Flexible Arm Stand F 360

User Manual



To ensure correct use of this instrument and to avoid injury during operation, read this manual completely before use.

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Flexible Arm Stand F 360

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Flexible Arm Stand User Manual

Congratulations on purchasing a LABOMED Flexible Arm Stand F 360, an excellent choice! It stands out for its sturdy design and absolutely maintenance-free performance. It is easily adaptable to all your requirements and ensures vibration-free observation thanks to its solid and flexible design. You can use it for a wide range of tasks, such as manufacturing, testing, quality control and other industrial applications.

We have placed great emphasis on simple, intuitive operation. However, please take the time to read the user manual and the notes on operating safety to learn about all of its features and capabilities and use them to your best advantage. If you have any questions, please contact your local LABOMED representative. We will be glad to help!

TABLE OF CONTENTS

1. Important Notes and Brief Description 1

2. Safety Instructions 2 - 3

3. Directions for Use 4

4. Maintenance, Cleaning, Accessories and Repair 5

5. Overview of LABOMED Flexible Arm Stand F 360 6

1. Table Clamp....6
2. Rotatable Arm....6
3. Flexible Arm....6
4. Fastening Lever for Height Adjustment....6
5. Horizontal Arm....6
6. Connection to the Focusing Arm....6
7. Power Supply....6

6. Assembly and Use 7 - 8

Table Clamp

Instructions for Safe Assembly....7
Assembling the Table Clamp....7
Adjusting the Table Clamp....7

Flexible Arm Stand and Focusing Arm

Load Capacity....8
Assembly....8
Working Height Adjustment....8

7. Spring Tension Adjustment 9

Tool Requirement....9
Factory Settings....9
Adjusting the Spring Force....9

8. Dimensions 10

1 IMPORTANT NOTES AND BRIEF DESCRIPTION

This user manual provides important instructions for operational safety, maintenance and accessories.

Adhere to local regulations related to accident prevention and environmental protection.

Electrically operated accessories comply with the EC Declaration of Conformity.

The LABOMED Flexible Arm Stand serves as a flexible holder for the LABOMED Luxeo 6z and 6i stereo microscopes, UMS (Universal Mounting System) models.

The flexible arm stand must be placed on a solid, vibration-free surface.

The flexible arm stand can be used in clean rooms without any problems.

2 SAFETY INSTRUCTIONS

Symbols used in this operating manual



This symbol indicates especially important information that is mandatory to read and observe.

Failure to comply can cause the following:
Hazards to personnel
Instrument malfunctions and damage



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Failure to comply can cause the following:
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Instrument malfunctions and damage



This symbol indicates additional information or explanations that are intended to provide clarity.

Non-intended use



Using the flexible arm stand in any way other than that described in the user manual may result in personal injury or damage to property. Doing so can impair the functions of the protective measures provided.



The instruments and accessories described in this user manual have been tested for safety and potential hazards.



The responsible LABOMED affiliate must be consulted whenever the flexible arm stand is modified or used in conjunction with non-LABOMED components that are outside of the scope of this manual!



Unauthorized alterations or non-compliant use shall void all rights to any warranty claims.

SAFETY INSTRUCTIONS (continued)

Use of the original packaging is recommended for shipping or transporting individual modules.

To prevent damage, follow the instructions in this user manual.

Disposal must comply with locally applicable laws and regulations.

If the flexible arm stand is used with non-LABOMED products, the manufacturer of the complete system or the person putting it on the market is responsible for adhering to applicable safety regulations, laws and guidelines.



Using a stereo microscope makes the viewing task easier, but it may also cause strain on the eyes and the postural muscles, depending on the chair used. To prevent this, appropriate measures concerning workplace layout, training and working time must be taken.

During use, follow the safety notes in the microscope manual.

3 DIRECTIONS FOR USE

- This flexible arm stand may be used only by qualified persons.
- Always keep this manual available at the workplace.
- Carry out regular audits to ensure that trained and authorized users follow the required safety procedures.
- Explain the meaning of the warning signs and messages thoroughly to new users.
- Allocate responsibilities for commissioning, operation and maintenance, and ensure compliance.
- Inform your LABOMED representative immediately of any product defect that could potentially cause injury or harm.
- Accessories or cables other than those specified, except those sold by the manufacturer as replacement parts, are not recommended, as they may impair the immunity of the equipment or system.
- If this instrument is modified, appropriate inspection and testing must be carried out to ensure its continued safe use.
- Only original LABOMED replacement parts may be used to service the product.
- Modifications to this instrument are not allowed. Any modification to this unit must be authorized by LABOMED; otherwise serious injury to the operator may occur.

