

PICOTE MINI COATING PUMP Picote Brush Coating™ System

OPERATION, SAFETY & INSTALLATION MANUAL

This operations manual is for the Picote Brush Coating ™ System using the Mini Coating Pump and covers the equipment as well as the application process including the DC1000E 100% Solids Epoxy and Fast Cure Resins.











These instructions are for your personal safety. Always ensure that you have read and understood these instructions before using the Picote Brush Coating ™ System.

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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



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

Safety Symbols

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



Danger risk of serious injury or death by electrocution, follow instructions.



Danger risk of serious injury, follow instructions.



Danger risk of serious injury from rotating parts, follow instructions.



Danger risk of serious injury from hot parts, follow instructions.



Danger do not touch. Risk of injury, follow instructions.

Personal Protective Equipment (PPE)

Always use Personal Protective Equipment including suitable protective clothing, footwear, plus:



Suitable eye protection to protect against sewage, chemicals or dust from irritating eyes.



Suitable ear protection to protect against hearing loss.



Suitable heat and cut-resistant gloves to help prevent any hand injuries. Any open injuries or skin irritations should always be covered to avoid contact with sewage, chemicals or dust.



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

GENERAL MACHINE SAFETY INFORMATION

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

Always read all safety warnings and instructions. Failure to follow warnings and instructions may result in electric shock, fire and/or serious injury. **For resin please download the MSDS Sheets from the Picote Institute**.







1. Always wear eye and ear protection as well as heat and cutresistant gloves.

Other personal protective equipment, such as dust mask, gloves and overalls should be worn when necessary. Dust produced when working

can be dangerous to your health, inflammable or explosive. **Always wear appropriate personal protective equipment.**

- 2. Make sure the pipe has been opened and ventilated to prevent any gases accumulating.
- 3. Always ensure that the machine is fully turned off and unplugged before inspection, maintenance, or installing any accessories to the machine. Always follow the instructions in the manufacturer's manual.
- 4. **Before each use** inspect the machine carefully for any potential break or damage. **Change damaged parts** immediately. It is especially important to check the end of the shaft for any signs of wear and tear, and repeat the process for the outer casing.
- 5. When in use, it is very important that the machine is stable and on an even surface at all times.
- 6. Never leave the machine running unattended. Always hold the cable when operating the machine.



- 8. If the working environment is extremely hot and humid, or badly polluted by conductive dust, use a GFCI-enabled power outlet to ensure the safety of the operator.
- 9. Make sure that the job location is well ventilated before grinding or drilling. Always use a vacuum extraction system in the pipe to remove dust. The operator must wear a dust mask when using dry grinding to clean pipes.
- 10. Ensure that the ventilation openings are kept clear when working in dusty conditions. If it should become necessary to clear dust, first unplug the machine. Avoid damaging internal parts.



- 11. Do not use the machine on any pipes containing asbestos fibres.
 - 12. Never touch rotating parts. Do not stand on the machine.
- 13. Only use this machine with the accessories and spare parts offered by the Picote Solutions. Accessories and spare parts should only be used in the manner intended and as described by Picote Solutions.
- 14. Only operate the foot pedal or OPC as instructed. Never place anything on it in place of a foot.
- 15. Do not extend the shaft by more than one extension. Use only Picote Solutions shaft extension and connector.

ENVIRONMENT, TRANSPORT, STORAGE & DISPOSAL

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE



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

ENVIRONMENTAL

-10 °C to 50 °C (14 °F to 122 °F) frost and condensation free **Operational Ambient Temperature Range:**

-20 $^{\circ}$ C to 60 $^{\circ}$ C (-4 $^{\circ}$ F to 140 $^{\circ}$ F) frost and condensation free **Storage Ambient Temperature Range:**

Maximum Altitude: 2000m or 6500 ft. Derate above 1000m or 3280ft: 1% / 100m or 328ft

Maximum Humidity: 95% non-condensing

TRANSPORT

Always remove the Smart Mixer from the Mini Coating Pump and then remove the Mini Coating Pump from the Miller for transport. Mini Coating Pump should be transported in a car or other vehicle and laid down and secured with ratchet straps to prevent any sudden movements or accidents caused by hard braking or accident.

Never transport the Miller with tool attached to the shaft. On +C models, always retract the camera back to it's housing during transport. If using a pick-up or trailer to transport Picote Millers or Mini Coating Pump always use a suitable cover on the unit to protect it from the elements

STORAGE

It is recommended that the Mini Coating Pump and Picote Millers be stored indoors to protect them from rain and sunlight, and also in a constant ambient temperature. The best way to store the machines is using the same box that the machine has been shipped in.

If the Mini Coating Pump or Picote Miller has been stored in an environment colder than +10 °C or 50 °F, the machine should be stood at room temperature for 24 hours before use.

If the Mini Coating Pump or Picote Miller has been stored for long periods of time (over 2-3 months), it should be checked and tested according to the maintenance programme before use.

DISPOSAL

Mini Coating Pump pump, electric wires and power supply can be disposed in Europe at Waste Electrical and Electronic Equipment (WEEE) collection points.

The Mini Coating Pump frame can be recycled in metal waste collection points. Pump Housing, Delivery and Supply Hoses can be disposed of as plastic waste.

Dispose of unused Resin by mixing the product in a well ventilated location using a non-flammable container. The mixed product will generate heat while hardening. Follow the MSDS which can be found on the Picote Institute.

Always follow local waste handling rules and regulations.



Picote 100% Solids Epoxy Resin and Fast Cure Resin:

Refer to MSDS for Environment, Transport, Disposal and Storage, available from Picote Institute

CE DECLARATION OF CONFORMITY

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We Picote Solutions Oy Ltd as the responsible manufacturer, declare that the following Picote Solutions Oy Ltd machine:

Mini Coating Pump is of series production and

Conforms to the following EU Directive:

2006/42/EY

And is manufactured in accordance with the following standards or standardised documents:

EN 809 + A1/AC, EN 60204-1:2018

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

Picote Solutions Oy Ltd, Pienteollisuustie 24 06450 Porvoo, Finland

1st January 2018

Katja Lindy-Wilkinson

C.E.O.

Picote Solutions Oy Ltd
Pienteollisuustie 24, 06450 Porvoo, Finland

Approvals & Certifications



Picote Brush Coating SystemTM has been granted with WRc Approved Certificate for non-potable and waste water application for pipe diameters DN32 $(1^{1}/_{4}^{"})$ to DN300 (12").

