install another Patch: remove supporting hoses, films, etc. from the Packer.
- Clean the installation equipment and work environment.
- Inspect the Packer for damage or wear.

MAINTENANCE, SERVICE & REPAIR

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Personal Protective Equipment (PPE)

Use Personal Protective Equipment including:



Suitable eye protection to protect against injuries and chemicals from irritating eyes.



Suitable chemical resistant gloves. Do not use gloves which can become entangled.



Suitable ear protection to protect against hearing loss.

MAINTENANCE

- Before performing any maintenance always check that air supply line is disconnected.
- Clean the surface of the Packer before and after the tool has been used. The primary method for cleaning the Pro Packer should be with a damp cloth and soap to clean the surfaces. Protecting the Pro Packer with stretch film reduces the need to use cleaning solvents.
- If the Pro Packer has been stored for an extended or unknown amount of time, or if you are now aware of its condition, the Packer should be visually inspected and tested.
- The test should be done by placing the deflated Packer inside a correctly sized pipe, carefully pressurizing the Packer inside and simultaneously monitoring for leaks.
- Do not use the Packer if leaks are found. Contact Picote or your Picote Reseller for repair or replacement.

SERVICE & REPAIR

- The Pro Packers must be repaired or serviced at Picote Service Centre by trained personnel.
- Incorrectly assembled or serviced Packers are unsafe to use and can fail.
- To find your nearest authorized Service Centre contact your Local Reseller or Picote Solutions.

EQUIPMENT: 3D PRO PACKERS - US

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

3D Packers

| Product # | Pipe Size & Color | Length | Product # | Pipe Size & Color | Length |
|------------------------------|-------------------|--------|------------|-------------------|--------|
| 1511075100_5US ² | 2-3" (Black) | 39" | 1511150060 | 4-6" (Blue) | 24" |
| 1511075100_10US ³ | 2-3" (Black) | 39" | 1511150100 | 4-6" (Blue) | 39" |
| 1511075150_5US ² | 2-3" (Black) | 59" | 1511150150 | 4-6" (Blue) | 59" |
| 1511075150_10US ³ | 2-3" (Black) | 59" | 1511150200 | 4-6" (Blue) | 79" |
| 1511075200_5US ² | 2-3" (Black) | 79" | 1511150300 | 4-6" (Blue) | 118" |
| 1511075200_10US ³ | 2-3" (Black) | 79" | 1511150350 | 4-6" (Blue) | 138" |
| 1511075250_5US ² | 2-3" (Black) | 98" | 1511150400 | 4-6" (Blue) | 157" |
| 1511075250_10US ³ | 2-3" (Black) | 98" | 1511150500 | 4-6" (Blue) | 197" |
| 1511075300_5US ² | 2-3" (Black) | 118" | 1511250100 | 6-10" (Red) | 39" |
| 1511075300_10US ³ | 2-3" (Black) | 118" | 1511250150 | 6-10" (Red) | 59" |
| 1511100100 | 3-4" (Green) | 39" | 1511250200 | 6-10" (Red) | 79" |
| 1511100150 | 3-4" (Green) | 59" | 1511250300 | 6-10" (Red) | 118" |
| 1511100200 | 3-4" (Green) | 79" | 1511250400 | 6-10" (Red) | 157" |
| 1511100300 | 3-4" (Green) | 118" | 1511250500 | 6-10" (Red) | 197" |
| 1511100400 | 3-4" (Green) | 157" | | | |
| 1511100500 | 3-4" (Green) | 197" | | | |

1 – includes 9 ft integrated push rod, 2 – includes 16 ft integrated push rod, 3 – includes 32 ft integrated push rod

EQUIPMENT: BENDY PRO PACKERS - US

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Bendy Packers

| Product # | Pipe Size & Color | Length |
|------------------------------|-------------------|--------|
| 1510050060_3US ¹ | 2" (Black) | 24" |
| 1510050060_5US ² | 2" (Black) | 24" |
| 1510050100_3US ¹ | 2" (Black) | 39" |
| 1510050100_5US ² | 2" (Black) | 39" |
| 1510070060_5US ² | 3" (White) | 24" |
| 1510070060_10US ³ | 3" (White) | 24" |
| 1510070100_5US ² | 3" (White) | 39" |
| 1510070100_10US ³ | 3" (White) | 39" |
| 1510100060 | 3-4" (Green) | 24" |
| 1510100100 | 3-4" (Green) | 39" |
| 1510100120 | 3-4" (Green) | 47" |
| 1510100150 | 3-4" (Green) | 59" |
| 1510100200 | 3-4" (Green) | 79" |
| 1510125100 | 4-6" (Blue) | 39" |
| 1510125120 | 4-6" (Blue) | 47" |
| 1510125150 | 4-6" (Blue) | 59" |
| 1510125200 | 4-6" (Blue) | 79" |
| 1510200150 | 6-8" (Red) | 59" |
| 1510200200 | 6-8" (Red) | 79" |