4 MAINTENANCE, CLEANING, ACCESSORIES AND REPAIR



The flexible arm stand is absolutely maintenance-free.

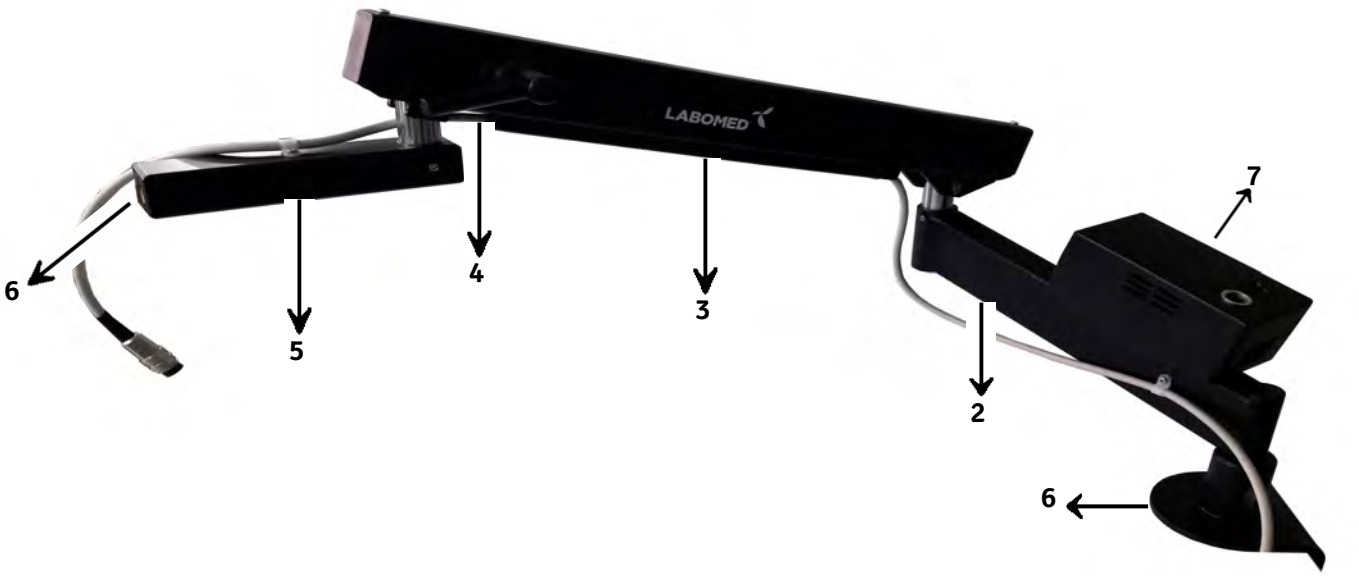
- For maintenance and repair, use only OEM spare parts.
- Remove coarse debris with a moistened disposable cloth.
- Dirt can be removed with petroleum ether or alcohol.



Do not use acetone, xylene or nitro-based thinners.

- Use only LABOMED-recommended accessories with this flexible arm stand.
- Use only original LABOMED spare parts.
- Before any repair, the power must be shut off and the power cables disconnected.

5 OVERVIEW OF LABOMED FLEXIBLE ARM STAND F 360



1. **Table clamp**
   - Tabletop thickness up to 100 mm
   - Min. space required on the table: 100 × 105 mm
2. **Rotatable arm**
   - Can be rotated 360°
   - Fixed at a 15° angle for freedom of movement around the specimen.
3. **Flexible arm**
   - Can be rotated 360°
   - Weight balance: 1.5–7 kg (factory setting 2.7 kg)
   - 470 mm height adjustment
   - Smooth guide adjustment
4. **Fastening lever for height adjustment**
5. **Horizontal arm**
6. **Connection to the focusing arm**
   - Accepts focusing arms with a standard pin diameter of 16 mm.
7. **Power supply**
   - Output: 24 V
   - Input: 100–240 V universal power supply

6 ASSEMBLY AND USE

Table clamp

Instructions for safe assembly

The table clamp is designed for tabletops up to 100 mm thick.

Before installation, make sure that the tabletop is strong enough to carry the weight. Otherwise the microscope may not function properly, the user may be injured, and the microscope or the specimen may be damaged.

Assembling the Table Clamp

1. Push the table clamp completely over the tabletop.
2. Tighten the two clamping screws (a), see Fig. 1.
3. Insert the flexible arm into the table clamp.
4. Tighten the clamping knob (c), see Fig. 2.