Certificate Number: PT/431/0918



ASTM approval of Picote DC1000E 100% Solids Epoxy when used to create a monolythic semi-structural repair of decayed and damaged pipelines. Designed exclusively for the Picote Brush Coating TM System.

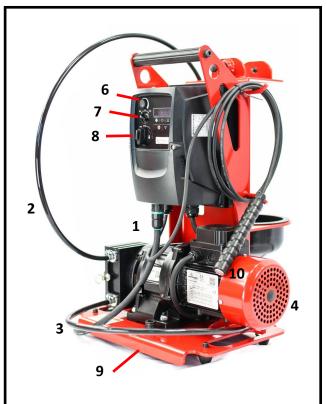


NSF 61.5 certifies that the white DC1000E Picote 100% Solids Epoxy can be utilised for potable water lines over DN100 / 4" diameter.

Meets the Requirements of NSF/ANSI 61-5

PICOTE MINI COATING PUMP

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE





General Description

- 1. Power Cord
- 2. Resin Supply Hose
- 3. Delivery Hose
- 4. Motor
- 5. Resin Cup Location
- 6. Speed Control
- 7. Reverse/Forward
- 8. On/Off Button
- 9. Release, locks pump to Miller
- 10. Locking Operator Control Button (LOC)
- 11. Smart Mixer Platform

PICOTE MINI COATING PUMP cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Intended Use

This machine is intended for the following uses:

- **1.** Coating pipes from DN32-DN150 / $1.^{1}/_{4}^{"}$ 6"
- 2. Cleaning sewers and drains with a degreaser.

Always follow the manufacturer's instructions when installing and using the machine with accessories.

SIZE	HOSE	RANGE	ROTATING SPEED	OUTPU	T (kw) POWER SOU	RCE WEIGHT
41x42x54.4 cr	m 8/10mm	Max 22m	Depends on pipe diameter	0.18	110v or 230v	16kg
16.2.2x16.5x2	21.5"	Max 75ft				35.5 lb



Voltage

Ensure that the supply voltage is correct. The voltage of the power source must match the value given on the nameplate of the machine. Available in 230v and 110v.



The machine should only be connected to a power supply of the same voltage as indicated on the nameplate, and can only be operated on single-phase AC supply.



This machine has a hand-held Locking Operator Control button or "LOC". When the control button is pushed the pump is engaged and will operate until depressed.

PICOTE MILLERS | 8mm (1/3") Shaft

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Note: Mini Coating Pump can also be used with the Mini Cleaner, Battery Mini Cleaner, Mini Cleaner +C, Battery Mini Cleaner +C, Mini Miller +C, Battery Mini Miller and Battery Mini Miller +C.





General Description

- 1. Shaft Reel
- 2. Frame
- 3. Flexible Shaft
- 4. Motor & Bevel Gear (not shown)
- 5. Emergency Stop Bottom (red)
- 6. Power Switch
- 7. Speed Control
- 8. Foot Pedal—Operator Presence Control
- Hand Guard & Strain Relief/inside Hand Guard (not seen in photo)

Intended Use

This machine is intended for the following uses:

- Coating pipes from DN32-DN150 / 1.¹/₄"- 6"
- Cleaning and unblocking pipes, drains and sewers by grinding.
- Descaling pipes.
- Reinstating branches in sewers and drains by drilling and grinding.
- Cutting excess length of cured linings.

Always follow the manufacture's instructions when installing and using the machine with accessories.

PICOTE MILLERS | 8mm (1/3") Shaft cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Note: Mini Coating Pump can also be used with the Battery Mini Cleaner, Mini Cleaner +C, Battery Mini Cleaner +C, Mini Miller +C, Battery Mini Miller and Battery Mini Miller +C.



manual for more information

MINI MILLER 8/16							
SIZE	SHAFT	RANGE	ROTATING SPEED	OUTPUT (kW)	POWER SOURCE	WEIGHT	IP CLASS
752x519x389	8mm	16m	500-2900rpm	110V:1.1kW	110v or 230v	27kg	
29.6x20x15.3"	1/3"	50ft		230V:1.2kW		59.5lb	
MINI CLEANER 8/16							
SIZE	SHAFT	RANGE	ROTATING SPEED	OUTPUT (kW)	POWER SOURCE	WEIGHT	IP CLASS
1122x712x466	8mm	16m	500-1500rpm	110V:1.5kW	110v or 230v	26.5kg	
44x28x18"	1/3"	50ft		230V:1.5kW		152lb	

When is use, always lay the machine down horizontally on the floor as shown above. When not in use, some non-hazardous Picote Flexible Shaft Lubricant might leak from the hand guard.



VOLTAGE

Ensure that the supply voltage is correct. The voltage of the power source must match the value given on the nameplate of the machine.



FOOT PEDAL

The machine has an Operator Presence Control or 'OPC'. When the control is noheld down, the machine stops.



POWER SUPPLY

The machine should be connected only to a power supply of the same voltage as indicated on the nameplate, and can only be operated on single-phase AC supply.



EMERGENCY STOP

There is an Emergency Stop Button on the machine. The power supply to the motor is cut off when the Emergency Stop Button is pushed.

Always make sure the Emergency stop Button is pressed and completely unplug the machine when the machine accessories (e.g. Cutter or Grinding



Mini Coating Pumps have been pre-set by the manufacturer

Picote Solutions accepts no liability for failures or accidents caused by tampering with or changing of the manufacturer settings. The control box has been pre-programmed and requires no additional adjustments.

Opening the box or changing the factory settings may cause damage and will void the warranty!

REQUIRED PARTS

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First make sure you have all of the required parts!

