



DIGIMICRO

# Stand

**MS-12C/MS-22S/MS-32G/MS-41G/MS-51C**

**User's Manual**

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Thank you for purchasing the Nikon DIGIMICRO Stand.

Read thoroughly this user's manual before starting operation to be sure of getting optimum performance and longer service life from the unit.



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- The information contained in this manual is subject to change without notice.
- This manual has been prepared with great care. If you have any questions or comments, or find any errors, please contact your local Nikon representative.
- When you use the product in combination with peripheral devices, read the relevant user's manuals.
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About WARNING and CAUTION symbols used in the manual

Nikon products are designed with full consideration of safety. However, improper use or failure to observe precautions may result in injury or damage to property. Thoroughly read this user's manual before you use the product, and use the product appropriately. We recommend that you download or bookmark the manual so that you can refer to it whenever necessary.

This manual uses the following symbols to highlight what requires special attention for safety. Be sure to follow the instructions with those symbols.

Symbol	Description
 <b>WARNING</b>	Failure to follow the instructions may result in death or serious injury.
 <b>CAUTION</b>	Failure to follow the instructions may result in injury or property damage.



## WARNING

### 1. Purpose of Using the Product

This product is a stand designed to attach a Nikon DIGIMICRO product. Do not use the product for any purposes other than its intended use.

In addition, carefully read the user's manual and the user's manuals of DIGIMICRO products.

### 2. Do Not Disassemble or Modify

Do not disassemble or modify the product. Such actions may cause a malfunction. If you notice an abnormality, contact your local Nikon representative.

### 3. Avoid Applying Excessive Load

Do not apply excessive load on the arm of the Stand. Do not put your weight on the Stand or lift the Stand by holding only the arm.



## CAUTION

### 1. Precautions for Installation and Storage

Be careful not to get your fingers or hands pinched.

### 2. Precautions for Transportation

Because the product is heavy, carefully handle it during transportation. Be careful not to drop the Stand or get your fingers caught in the components.

## Notes on the use of the product

### Handle with care

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This product is precision equipment. Handle the product carefully to avoid shock.

### Installation

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Install the product in a stable, vibration-free place. Do not install the product near direct sunlight, in an excessively dusty environment, or in a place subject to extreme temperature change. Do not use the product in an environment that exceeds the operating temperature range (0°C to 40°C).

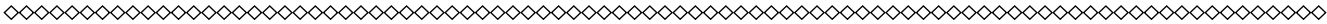
### Disposal

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When disposing of the product, follow the laws and regulations of your country or region.

# Table of Contents

About WARNING and CAUTION symbols used in the manual .....	ii
⚠ WARNING .....	iii
⚠ CAUTION .....	iii
Notes on the use of the product.....	iv



Thread parts .....	1
Surface plate .....	1
Main specifications .....	2
Dimensions.....	3
Accessories .....	4
Repair .....	4
Contact information .....	4

## Thread parts

- This product is a stand designed for use with Nikon DIGIMICRO products.
- Be sure to loosen the arm clamp screw while holding the arm. Otherwise, the DIGIMICRO Stand falls together with the arm, causing a failure.
- Whenever you use the product, make sure that the head clamp and arm clamp are securely tightened.
- Be sure to confirm that the arm touches the vertical motion nut before operating a vertical motion nut (MS-22S, MS-41G, or MS-51C). Loosen the arm clamp screw with the arm supported, turn the vertical motion nut, and move the arm up and down. After moving the arm, tighten the arm clamp screw and fix the arm again.
- The head clamp lever (MS-51C) can be turned in a free state with the interlocking with a thread part released when it is pulled toward you. The lever is fixed in the position when it is returned to the arm side. In this case, interlocking with the thread part is also returned.
- Excessive tightening causes a failure. Especially, notice that tightening the head clamp screw and head clamp lever excessively causes a failure to occur in the DIGIMICRO.
- Do not attempt to tighten the head clamp screw and lever without the DIGIMICRO installed. Failure to follow this instruction may cause damage to the stand.
- To prevent injury, be careful not to drop the stand or get your fingers caught in the components.
- The arm clamp screw, head clamp screw, and head clamp lever are equipped with spacer or washer. To prevent the spacer or washer from falling off, be careful not to excessively loosen the arm clamp screw, head clamp screw, and head clamp lever. Tightening without the spacers or washers may cause damage to the stand.

## Surface plate

- Connect the probe of the DIGIMICRO as light as possible to a surface plate. Connecting the probe strongly may cause a dent.
- The surface plate (MS-32G or MS-41G) made of gabbro is the soft crystal part in stone structure. A plane may be formed in the position slightly lower than the plane of a surface plate. Therefore, an error of 1 to 2  $\mu\text{m}$  may occur when 0 is set with the sharp-pointed probe or spherical probe connected to the plane of a surface plate. Comparison and measurement must be performed by using the plane of a block gauge as reference.
- Be sure to apply anti-rust oil to the surface plate after using a steel-made surface plate (MS-22S).
- The block gauge and anti-rust oil must be provided by the user.

