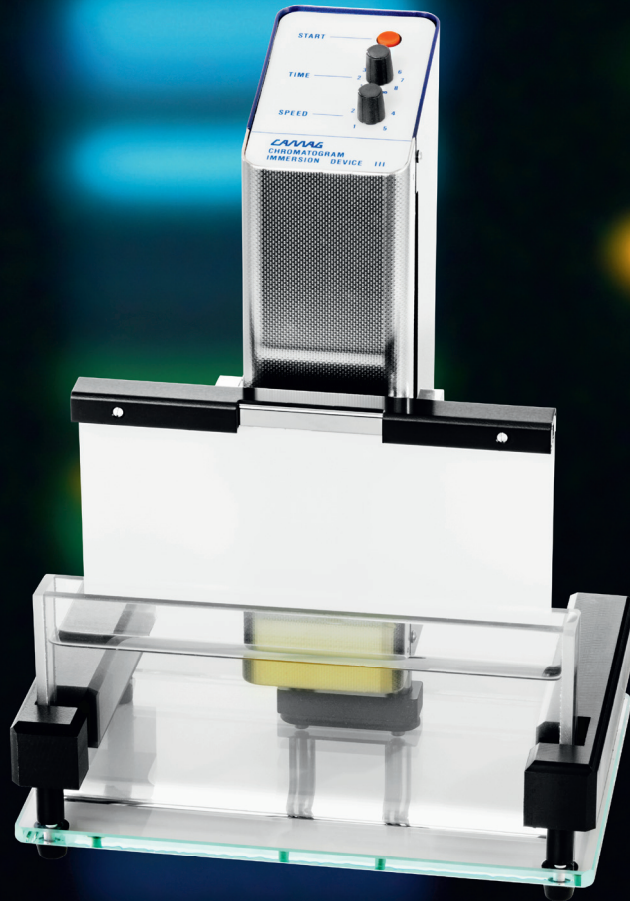


CAMMAG®



INSTRUCTION MANUAL CHROMATOGRAM IMMERSION DEVICE 3



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Declaration of Conformity (DoC)

1 Introduction

The CAMAG Chromatogram Immersion Device 3 is used for treating chromatograms after development and for prewashing TLC plates.

By enabling TLC plates to be immersed and withdrawn at a uniform speed, it avoids distortions resembling a solvent front that interfere with densitometric evaluation.

Immersion conditions can be standardized by setting a fixed dwell time.

1.1 Precaution



- Please read this operating manual before starting the installation! This manual contains information and warnings the user has to follow to ensure reliable operation of the instrument
- If the instrument is used in a manner not specified in this manual, the protection provided by the equipment may be impaired
- This sign indicates (on instrument and in this manual) that failure to take note of the accompanying information may result in damage of the instrument
- Attention: For safety reasons the instrument may only be used for the purposes described in the operating manual
- To avoid injury use adequate safety equipment (protective goggles, gloves etc. if applicable) when working with the instrument
- When working with the fluids of the instrument, be sure to take the appropriate caution (protect your eyes from direct contact with liquid)
- The instrument may be used only by properly trained laboratory staff
- The instrument may not be used in rooms with danger of explosions
- Use a damp lint free cloth for cleaning the instrument surface. Do not employ aggressive detergents
- Only authorized personnel may open the instrument. Service and repair is only to be performed by trained specialists. Use spare parts and consumables supplied by CAMAG only. The warranty is voided if parts from other sources are used. Check the service manual before you start service to reduce product-specific risks
- The use of the instrument without adequate ventilation to outside air may constitute a health hazard depending on the substances in use

1.2 Parts supplied with the instrument

Part no	Description
115.0031	Plate holding device
370.0004	Battery 9V
705.0009	Allen key 3mm
B022.6606E	Instruction manual

1.3 Options

Part no	Description
022.6628	Dip tank 20 x 10 cm
022.6627	Dip tank 20 x 20 cm
022.6622	Polyethylene lid for 20x10 and 20x20cm dip tanks
022.6619	Rack for 3 dip tanks, 20x10 or 20x20cm

2 Unpacking/Installation

2.1 Unpacking

- Unpack the instrument and check the parts supplied.
- Install the instrument on a flat, smooth surface.
- Insert the lithium battery supplied into compartment (1) at the back of the instrument.
- Make sure that the poles of the battery match those marked in the battery compartment. See figure 1