PRODUCT NAME	PRODUCT NUMBER	DESCRIPTION	INFORMATION
1. MINI MILLER COATING PUMP	2220100001 2220100002	Mini Miller Coating Pump EU 230v Mini Miller Coating Pump UK, US 110v	Hoses, brushes & other parts sold separately
2. MINI MILLER	3540000817 354000817UK 3540000817US	Mini Miller 230v, 16m range Mini Miller 110v, 16m range Mini Miller 110v, 50ft range	8mm / ⅓" Shaft
3. HOSES & SHAFT	2220100004	Resin Supply Hose	Supplied in 25m/82ft lengths. Colour-Red
	2220100011	Pre cut Resin Supply Hose	Supplied in pre cut lengths. Colour-Red
	2220100003	Resin Delivery Hose	Supplied in 25m/82ft lengths. Colour-Black
	1312030085017	Mini Miller spare shaft, 8mm with thick outer casing	17.5 metres /57.4ft
00 00	9123050001	Shaft connector	Necessary if attaching a shaft extension
	2220100007	Hose Connector with two hose clamps (11 & 13mm)	
	93212321085	Sleeve 2 Plastic for 8mm thick casing	

REQUIRED PARTS cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

PRODUCT NAME	PRODUCT #	DESCRIPTION	INFORMATION
4. COATING BRUSHES & BRUSH STOPPER	2120000050	50mm 2" for DN32 1.25" pipe	8mm/⅓" shaft
	2120000075	75mm 3" for DN50 2" pipe	8mm/ ⅓" shaft
	2120000100	100mm 4" for DN75 3" pipe	8mm/⅓" shaft
	2120000125	125mm 5" for DN100 4" pipe	8mm/⅓" shaft
	2120000175	175mm 6.1/8" for DN150 6" pipe	8mm/⅓" shaft
	2120000220	220mm 8.5%" for DN200 8" pipe	8mm/⅓" shaft
	900000338	Brush Stopper 8mm	Extra stopper to secure brush
5. PICOTE 100% SOLIDS EPOXY	2110001001	Picote Dual Color Resin Kit, 5.58kg / 12lbs	6 Cartridge Kit (3 White, 3 Dark Grey) with 8 Tips & 3 Nuts.
PICOTE DC1000E DD0AL COAT	2110001006	Picote Grey Resin Kit, 5.58kg/12lbs	6 Grey Cartridges with 8 Tips & 3 Nuts
100% SOLIDS EPOXY SOLIDS POXY FOR PROFESSIONAL USE (IN) FOR PROFESSION	2110001005	Picote White Resin Kit, 5.58kg/12lbs	6 White Cartridges with 8 Tips & 3 Nuts
PICOTE BUSTO SDE23 ILUVERY HOSE LUIS OF HOSTEROOK, UIS OF	2110001003	Delivery Hose Lube 1 QT / 946ml	Special Lubricant to reduce friction
	2220200004	Coating Resin Cup, 10pcs	
6. PICOTE SMART MIXER	2130001001	Picote Smart Mixer	Battery powered epoxy mixer. Please see the Smart Mixer operating manual for more information.
	2130000002	Nut (pack of 10)	
	2130000001	Tip (pack of 10)	
7. DRAIN CAMERA		Use your own mini CCTV cam- era system	larger cameras will cause is- sues with weight and naviga- tion through bends
8. OTHER ITEMS	Resin Cups	Duct Tape	Be sure you have plenty of rags for the clean-up process.
	Acetone	Rags & Bucket with Lid	
	Nitrile Gloves	Razor Knife	
	Spare Hose	7mm Nut Driver	
	Clamps	for Hose Clamps	
	Scissors	3, 5, 6mm Hex Key for Scews	

PREPARING THE ORIGINAL PIPE FOR CLEANING

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Substrate preparation is one of the most crucial steps in the coating process as specialized coating resin is designed to bond to the host pipe. Be sure to remove all scale, grease, dust, standing water and any other debris completely from the pipe before coating. If coating plastic pipe be sure to thoroughly abrade with Picote Smart Cutter m grinding panels.













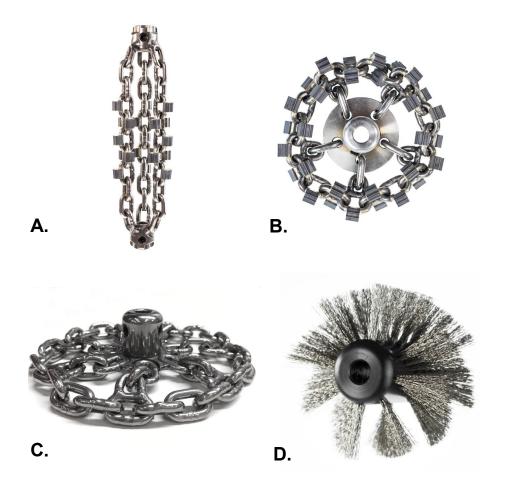




STEP 1



Clean the host pipe very well. Use Original (a) or Cyclone (b) grinding chains with carbides for cast iron pipes and flush with water. For PVC pipes, use the special PVC chains (c). Use a wire brush (d) to remove final dust and other remaining particles.



OPTIONAL STEP: For pipe with excessive build-up of fats, oils or grease (FOG) a degreaser may be necessary. This can be pumped into the pipe during cleaning if necessary using the coating pump system and Eco-friendly degreasing agent.

PREPARING THE ORIGINAL PIPE FOR CLEANING cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 2

When necessary, run the Smart Cutter™ with side grinding panels through the pipe to create a rough surface and to allow for the resin to have the best possible bond to the pipe wall.



STEP 3



The pipe MUST be dry before continuing with the coating setup. Use the Picote Heater to expedite the process.



Once the original pipe is completely clean, move on to the Coating System Assembly



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Required Tools & Parts

Mini Coating Pump

Nut Driver 7mm

Picote Hose Lube

Resin Cup

Delivery Hose (black)

Resin Supply Hose (red)

Hose Clamps 11mm & 13mm

Scissors

Tubing Cutters

Hex Keys

Silicone Grease

Hose Connectors

Towels



BEFORE BEGINNING ASSEMBLY





Risk of serious injury from rotating parts!

- Have plenty of disposable nitrile gloves and towels available. Wearing a double layer of disposable gloves is useful when applying lubricant.
- Be sure that all machines have the required power supply.
- Test machines and power source to ensure adequate and safe operation. Read Machine Operating Manual.

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Cut the Resin Pump Supply Hose in between 248mm (9.%") or use pre-cut lengths. Ensure the ends are squared.



248mm / 9.34"



STEP 2

Prepare the Hose Connectors and Hose Clamps to be inserted into Resin Supply Hose. There are 2 small hose clamps for black hose (10mm) and 2 larger hose clamps for red hose (13mm).