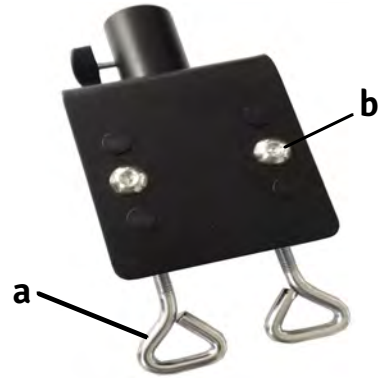


Fig. 1

Adjusting the Table Clamp

The table clamp has 6 holes (4 are covered with hole plugs) for adjustment to the table thickness. If the table clamp does not fit the thickness of the tabletop, you can adjust it by unscrewing the two screws (b), moving the loose part of the clamp as required and refitting the hole plugs. See Fig. 1.



Fig. 2

ASSEMBLY AND USE (continued)

Flexible Arm Stand and Focusing Arm

Load capacity

This flexible arm stand is designed for a load capacity of 1.5–7 kg and keeps the stereo microscope balanced without tightening the fastening lever.

You can lock the working height if necessary by tightening the fastening lever.

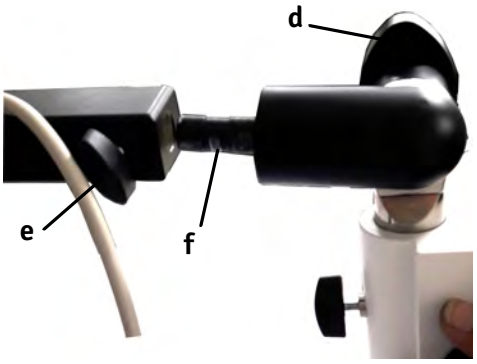


Fig. 3

Assembly

1. Unscrew the clamping knob (e) on the horizontal arm.
2. Loosen the UMS knob (d) and tilt the connecting pin (f) by 90° as shown in Fig. 3.
3. Push the connecting pin (f) in completely and tighten the knob (e) as shown in Fig. 4.



Fig. 4

Working Height Adjustment

1. Move the flexible arm to the desired height according to the object under inspection.
2. If necessary, tighten the fastening lever (h) to protect the stereo microscope from unwanted height adjustment as shown in Fig. 5.

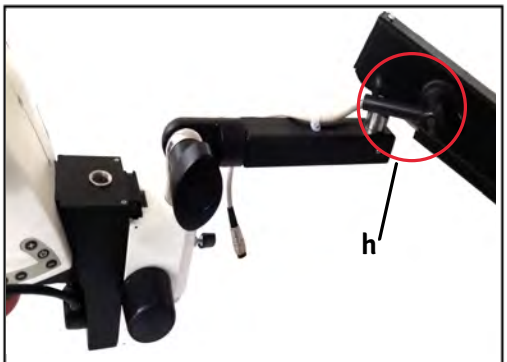


Fig. 5

7 SPRING TENSION ADJUSTMENT

Tool Requirement

- 13 mm socket wrench
  (not included in the delivery package)

Factory settings

The spring force of the flexible arm is factory-set to approx. 2.7 kg and can be adjusted by turning the screw clockwise. See Fig. 8.

Adjusting the spring force

1. Remove the socket screw (a) above the cover with a 2.5 mm Allen wrench, as shown in Fig. 6.
2. Remove the cover.
3. Unscrew the fastening lever (b) shown in Fig. 7.
4. Change the spring force with the screw inside, as shown in Fig. 8.

