MiniRoller D200e
Manual

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CONTENTS

1 GENERAL INFORMATION

This manual consists of instructions for installation, operation and maintenance of calibration roller (MiniRoller D200e) used for spreading epoxy in liners in pipe renovations. The machine is intended for professionals only.

1.1 USE

MiniRoller D200e has been designed and manufatured for processing pipe liners only. MiniRoller D200e can only be used with materials and equipment proven safe.

1.2 EU DECLARATION OF CONFIRMATION

EU Declaration of confirmation has been composed by the manufacturer and can be found in section 7.
Manufacturer:
Boldan Oy, Business-ID: 2355506-6
Matkuntie 3
05200 Rajamäki, Finland
Tel. +358 (0)9 853 1042

1.3 CE-MARKING AND LABELLING

The machine has been approved by CE-marking and labelling for declaration of confirmation. MiniRoller D200e has been risk evaluated approriately. All the risks associated to the use of MiniRoller D200e are genuine and by obeying safe working methods can be kept **insignificant, slight or moderate.**

1.4 INITIALIZATION INSPECTION

Electrical hardware of MiniRoller D200e has been inspected according to SFS-EN 60204-1 before initialization.

2 INSTALLATION

2.1 INSTALLATION OF EQUIPMENT

Always install MiniRoller D200e on a firm surface.

3 INSTRUCTIONS

3.1. USERS

MiniRoller D200e is intended for professional use only. MiniRoller D200e can be operated only by persons familiar with this manual of installation, instructions and service. Instructions and warnings in this manual must be followed unquestionably.

3.2 STRUCTURE

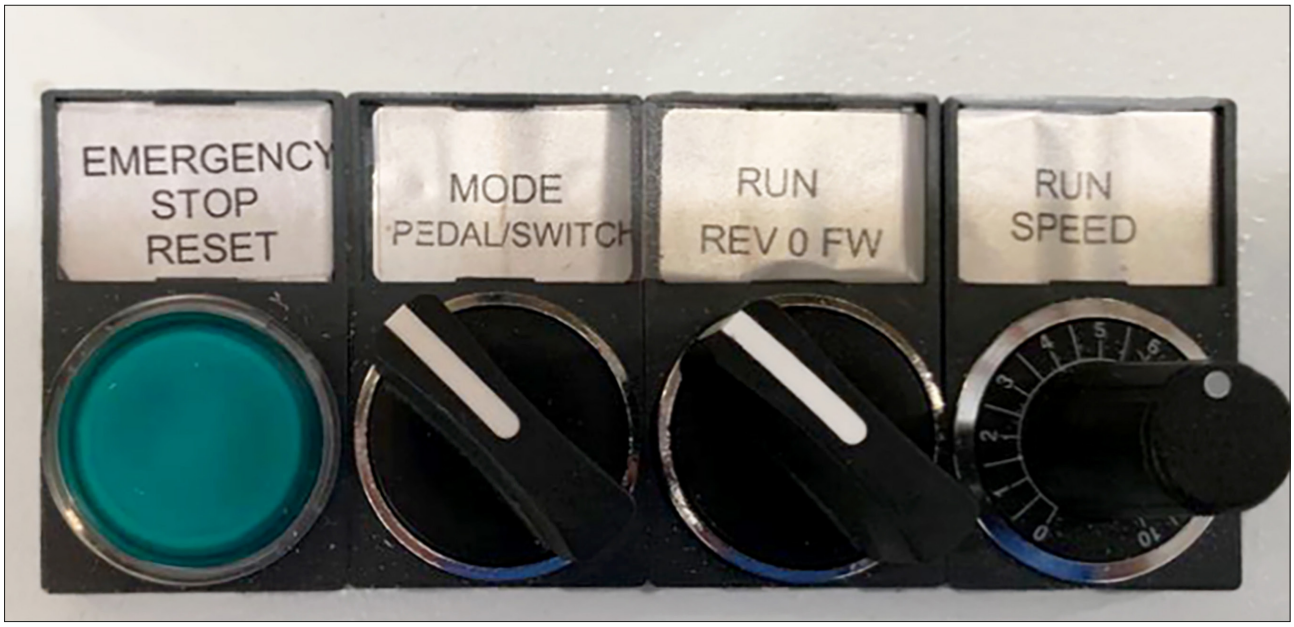
MiniRoller D200e consists of aluminum body, sheet metal parts, rollermotors, control panel and foot pedal.