STEP 3

Insert hose connectors and rotate notched surface up while following the natural curve of the hose. Ensure hose clamps are facing outward and inward. Once positioned properly tighten the hose clamps. This is important when installing into the pump housing.



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STEP 4

With hose clamps facing outward, insert the connector into bottom of the housing key-way.



STEP 5

Push hose into housing and slowly rotate the pump rotor clockwise manually while feeding the hose into place. Tip! Silicone grease will make the process easier.





STEP 6

Slide second connector into the top key-way.

Note: light pressure will be needed to pull the top connector into the key-way.



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STEP 7

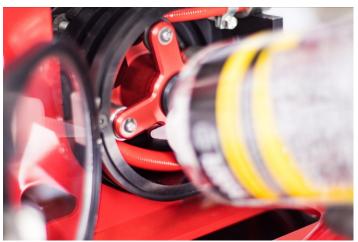


Ensure hose clamps are facing inward and outward for easy access if required.



STEP 8

Apply a small amount of a silicone grease to the underside of the hose at the bottom of the housing. This allows the hose to always return to the centre after the rollers pass over it.



STEP 9

Close housing door to secure connectors. The Pump door should remain closed at all times during the coating process!



SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

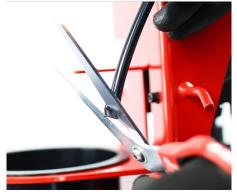
STEP 10

Once the pump hose has been installed, turn on the pump and check that it is working correctly by firstly covering the top hose fitting with your finger. If working correctly you should feel the hose sucking onto your finger. Next place your finger over the bottom hose fitting. If working correctly you should feel air blowing over your finger.

STEP 11 🕨

Cut a 1.2m or 47" piece of the black Delivery Hose to be used as a supply hose extension. One end will require a 45 degree angle and the other should be a square cut.





STEP 12

Attach the square end of the hose to the top hose connector on pump using a small hose clamp.





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STEP 13



Take the 45 degree end and place in the resin cup at the back of the pump. Run the hose through the retaining holes on the back of the pump.







COATING SYSTEM ASSEMBLY | BRUSHES

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Required Tools & Parts

BRUSHES (1 or 2)
BRUSH STOPPER
SLEEVE BEARING
HEX KEY 2.5
ADJUSTABLE WRENCH



BEFORE BEGINNING ASSEMBLY





DANGER

Risk of serious injury from rotating parts!

- Have extra brush stoppers and hose connectors available.
- Use an angle grinder or portable band saw to cut Miller shaft if necessary.
- Have a roll of PVC tape available.

COATING SYSTEM ASSEMBLY | BRUSHES cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 1

Select the appropriate brush size for the pipe. <u>Always use a brush one pipe size larger than the pipe to be coated.</u>

Note: Although one brush can be used in straight pipe, dual brushes are required for pipes with bends or transitions.



Recommended Coating Brush Diameters (Mini Cleaner / Mini Miller)					
Host Pipe Diameter	Front Coating Brush Diameter (Straight)	Front Coating Brush Diameter (Multiple Bends)	Rear Coating Brush	Distance Between Brushes	
DN32 (1. ¹ / ₄ ")	50mm (2")	N/A	N/A	N/A	
DN40 (1. ¹ / ₂ ")	50mm (2")	50mm (2")	50mm (2")	40mm (1. ¹ / ₂ ")	
DN50 (2")	75mm (3")	100mm (4")	50mm (2")	50mm (2")	
DN70 (3")	100mm (4")	125mm (5")	75mm (3")	75mm (3")	
DN100 (4")	125mm (5")	175mm (7")	100mm (4")	100mm (4")	
DN150 (6")	175mm (7")	220mm (9")	150mm (6")	150mm (6")	

Recommended Coating Brush Diameters (Midi Miller / Midi Cleaner / Super Midi Miller / Maxi Miller)					
Host Pipe Diameter	Front Coating Brush Diameter (Straight) Front Coating Brush Diameter (Multiple Bends) Brush Brush Brush				
DN70 (3")	100mm (4")	125mm (5")	100mm (4")	25-50mm (1-2")	
DN100 (4")	150mm (6")	175mm (7")	150mm (6")	25-50mm (1-2")	
DN150 (6")	175mm (7")	200mm (8")	175mm (7")	25-50mm (1-2")	

^{**} If coating pipe diameters > DN150 (6") use the Picote Maxi Coating Pump



Always use a sleeve on the outer casing of the miller shaft. Attach the smaller brush against the sleeve leaving roughly 6 mm / 1/4" between the brush hub and sleeve and tighten the two 2.5 mm set screws.

DO NOT OVER TIGHTEN OR SCREWS MAY STRIP THE NYLON HUB.





COATING SYSTEM ASSEMBLY | BRUSHES cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The larger of the two brushes will be the brush at the tip of the shaft and is used for finishing the resin. The closest brush helps to spread the resin and stabilize the brush set during coating.

STEP 3

Slide the larger brush onto the shaft followed by the supplied brush stopper. Bring to the end and tighten both securely





STEP 4

Refer to the table on page 22 for the distance between the front and rear brush and leave space between the brushes with no need for casing over the shaft. This will allow for flexibility around bends.



ONCE THE BRUSHES ARE ASSEMBLED, MOVE ON TO THE DELIVERY HOSE AND CAMERA SET UP.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Required Tools & Parts:

DELIVERY HOSE

PVC TAPE

CAMERA

NUT DRIVER

SCISSORS

11mm CLAMP



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When you are pulling the delivery hose from the roll, always pull from the centre. This will keep the hose from getting tangled and messy.



STEP 1



Pulling from the centre of the delivery hose roll, attach the delivery hose 50-75mm / 2-3" behind the sleeve bearing with PVC tape. Exactly 300mm / 1ft away, place a second piece of tape securing the delivery hose to the shaft.





STEP 2

Attach the camera head 100-200mm / 4-8" behind the sleeve bearing. Watch your camera screen to ensure that you have full view of the brush.





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STEP 3

Once the brush is in full view on the screen, tape the camera head from the very end all the way to the end of the camera spring. This will ensure the camera spring and connectors inside stay clean during the process.





STEP 4

Once the camera is secure, insert the brushes in to the pipe opening. Push in about 500mm / 18" and tape camera, delivery hose and miller cable together.



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STEP 5

With the pump and miller positioned as close to the opening as possible, cut off the delivery hose (square cut) and attach to the bottom connector on the pump. Secure with a hose clamp.