1 – includes 9 ft integrated push rod, 2 – includes 16 ft integrated push rod, 3 – includes 32 ft integrated push rod

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Packer Navigation System



Assists the packer through various pipe bends and turning into secondary lines.

| Product # | Pipe Size | Diameter |
|------------|-----------|----------|
| 1510000001 | 2-3" | 30mm |
| 1510000002 | 4-6" | 60mm |
| 1510000003 | 8"+ | 80mm |

Front Wheel Drive Glass Fiber Rod

1510000004



131ft of 1/3" glass fiber rod in a vertical frame. Frame is galvanized.



Push Rod 0.86" for 3-6" Pipes

1410000023

Designed to be both strong enough to push and rotate, while also flexible enough to go through multiple bends when needed. Can also be used with steam curing. Available in 5 ft lengths.



Push Rod 0.94" for 4-9" Pipes

1410000032

A more rigid rod for longer runs and larger pipes. Designed to be both strong enough to push and rotate, while also flexible enough to go through multiple bends when needed. Can also be used with steam curing. Available in 5 ft lengths.

Installation Tool 2.0 Air Adapter

1410000025US



Designed to replace the Turning Handle during the wet-out and curing process. This allows the release of the Turning Handle, in order to be used while the previous installation is curing.

Air Pressure Regulator 0-58 PSI

2340000002US



0-58 PSI model for use with Picote Pro Packers.

PRO PACKER COUPLING GUIDE

Use standard Picote Bendy & 3D Packers with Picote's new high quality Push Rods. Both Pro Packer series also available with customized couplings to fit your existing push rods. To order standard Picote Packers with Picote Standard Male Coupling, please use the normal Packer product number (PN). For other coupling types please see the table below and add the product number extension to the standard Picote product number of the Packer size required.

| Packer Coupling Required | Product Number Extension |
|---|--------------------------|
| Picote Standard Male | No extension required |
| Steinco 161 Female | _SC161 |
| Standard EU Male | _EU |
| Steinco 126 Female without Hexagon (fits to Standard EU Male fitting) | _EUF |
| Steinco 126 Female with Hexagon | _SC126 |

EQUIPMENT: 3D PRO PACKERS - EU/ROW

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

3D Packers

| Product # | Pipe Size & Color | Length | Product # | Pipe Size & Color | Length |
|----------------------------|-------------------|--------|------------|-------------------|--------|
| 1511075100_5 ² | DN50-75 (Black) | 100cm | 1511150060 | DN100-150 (Blue) | 60cm |
| 1511075100_10 ³ | DN50-75 (Black) | 100cm | 1511150100 | DN100-150 (Blue) | 100cm |
| 1511075150_5 ² | DN50-75 (Black) | 150cm | 1511150150 | DN100-150 (Blue) | 150cm |
| 1511075150_10 ³ | DN50-75 (Black) | 150cm | 1511150200 | DN100-150 (Blue) | 200cm |
| 1511075200_5 ² | DN50-75 (Black) | 200cm | 1511150300 | DN100-150 (Blue) | 300cm |
| 1511075200_10 ³ | DN50-75 (Black) | 200cm | 1511150350 | DN100-150 (Blue) | 350cm |
| 1511075250_5 ² | DN50-75 (Black) | 250cm | 1511150400 | DN100-150 (Blue) | 400cm |
| 1511075250_10 ³ | DN50-75 (Black) | 250cm | 1511150500 | DN100-150 (Blue) | 500cm |
| 1511075300_5 ² | DN50-75 (Black) | 300cm | 1511250100 | DN150-250 (Red) | 100cm |
| 1511075300_10 ³ | DN50-75 (Black) | 300cm | 1511250150 | DN150-250 (Red) | 150cm |
| 1511100100 | DN70-100 (Green) | 100cm | 1511250200 | DN150-250 (Red) | 200cm |
| 1511100150 | DN70-100 (Green) | 150cm | 1511250300 | DN150-250 (Red) | 300cm |
| 1511100200 | DN70-100 (Green) | 200cm | 1511250400 | DN150-250 (Red) | 400cm |
| 1511100300 | DN70-100 (Green) | 300cm | 1511250500 | DN150-250 (Red) | 500cm |
| 1511100400 | DN70-100 (Green) | 400cm | | | |
| 1511100500 | DN70-100 (Green) | 500cm | | | |