3.3 DESCRIPTION OF USE AND OPERATION

3.3.1 PREPARATIONS

Before using Miniroller D200e read the manual completely to understand how to operate it.

- Hook up electricity.
- Turn EMERGENCY/STOP -switches to release them and press EMERGENCY/STOP -button to confirm.
- Turn RUN-switch clockwise (FW) to turn MiniRoller D200e on.
- MiniRoller D200e can be turned off by turning RUN-switch to position 0.
- MiniRoller D200e operates backwards when RUN-switch is fully turned counterclockwise (REV).



- EMERGENCY/STOP -indicator lights up, when MiniRoller D200e is ready to use. EMERGENCY/STOP does not work, if RUN-switch has been turned on. RUN-switch must always be turned to position 0 to confirm.
- MODE-switch has two positions: foot pedal (PEDAL) or manual steering (SWITCH).
- RUN-switch directs roller backwards (REV) or forward (FW).
- RUN SPEED -switch adjusts the speed of rollmotors.
- Control panel can be attached onto calibration roller or released. If released the control panel can be hooked up within 1,5 meter (5 ft) distance with a cord that comes along.
- Control panel can be released by turning the black knobs fully open (seen in picture).
- Rollers can be controlled by foot pedal also. Foot pedal can be hooked up into the control panel by the socket on the side of the control panel case.
- When drive mode has been set up for foot pedal, the rollers will roll only when pressing the foot pedal.
- Liner has to be placed between the rollers before turning rollmotors on.
- Recommended temperature for use of calibration roller is 10 - 30°C (50 - 86°F).

3.3.2 ROLLER ADJUSTMENT AND CHANGE OF DIRECTION

- The height of upper roller can be adjusted with the wheel of linear axle.
- Before changing directions the rollers must be completely stopped. The electrical components might get damaged due to large strain, If not stopped before changing rolling direction.

3.4 WARNINGS

MiniRoller D200e can be used on flat and firm surfaces only!

Do not touch the rotating rollers!

Person operating MiniRoller D200e must always wear rubber gloves to protect against epoxy (for example nitrile gloves) and must wear protective eye glasses.

Workwear must be suitable to avoid sleeve or another part of clothing getting caught between the rollers.

- MiniRoller D200e can only be used by person familiar with it
- MiniRoller D200e must be disconnected from electricity for cleaning and maintenance
- Liner must be installed between rollers before turning them on
- Beware of rotating rollers
- Beware of clothing getting caught between rotating rollers
- It is recommended to use the foot pedal

4 MAINTENANCE

When maintaining the MiniRoller D200e one must follow the installation, operation and maintenance instructions in this manual and above all pay attention to the warnings section. Maintenance can only be performed by person familiar with the instructions. The person maintaining the MiniRoller D200e must have comparable knowlegde to the person operating the MiniRoller D200e.

MiniRoller D200e must be cleaned of trash and dirt.

Electricity must be disconnected while maintaining or repairing Miniroller D200e. The main switch must be turned to position 0 and electricity must be unplugged from power network.

Maintaining rollers

- Dirty roller must be cleaned before use
- Broken bearings must be replaced
- Tilted rollers must be straightened
- Damaged surfacing of pulling roller must be removed and replaced

Cleaning of rotating roller

The easiest way to remove grime, such as grease, is to wipe the surface with a damp cloth and cleanser (check suitability for rotating roller). Thin, quickly evaporating film of cleanser does not damage the rotating roller. It is recommended to use scrub cleaning cloth or such.

4.1 ELECTRIFICATION

Person in possession of MiniRoller D200e must make sure that the machine functions without disturbances when operating and maintaining the it. Protection of electric shocks and fire must also be taken care of.

Person in possession of MiniRoller D200e is responsible for carrying out these obligations by monitoring the machine by regular or continuous inspections and, when needed, by measurements and testings. erson in possession of MiniRoller D200e must take care that failures and malfunctions are repaired immediately. Electrical wires, buttons and switches must be monitored to keep them in order. Faulty wires and components must be replaced immediately.