ONCE THE DELIVERY HOSE & CAMERA ARE SET UP, YOU CAN NOW BEGIN PREPARING THE RESIN.

PREPARING THE RESIN

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Required Tools & Parts:

MINI COATING PUMP

PICOTE DUAL COLOUR 100% SOLIDS EPOXY

SMART MIXER & STATIC MIXING TIP

NITRILE GLOVES

RESIN CUP & BAG

SCISSOR STYLE TUBING CUTTERS

TOWELS

ACETONE

WASTE BIN



PICOTE

DC1000E AS

PICOTE

DUAL COAT

BEFORE BEGINNING PREPARATION

- In case of spills or accidents have plenty of rubber gloves, towels, chemical spill kit and acetone readily available.
- Be sure to prepare all cartridges before pumping any resin. This will allow you to have more
 efficient workflow.
- Save a few cartridge caps to reseal unused material.

TIP: Resins have limited work time. Higher temperatures will decrease the work time. If resin is over +29°C or 85°F upon installation, it is recommended to chill the resin slightly.

If too cold the resin may become difficult to pump.

Recommended installation temperature +18 to +27°C (65-80°F)

Installation Temperature Range: +10°C to +60°C (50-140°F)

Resin Temperature: +23°C to +25°C (74-77°F)

PREPARING THE RESIN cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Resin Calculator

Use the resin calculator to determine how much resin will be needed to complete all necessary coats. Refer to the chart below for recommended number of coats. The resin calculator can be downloaded from the Picote Institute.

Pipe diameter	Number of Coats (Corrosion Resistance)	Number of Coats (Semi Structural)
DN32 (1¼")	2	2
DN40 (1½")	2	2
DN50 (2")	2	2
DN70 (3")	2	2
DN100 (4")	2	3 to 4
DN150 (6")	2 to 3	4 to 5

minimum of 4 coats to be applied when the pipe is going to be cleaned using High Pressure Water Jetting .

Maximum Water Jetting Pressure is 2600 PSI or 180 Bar.

A minimum of 3 coats need for abrasion resistance.



Before you begin preparing the resin for application, verify the following: (A) The Mini Miller and Pump are ON. (B) The Speed of the Mini Miller is set to 950 to 1100 rpm (speed dial 2-3). (C) The Speed of the Pump is set to full speed. (D) The

Pump is set to rotate clockwise.







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PREPARING THE RESIN cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 2

To avoid contact with resin on skin, wear at least two pairs of nitrile disposable gloves. The top pair will be removed during the clean-up process, leaving you with a clean pair of gloves on.



STEP 3

There are four (4) stages to setting up the resin cartridge. Always keep the cartridge upright to avoid resin leakage and possible mixing of resin.

- A. Choose the desired colour of resin for the first application. Choose a colour that gives the most contrast to the original pipe colour. If you are coating a light pipe, use the dark grey first, or in dark pipe use the white resin to start with.
- **B.** Remove the nut(1) and cartridge cap(2), and set aside for later.



Cut the mixer tip back two notches. This will improve the flow of resin and allow for cleaner operation of the Smart Mixer during operation.



PREPARING THE RESIN cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

D. Attach the static mixing tip and secure with the nut.





STEP 4

Once the mixing tip and nut are securely fastened, insert the Epoxy Cartridge into the Smart Mixer. Set the speed dial on the Smart Mixer to the 4th setting and dose dial to it's maximum setting.



STEP 5

Feather the trigger to allow the pistons to seat properly and evenly on the back of the cartridge. Once resin flows into the tip, slowly dose a small amount of resin (no more than 30g / 1 oz) into a cup or cartridge bag and dispose of. This ensures the resin is mixed properly.



OPERATING THE COATING SYSTEM

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Required Tools & Parts:

MINI COATING PUMP

DUAL COLOUR 100% SOLIDS EPOXY RESIN

SMART MIXER

NITRILE GLOVES

SCISSOR STYLE TUBING CUTTERS

TOWELS

ACETONE

WASTE BIN

CHEMICAL SPILL KIT



BEFORE BEGINNING PREPARATION















- Have plenty of gloves, towels, acetone and a chemical spill kit available in case of spills or accidents.
- Use a **digital infrared thermometer non-contact tool** to monitor the temperature of the resin while coating.
- Make sure you have a crew large enough to cover the cable, maintenance of Smart Mixer and the coating application!
- Have ice available for temperatures over +27 °C / +80 °F or heat if the temperature is below +15 °C / +59 °F.

OPERATING THE COATING SYSTEM cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE



If the piping system has several bends that are difficult to navigate or if the line set is difficult to push through the pipe, a special lubricant can be used to reduce friction. The Picote Delivery Hose Lube should added to a spray bottle to be easily applied to the outside of the line set. Lightly coat the line set as it is being pushed into the pipe.

Please note: The lubricant is highly specialised and designed to be absorbed into the coating resin without causing any negative effects. Any other lubricant WILL cause negative effects and can prevent the epoxy from bonding or curing properly. Excessive use is not needed nor recommended.



After priming the static mixing tip, allow the resin to begin filling the resin cup to no more than ½ full. Filling the cup too full will generate heat too quickly and reduce the overall working time.

STEP 1



Once the cup is 1/3 full, begin priming the delivery hose. Set the variable speed dial on the pump to full speed and engage the pump to begin priming the delivery hose.





OPERATING THE COATING SYSTEM cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

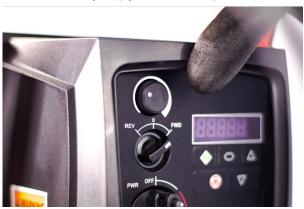
STEP 2

Watch the CCTV screen for the resin flow. Note: it may be difficult to see the flow of resin if the camera is turned upside-down. Watch closely and move the camera and rotating shaft back and forth if necessary to check for resin flow.



STEP 3

Once resin can be seen flowing, stop the pump and turn the variable speed dial down to the appropriate speed for the pipe diameter. Normally the Mini Miller is between 950—1100 rpm (speed dial 2-3).



STEP 4

Start the coating from the far end. Pump out resin and brush it on. Pay close attention to the flow of resin and lay a consistent bead of resin into the pipe. Also, watch the bead of the resin around the edge of the brush. Pull slowly and evenly for 1m / 3ft.