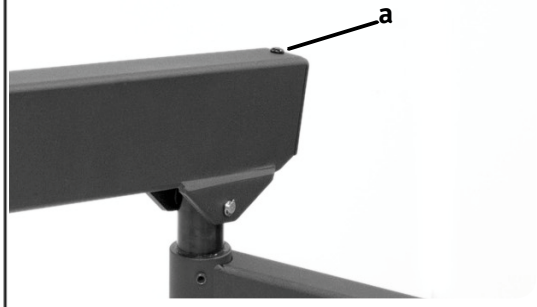


Fig. 6

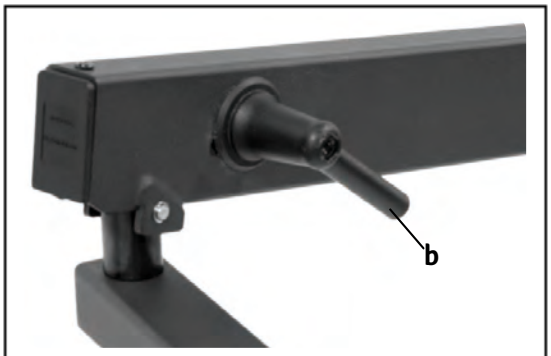
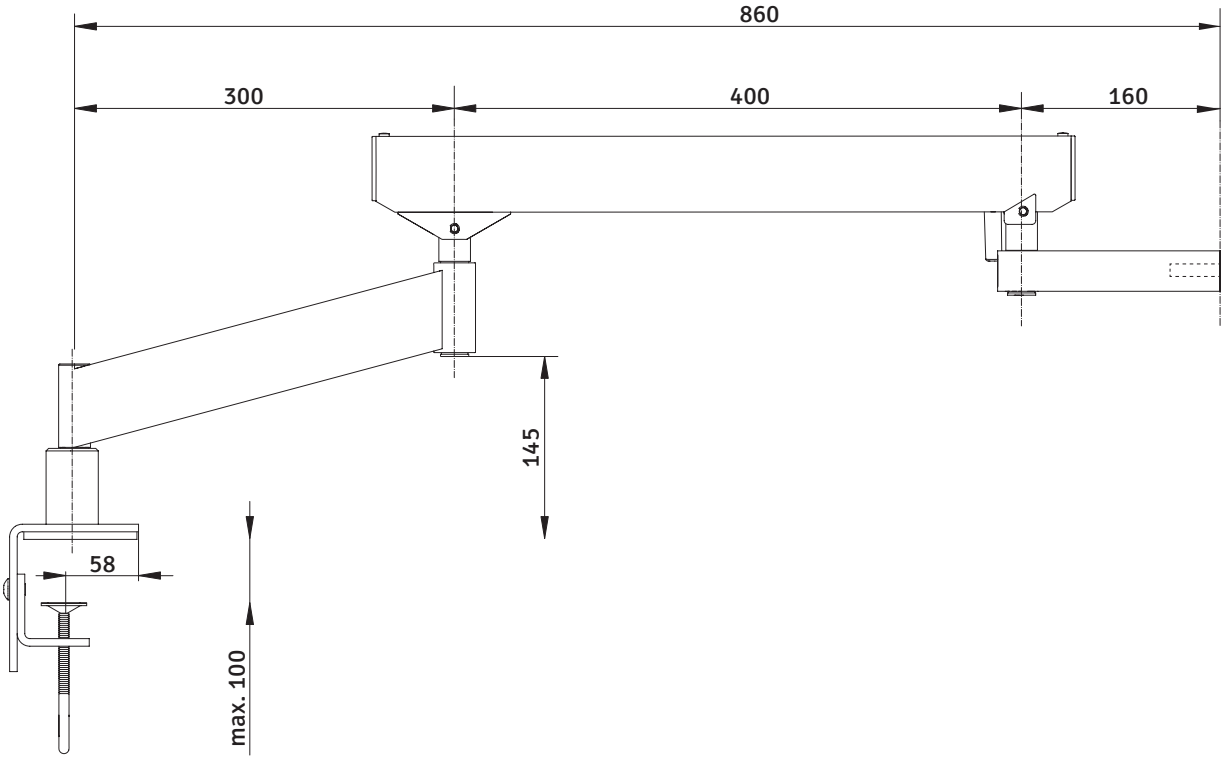


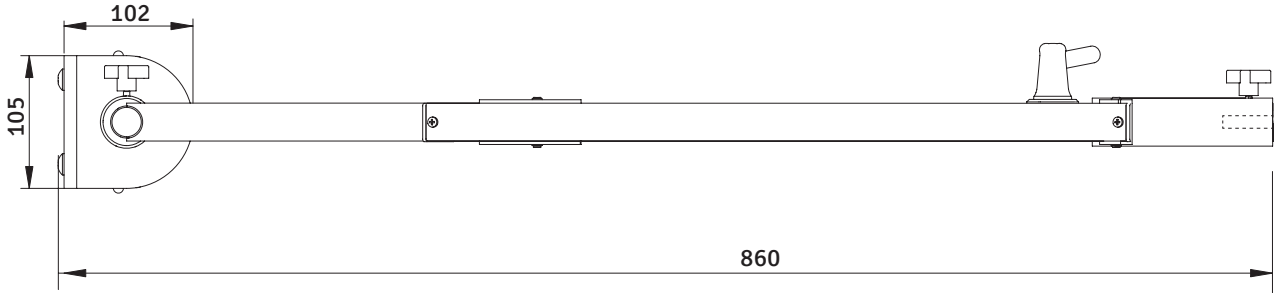
Fig. 7



Fig. 8

8 DIMENSIONS





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Our policy is one of continuous development. Labo America, Inc., reserves the right to change design and specifications without prior notice.

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