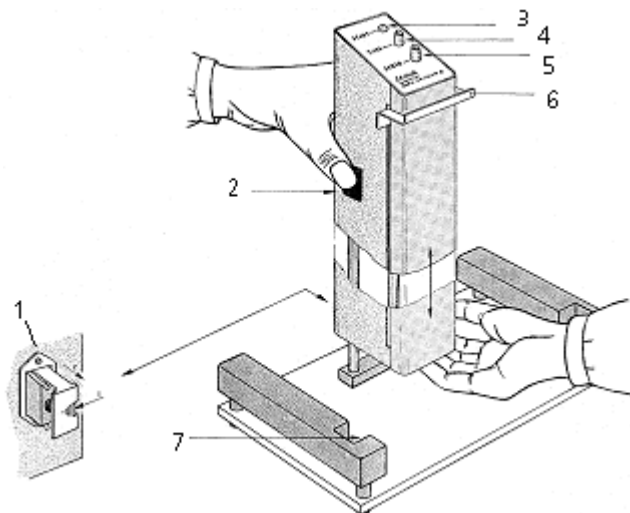


Fig.1: Height adjustment

2.2 Height adjustment

- Adapt the instrument to the selected TLC plate size by pressing the button (2).
- Slide the entire assembly up or down by hand. Release the button (2) when at the upper position for 20 x 20 cm plates or at the lower position for 20 x 10 cm plates. The arm (6) is now in the right position for the selected plate size. See figures 1 and 2.

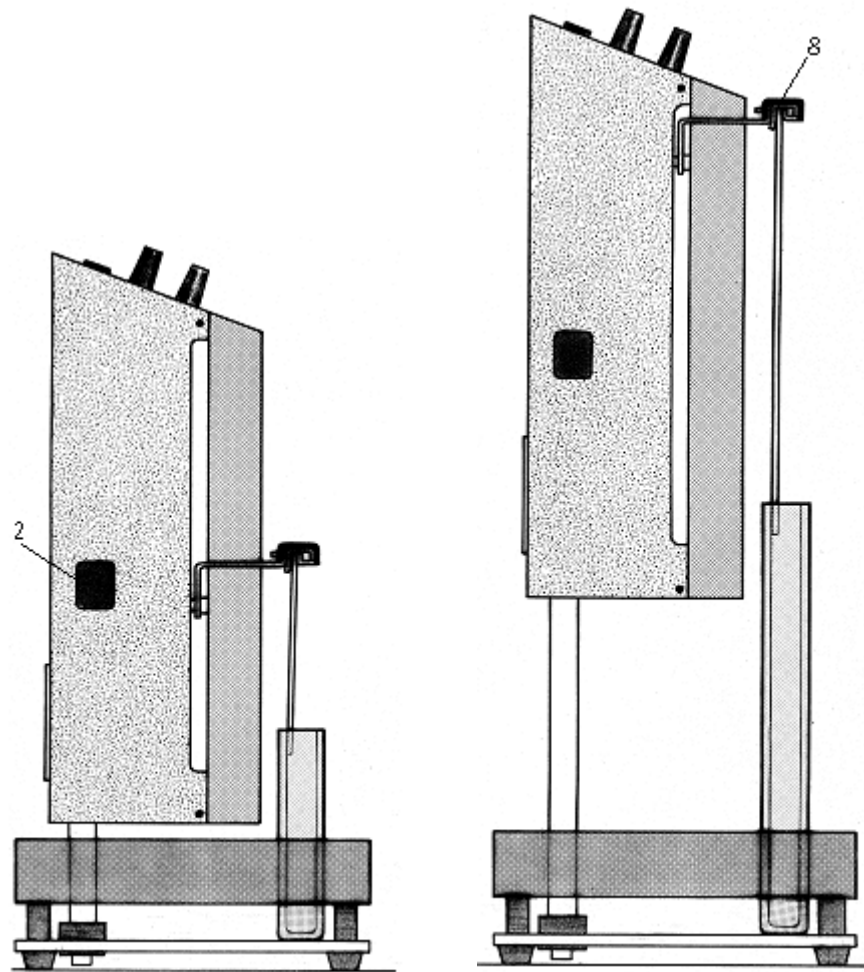


Fig.2: Position for 20 x 10 cm and ...