OPERATING THE COATING SYSTEM

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 5

Stop the pump and brushes and push back into the pipe to visually verify the coating has covered all required areas evenly. Repeat this process in 1m / 3 ft sections until the pipe is fully coated. The brushes should always be rotating when being pulled through the pipe and stationary when being pushed into the pipe.



STEP 6

Average coat thickness is 0.7 to 0.8mm (0.03"). Carefully inspect that the resin covers the pipe everywhere. Be especially careful around bends.



STEP 7

To speed up drying time, twenty (20) minutes after the first coat is complete apply heat using the Picote Heater to the pipe before starting the next coat.

Please have a look at page 42 for more information about additional coats.



OPERATING THE COATING SYSTEM cont.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 8



If the next coat is applied after 12 hours, the original coat will need to be abraded with a Smart Cutter™ first to make sure that the layers bond well.





STEP 9

Dual Colour Method: Apply over existing colour with new colour. Verify that resin has been applied everywhere. The Dual Colour Method allows for clear visual verification during application that resin has been evenly distributed everywhere.



SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Required Tools & Parts:

NITRILE GLOVES ACETONE PVC / DUCT TAPE WASTE BIN SCISSOR STYLE TUBING CUTTERS **TOWELS OR RAGS** SUITABLE BUCKET WITH LID **NUT DRIVER HEX KEYS NUT DRIVER** 5mm DRILL BIT **SPILL KIT**



BEFORE BEGINNING CLEANING PROCESS ()









- Have plenty of gloves, towels, rags, acetone and a spill kit available in case of spills or accidents.
- Have buckets ready for cleaning the brushes and camera.
- Have a roll of PVC or duct tape and a large waste bin nearby.



SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 1



When you have finished coating, turn the pump rotation to reverse. This will pull the resin back to the cup and reduce resin dripping during the cleaning process. When the resin stops dripping, put the brushes in a bucket of acetone. Cover the opening and run brushes for a short time to rinse off resin. Brushes and cable should now be clean enough to reuse later.









STEP 2 Wipe the camera head and the Miller shaft clean with an acetone soaked rag.







STEP 3 Cut away tape then recoil the cleaned camera and miller cables into their holders.



SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 4



Stop the pump from spinning in reverse and shut the system down completely. Isolate the power supply. Remove cartridge from the Smart Mixer. Recap for later if there is unused material in the cartridge



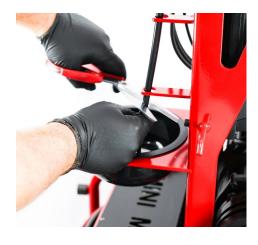
STEP 5

Wipe down the delivery hose so as not to make a mess and remove the pump hose from the housing.

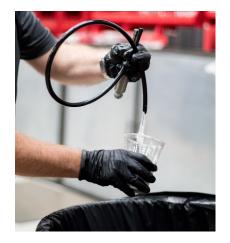


STEP 6

Carefully remove the suction hose from the cup and wipe down the end. Watch for drips and tape the end closed if necessary.







SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 7



With the entire hose set removed from the pump, cut away the hose connectors and clamps for reuse later.





STEP 8 Remove hose clamps and carefully cut away hoses and dispose of them.





STEP 9

Hose connectors can be cleaned with acetone and a small wire brush or cotton swab, or they can be allowed to cure and drilled out later.

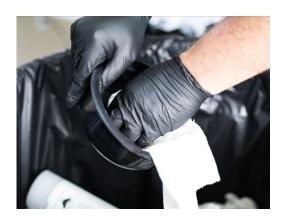


SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

STEP 10 |

Empty any remaining Epoxy in the resin cup into the waste bin / trash can. Then wipe the container clean with acetone so that it can be used again later.







STEP 11

If drilling, clamp the connector in a vise or hold tightly with locking pliers. Carefully drill the hardened resin out of the centre entirely. Save clamps and connectors for reuse later.



STEP 12

Collect all the contained waste including used gloves, delivery hose, rags etc. into thick waste bags and seal properly. If large amounts of mixed coating resin was left, let it harden separately, for example, in the resin cup. Dispose according to waste laws and regulation. Follow instructions from coating resin MSDS.

NOTE! Mixed resin will generate heat while curing. Do not add large amounts of mixed resin inside the waste bags before it has cured and keep the resin in well ventilated location while curing.

CURING & ADDITIONAL COATS

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

CURING

During the curing process, it is very impoprtant to prevent any dirt, debris or water from getting into the pipe. The pipe must stay clean and dry during the entire coating and curing process. Water can keep the resin from bonding properly. The resin is ready for additional coats once the surface is dry to touch.

AMBIENT CURING: Cure time: approximately 3 hrs at +21°C / 70°F.

HEAT CURING: Cure time: approximately 1.5 to 2 hrs if Picote Heater is used.

When adding heat the pipe should never exceed a constant temperature of +65 $^{\circ}$ C / 150 $^{\circ}$ F.

ADDITIONAL COATS

Refer to the chart below to determine the recommended number of coats to apply. Additional coats should always be applied in contrasting layers. This will give a visual verification to each coat that is applied. If the previous coat sits

longer than 12h before coated again, the pipe will need to be abraided with Smart CutterTM.

A minimum number of 4 coats needs to be applied to the pipes that will be cleaned using high pressure water jetting. Maximum water jetting pressure is 2600 psi or 180 bar.

A minimum number of 3 coats is required for abrasion resistance.

Pipe diameter	Number of Coats	Number of Coats	
	(Corrosion	(Semi Structural)	
	Resistance)		
DN32 (1¼")	2	2	
DN40 (1½")	2	2	
DN50 (2")	2	2	
DN70 (3")	2	2	
DN100 (4")	2	3 to 4	
DN150 (6")	2 to 3	4 to 5	



RETURN TO SERVICE

Below are the proper wait times and conditions required before returning to service.

4 HOURS: Light use, water contact

24 HOURS: Pressure testing, completely cured

For potable water pipes, the final coat should be white and return to service is 25h.

DUAL COLOUR RESIN INFORMATION

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

This operations manual is for the Picote Brush Coating ™ System using the Mini Coating Pump with the DC1000E Epoxy. For information on the Fast Cure Resin please visit the Resources section of the Picote Institute.