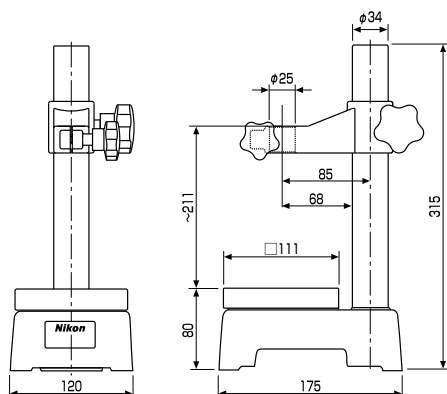
## Main specifications

	MS-12C	MS-22S	MS-32G	MS-41G	MS-51C
Compatible DIGIMICRO	MF-1001, MF-501				MH-15M
Surface plate material	Ceramics	Steel	Gabbro		Ceramics
Flatness of surface plate	0.005 mm or less	0.003 mm or less	0.002 mm or less	0.003 mm or less	0.001 mm or less
Maximum height of test object	Approx. 160 mm	Approx. 250 mm	Approx. 180 mm	Approx. 300 mm	Approx. 136 mm
Mounting hole of DIGIMICRO Stand	Ø25 mm				Ø8 mm
Weight	6 kg	18.4 kg	6 kg	36 kg	11 kg

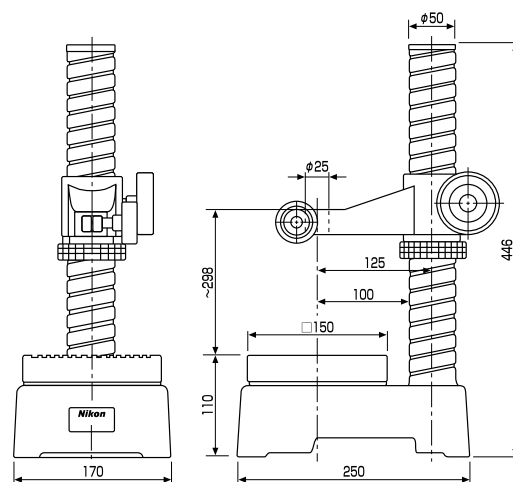


# Dimensions

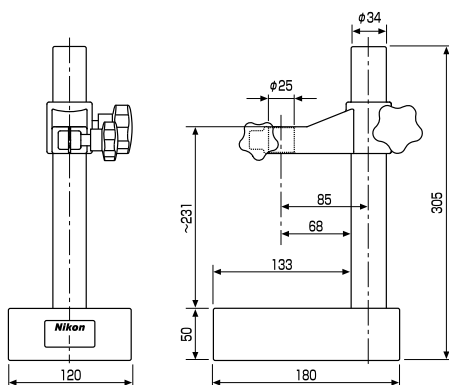
MS-12C



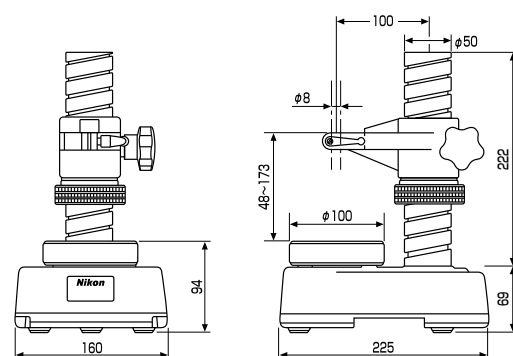
MS-22S



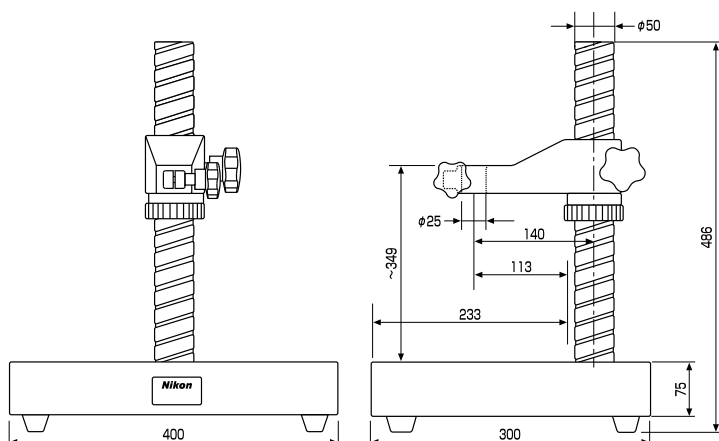
MS-32G



MS-51C



MS-41G



## Accessories

- Safety Precautions x 1
- Product warranty x 1

## Repair

If you need repair, contact your local Nikon representative.

Repairs covered by the warranty

- A natural failure occurred within the warranty period (one year after the date of purchase), and the product warranty is present.
- After repair, the same part failed in normal handling conditions within six months after the date of return from the previous repair, and the relevant documentation for the previous repair is present.

Any other cases constitute out-of-warranty repairs. Store the product warranty so that it is not lost.

For details, contact your local Nikon representative.

## Contact information

Region	Company name	Address	Phone
Japan	NIKON CORPORATION	Shinagawa Intercity Tower C, 2-15-3, Konan, Minato-ku, Tokyo 108-6290, Japan	+81-3-6433-3726
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