Position for 20 x 20 cm TLC plates

3 Getting started

3.1 Selecting the immersion (lowering) speed

- Turn the knob (5) to increase or decrease the immersion speed.
Any speed between 2.5 and 4.5 cm/s can be pre-selected.

3.2 Selecting the dwell time

- Select the dwell time for the TLC plate in the reagent solution by turning the knob (4)
- Positions 0 - 8 correspond to dwell times in seconds

The dwell time starts once the TLC plate has reached the lowest immersion position

- For longer dwell times select switch position ∞ . The TLC plate then stays immersed until you turn the switch back to position 8

3.3 Inserting the dip tank

- Use a dip tank matching the selected size of the plate in use

- Position it in the two guides (7) of the instrument base with the straight vertical side facing the user
- Pour the necessary volume of reagent into the tank
- Make certain that the reagent surface is 20 mm below the upper rim of the 20 x 10 cm tank, and 40 mm below that of the 20 x 20 cm tank. This ensures that the volume of liquid displaced by the TLC plate does not cause overflow

3.4 Inserting TLC plate

- Mount the TLC plate (application position downward) in the clamping device (8) with the stationary phase facing forward. See figure 3. Make sure not to touch the stationary phase.

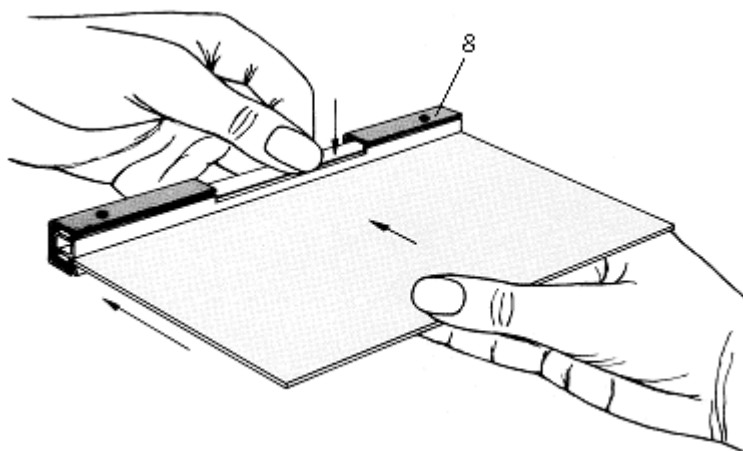


Fig.3: Plate handling

Hang the clamping device onto the arm (6) and assure that the two bolts engage in the corresponding recesses in the clamping device.

The clamping device is designed to hold glass plates as well as aluminum sheets.

3.5 Starting immersion

- Press the red button (3) to start immersion

The TLC plate/foil slides down the glass ribs, enters the reagent at the pre-selected speed and stays immersed for the pre-set time.

After the pre-set immersion time has expired, the TLC plate is automatically withdrawn.

4 Maintenance

4.1 Cleaning

The dip tank should be emptied and cleaned with a normal laboratory detergent every day, especially if it has been used with corrosive reagents.

4.2 Replacing the battery

The 9 V lithium battery supplied with the device has a working life of 10 years or about 10'000 immersions.

For reliable operation, use only leak proof batteries.

- Open the battery compartment at the back side of the instrument (Fig.1 #1)
- Dispose the old battery according applicable rules
- Insert the new battery

Make sure that the poles of the battery match those marked in the battery compartment.

- Close the battery compartment

4.3 Temporary storage of dip tanks

If you have several tanks containing different reagents, close those not in use with a polyethylene lid (order #022.6622) and store them in a safety rack (order #022.6619) that they cannot tilt.

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EC – Declaration of Conformity

We, CAMAG Chemie-Erzeugnisse und Adsorptionstechnik AG
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declare under our sole responsibility that the product

CAMAG® Chromatogram Immersion Device

Product name

022.6606

Article number(s)

to which this declaration relates is in conformity with the following provisions of directive(s):

- 2001/95/EG
- 2011/65/EU
- 2012/19/EU

Following standard(s) or other normative document(s):

- EN60950-1: 2006

Muttenz, 26 March 2015



Walter Rahm, Head of Quality Management

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