PICOTE 100% SOLIDS EPOXY

Mixing ratio 2:1 / Pot life 25 min at 20°C / 68 °F

Package Sizes:

Cases contain 3 white and 3 dark grey cartridges each with 900ml of epoxy inside.

For large scale projects, cases of all white and all grey can be ordered.

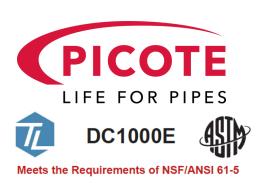


Re-coat - 3 hrs at +21 °C / +70 °F Restore flow - 4 hrs. Final Cure - 24 hrs.

Can be recoated within 12 hrs with no prep, grinding panels must be used after 12 hrs.

Installation: +10 °C / +50 °F to +60 °C / 140 °F **Storage:** Room Temp +16 °C / +60 °F to +29 °C / +85 °F

Finished product: up to +82 °C / +180 °F constant



100% SOLIDS EPOXY

WHITE

FOR PROFESSIONAL USE ONLY

NET CONTENTS: 900 ml.

Storage Temperature:

Room Temp +16 °C / +60 °F to +29 °C / +85 °F **Shelf life:** 2 years from packaging when kept in accordance with storage instructions included in MSDS and Technical Data Sheet.

WARNING! MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION. HARMFUL IF INHALED. MAY CAUSE EYE, SKIN RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.

FIRST AID: IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN IF IRRITATION DEVELOPS AND PERSISTS. WASH CLOTHING BEFORE REUSE. IF INHALED: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. IF SWALLOWED: DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY A MEDICAL PHYSICIAN.

FOR PROFESSIONAL USE ONLY: USE THE NECESSARY SAFETY EQUIPMENT (NITRILE OR LATEX GLOVES, EYE PROTECTION) REVIEW SAFETY DATA SHEET (SDS) FOR FURTHER INFORMATION.







UN 2735, Amines, liquid, corrosive, n.o.s., (Tallow Amine), 8, PGIII

Industrial safety: Ready-measured product must not be in contact with skin (it adheres).

Gas emissions: No harmful VOCs released

during mixing or after hardening.

Safety data sheet: Delivered with first order.

MSDS AND OPERATOR CHECKLISTS FOR 100% SOLIDS EPOXY & FAST CURE RESINS AVAILABLE TO DOWNLOAD FROM PICOTE INSTITUTE

MAINTENANCE

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

CARING FOR THE FLEXIBLE SHAFT (Mini Miller)

See relevant Miller operating manual, available from the Picote Institute.

The flexible shaft is pre-treated with **Picote Flexible Shaft Lubricant** and the casing replaced prior to shipping. Always inspect the condition and apply oil between the flexible shaft and its outer casing when required.

If necessary remove the shaft from its casing to treat. When the casing has been replaced, rotate manually for even coverage.

FASTENER SCREWS FOR THE SMART CUTTER™ HUB

If you are unable to tighten the fastener screws properly, due to worn out hex socket heads, replace the fastener screws immediately. Otherwise, a brush or other tool can detach from the shaft during use, and fall into the pipe.

PUMP & MILLER PARTS

Keep parts clean. Where possible, remove resin from the Coating Pump, brushes, Miller and other parts carefully with acetone. See pages 37-41 for more information.

PLEASE READ YOUR MILLER OPERATING MANUAL FOR DETAILED INSTRUCTIONS ON HOW TO PROPERLY MAINTAIN THE MACHINE

MAINTENANCE

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

MAINTENANCE PROGRAMME

		Mon	ths	
Maintenance task	3	6	12	24
Tightness of motor fixing				I
Tightness pump assembly fixing				I
Condition of pump assembly	1	1	I	I
Condition of rollers	1	1	I	R
Condition of frame & quick locks			I	I
Condition of electric components	1	1	I	I
Clean resin stains	Р	Р	Р	Р
Operation of Smart Mixer	1	1	1	I
Condition of hose clamps	1	R	R	R
Condition of hose connectors	1	1	R	R

I: Inspect, fix or replace if needed.

P: Perform, replace if needed.

R: Replace

WARRANTY PERIODS

Service Period	3 months	6 months	12 months
Α			
В			
С			•

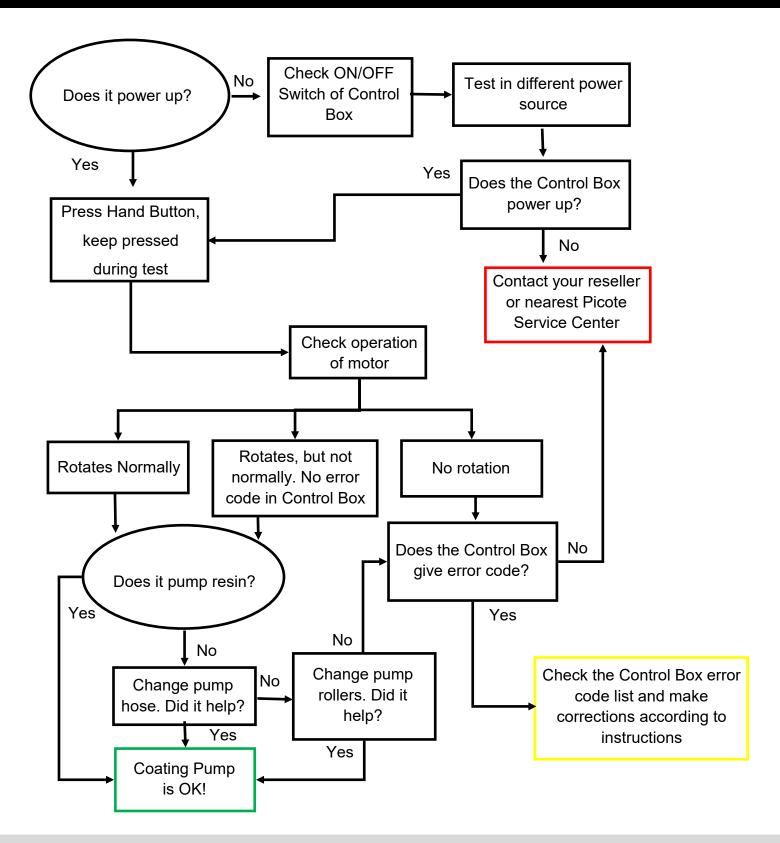
A Pump & spare parts, except

B Electric motors

C Service Centre repair work

TROUBLESHOOTING FLOWCHART | MINI COATING PUMP

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE



If there is problem that you cannot resolve with this manual, please consult your Picote Reseller or Picote Solutions at claims@picotesolutions.com

TROUBLESHOOTING FAULT CODES

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TROUBLE SHOOTING

The control box of the Mini Coating Pump will show fault codes according to different problems which the machine may encounter during use. Please check from the list below the most common fault codes of the control box. If a code other than those shown below is received, or if the fault does not correct, please write down the error code and contact your reseller or Picote Service Centre.