4.1.1 MAINTENANCE AND INSPECTION DURING OPERATION

Daily inspection and inspection before each operation is needed for the following (maintenance when needed):

A. Emergency stop -switch

Approximate examination during operation:

- check attachment of switches onto case/control panel
- check attachment of containers and covers
- loosening of mushroom shaped Emergency-switch -> replacement
- replace or clean dirty switches
- replace switch if dirt affects operation
- replace swiches if chemicals have deteriorated them or made them brittle
- replace switches if they are battered, fractured or strained
- ensure free access and easy reachability of switches

4.1.2 MAINTENANCE AND INSPECTION EVERY 12 MONTHS

Inspect and maintain the following. Checkup includes visual perception and auditional observation.

A. Case/body of MiniRoller D200e

Inspection for twists, chips and other damages. Damaged parts must be replaced.

B. Bearings

Inspection of bearings for intactness.

C. Screwed, bolted and welded connections

Inspection of all connections for adherence and inspection of fasteners. Replacement, tightening or repairing if needed.

D. Condition of rotating rollers

Inspection of surface of rotating rollers. If notably worn out, it must be replaced.

E. Lubrication of electrical conductors and trapeze screw

Lubrication of linear guideways through upper holes of liner axle.

Light lubrication of trapeze screw if needed.

5 ENVIRONMENTAL ASPECTS

5.1 EMISSION AND WASTE

No emission or waste will be formed when using Miniroller D200e according to instructions.

5.2 DISASSEMBLY AND RECYCLING

If wood (from pallet) or plastic film (for shielding) used in transportation remain with client, they have to be handled accordingly. Wooden pallet can be reused for similar purposes if intact, or it can be dispatched to a recycling and repairing company. Plastics can possibly be used in energy waste company. Recycling or disposing the packaking waste must always be handled locally according to the local rules.

When life cycle of MiniRoller D200e comes to an end, all metals need to be sorted and recycled accordingly.
Steamer can also be dispatched to a recycling center as whole, for sorting and recycling.
Cables can be processed in a center for cable granulation.
Control circuit boards can be recycled in a center for electroninc waste.

6 ELECTRICITY AND CONTROL PANEL

Electricity and automation has been implemented according to diagrams enclosed.

6.1 MAIN AND CIRCUIT DIAGRAM

Main and circuit diagram nr 175254100 enclosed
List of parts nr 175254701

EU DECLARATION OF CONFORMITY

1. Tuote: Miniroller, putken pinnoitussukan käsittelylaite.

2. Valmistajan nimi ja osoite:
   Boldan Oy
   Matkuntie 3
   FI-05200 RAJAMÄKI

3. Valmistajan yhteyshenkilö:
   Juhani Rolser
   Boldan Oy
   Matkuntie 3
   FI-05200 RAJAMÄKI

4. Tämä vaatimustenmukaisuusvakuutus on annettu valmistajan yksinomaisella vastuulla.

5. Vakuutuksen kohde:
   Miniroller
   MM-RM-50
   2018-XXX

6. Edellä kuvattu vakuutuksen kohde on asiaa koskevan unionin yhdenmukaistamislainsäädännön vaatimusten mukainen:

   Konedirektiivi 2006/42/EY
   EMC-direktiivi 2014/30/EU
   RoHS-direktiivi 2011/65/EU

7. Viittaus niihin asiaankuuluviin yhdenmukaistettuihin standardeihin, joita on käytetty, tai viittaus muihin teknisiin eritelmiin, joiden perusteella vaatimustenmukaisuusvakuutus on annettu:

   Konedirektiivi:
   SFS-EN ISO 12100:2010
   SFS-EN 60204-1:2006/AC1:2010

   EMC-direktiivi:
   EN 61800-3
   EN 61000-2-4
   EN 61000-4-2
   EN 61000-4-3
   EN 61000-4-4

8. Valmistajan puolesta allekirjoittanut:

   Paikka ja aika: Rajamäki 9 / 4 2018

   Valmistaja: Boldan Oy