1 – includes 9 ft integrated push rod, 2 – includes 16 ft integrated push rod, 3 – includes 32 ft integrated push rod

EQUIPMENT: BENDY PRO PACKERS - EU/ROW

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Bendy Packers

| Product # | Pipe Size & Color | Length |
|----------------------------|-------------------|--------|
| 1510050060_3 ¹ | DN50 (Black) | 60cm |
| 1510050060_5 ² | DN50 (Black) | 60cm |
| 1510050100_3 ¹ | DN50 (Black) | 100cm |
| 1510050100_5 ² | DN50 (Black) | 100cm |
| 1510070060_5 ² | DN70 (White) | 60cm |
| 1510070060_10 ³ | DN70 (White) | 60cm |
| 1510070100_5 ² | DN70 (White) | 100cm |
| 1510070100_10 ³ | DN70 (White) | 100cm |
| 1510100060 | DN75-100 (Green) | 60cm |
| 1510100100 | DN75-100 (Green) | 100cm |
| 1510100120 | DN75-100 (Green) | 120cm |
| 1510100150 | DN75-100 (Green) | 150cm |
| 1510100200 | DN75-100 (Green) | 200cm |
| 1510125100 | DN100-150 (Blue) | 100cm |
| 1510125120 | DN100-150 (Blue) | 120cm |
| 1510125150 | DN100-150 (Blue) | 150cm |
| 1510125200 | DN100-150 (Blue) | 200cm |
| 1510200150 | DN150-200 (Red) | 150cm |
| 1510200200 | DN150-200 (Red) | 200cm |

1 – includes 9 ft integrated push rod, 2 – includes 16 ft integrated push rod, 3 – includes 32 ft integrated push rod

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Packer Navigation System



Assists the packer through various pipe bends and turning into secondary lines.

| Product # | Pipe Size | Diameter |
|------------|-----------|----------|
| 1510000001 | DN50-70 | 30mm |
| 1510000002 | DN100-150 | 60mm |
| 1510000003 | DN200+ | 80mm |

Front Wheel Drive Glass Fibre Rod

1510000004



40m/131ft of 7.5mm/1/3" glass fibre rod in a vertical frame. Frame is galvanized.



Installation Tool 2.0 Air Adapter

1410000025



Designed to replace the Turning Handle during the wet-out and curing process. This allows the release of the Turning Handle, in order to be used while the previous installation is curing.

Push Rod 22mm for DN70-150 Pipes

1410000023

Designed to be both strong enough to push and rotate, while also flexible enough to go through multiple bends when needed. Can also be used with steam curing. Available in 1.5m lengths.



Air Pressure Regulator 0-4bar

2340000002



0-4bar model for use with Picote Pro Packers.

Push Rod 24mm for DN100-225 Pipes

1410000032

A more rigid rod for longer runs and larger pipes. Designed to be both strong enough to push and rotate, while also flexible enough to go through multiple bends when needed. Can also be used with steam curing. Available in 1.5m lengths.

PRO PACKER COUPLING GUIDE

Use standard Picote Bendy & 3D Packers with Picote's new high quality Push Rods. Both Pro Packer series also available with customized couplings to fit your existing push rods. To order standard Picote Packers with Picote Standard Male Coupling, please use the normal Packer product number (PN). For other coupling types please see the table below and add the product number extension to the standard Picote product number of the Packer size required.

| Packer Coupling Required | Product Number Extension |
|---|--------------------------|
| Picote Standard Male | No extension required |
| Steinco 161 Female | _SC161 |
| Standard EU Male | _EU |
| Steinco 126 Female without Hexagon (fits to Standard EU Male fitting) | _EUF |
| Steinco 126 Female with Hexagon | _SC126 |

WARRANTY POLICY & PROCEDURE

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Limited Warranty:

Picote warrants to the original End User that the Product purchased by such End User will operate in accordance with, and substantially conform to their published specifications when shipped or otherwise delivered to the End User and for a period of six (6) months, however, that Picote does not warrant any claim or damage under this Warranty if such claim or damage results from:

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www.picotegroup.com



International Offices

Finland. United Kingdom. USA.

Technical Support

support@picotesolutions.com

Production & R&D

Pienteollisuustie 24
06450 Porvoo, Finland
support@picotesolutions.com

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