Fault Code	Description	Suggested Cause	
no-F _L t	No Fault	Not required	
0-1	Output over current	Instantaneous over current on the drive output. Excess load or shock load on the motor.	
		Note: Following a trip, the drive cannot be immediately reset. A delay time is inbuilt, which allows the power components of the drive time to recover to avoid damage.	
1_t-trP	Motor thermal overload	The drive has tripped to prevent damage to the motor.	
		Try not to overload motor. Ensure sufficient cooling air is free to circulate around the motor and that the entry and exit vents are not blocked or obstructed.	
P5-trp	Power stage trip	Check for short circuits on the motor and connection cable.	
0-volt	Over voltage on DC bus	Check the supply voltage is within the allowed tolerance for the drive.	
U-volt	Under voltage on DC bus	The incoming supply voltage is too low. This trip occurs routinely when power is removed from the drive. If it occurs during running, check the incoming power supply voltage and all components in the power feed line to the drive.	
0-t	Heatsink over temperature	The drive is too hot. Check the ambient temperature around the drive is within the drive specification $(+50^{\circ}\text{C}/+122\text{F})$. Ensure sufficient cooling air is free to circulate around the drive.	
		Increase the panel ventilation if required. Ensure sufficient cooling air can enter the drive, and that the bottom entry and top exit vents are not blocked or obstructed.	
U-t	Under temperature	Trip occurs when ambient temperature is less than -10 $^{\circ}$ C/+14F. Temperature must be raised over -10 $^{\circ}$ C/+14F in order to start the drive.	
E-trip	External trip	Normally closed contact has opened for some reason. Check if the motor is too hot.	
FLt-dc	DC bus ripple too high	Check incoming supply phases are all present and balanced.	
P-L055	Input phase loss trip	Check incoming power supply phases are present and balanced.	
h 0-1	Output over current	Check for short circuits on the motor and connection cable.	
		Note: Following a trip, the drive cannot be immediately reset. A delay time is inbuilt, which allows the power components of the drive time to recover to avoid damage.	
dAtA-F	Internal memory fault (IO)	Press stop-key. If fault persists, consult Picote Solutions.	
dAtA-E	Internal memory fault (DSP)	Press stop-key. If fault persists, consult Picote Solutions.	
Fan-F	Cooling Fan Fault	Consult Picote Solutions.	
0-hEAt	Drive internal temperature too high	Drive ambient temperature too high, check adequate cooling air is provided. Increase the panel ventilation if required. Ensure sufficient cooling air can enter the drive, and that the bottom entry and top exit vents are not blocked or obstructed.	
Out-F	Output fault	Indicates a fault on the output of the drive, such as one phase missing, motor phase currents not balanced. Check the motor and connections.	

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 one (1) year, except electric motors for which the warranty period shall be six (6) months, provided, however, that Picote does not warrant any claim or damage under this Warranty if such claim or damage results from:

- 1. Consumable parts or normal wear and tear resulting from use of the Products,
- 2. Product overload or overheated motor,
- 3. Regular periodic maintenance of Products,
- 4. Misuse, neglect, or improper installation or maintenance of the Products, or use of Products not for their intended purpose,
- 5. Products that have been altered, modified, repaired, opened or tampered with by anyone other than Picote or an authorized Picote Service Centre, or unsuitable or unauthorized spare parts, accessories or third party products when using the Products or;
- 6. the use of the Products not in compliance with their respective Documentation, user manuals, safety and maintenance instructions, and any usage restrictions contained therein, or
- **7.** accident, fire, power failure, power surge, or other hazard.

Otherwise, the Products are sold AS IS. End User is responsible for using the Products within their specifications and instructions as contained in the Documentation.

EXCEPT AS SPECIFIED IN THIS WARRANTY, ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON INFRINGEMENT, SATISFACTORY QUALITY OR ARISING FROM A COURSE OF DEALING, LAW, USAGE, OR TRADE PRACTICE, ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. TO THE EXTENT AN IMPLIED WARRANTY CANNOT BE EXCLUDED, SUCH WARRANTY IS LIMITED IN DURATION TO THE WARRANTY PERIOD. BECAUSE SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, THE ABOVE LIMITATION MAY NOT APPLY. This disclaimer and exclusion shall apply even if the express warranty set forth above fails of its essential purpose.

TRAINING & CERTIFICATION

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

TRAINING CENTRES:

Phoenix, Arizona, USA

Porvoo, Finland

Sandhurst, England, UK

Whitburn, Scotland, UK





Certified Installer Training for Picote Brush Coating™ is highly recommended to get the most out of your investment.

For Certified Installer Maxi Pump or Mini Pump
Picote Brush Coating™ Training you will receive a
Picote ID Card for completion (UK only), which can
be used for the tendering process and on site.
Digital certificates are awarded for all certification
trainings.

Virtual training is also possible.

Contact **training@picotesolutions.com** to find out about pricing and scheduling.

OFFER A 10 YEAR WARRANTY*

When using the Picote Brush Coating™ System as an option for semi-structural pipe rehabilitation you are providing a solution that can last 30-50 years. When you successfully complete Picote Certified Installer Training for either the Picote Mini Coating Pump or Mini Coating Pump (or both) you will be able to offer a 10 year warranty on the Picote 100% Solids Epoxy Resin when you meet the outlined criteria. This provides assurance for the end-user as well as an advantage when you tender for work.

^{*}Terms & conditions apply, ask for details.

Please Contact:

Your Reseller / Salesperson or Picote

www.picotesolutions.com





International Offices

Finland. United Kingdom. USA.

Technical Support

support@picotesolutions.com

Claims

claims@picotesolutions.com

Production & R&D

Pienteollisuustie 24 06450 Porvoo, Finland support@picotesolutions.com

Authorised Resellers:

www.picotesolutions.com/resellers