



**SMZ**171

FLEXIBLE STEREO MICROSCOPE SOLUTION



in standard configuration gives plenty of space for preparation work, using the impressive depth of view. The SMZ-171 stereo microscope may come as a predefined package ready for advanced demands in both routine and research fields. The flexibility of the system allows more complex setups with boom stands, external light sources and an upgrade to a complete documentation station.



#### FOR CONVENIENT AND FAST WORK IN ROUTINE AND RESEARCH

Motic's SMZ-171 is designed for demanding tasks in routine and research work. The standard eyepiece tubes with 23mm Field of View feature a 45° viewing angle for a comfortable working position. The interpupillary distance of 52-75mm can be adjusted, following individual conditions. The trinocular stand option with a fixed 50:50 light split avoids handling errors in the fast-paced work of modern labs.



### **ZOOM SYSTEM WITH STUNNING 3-D IMAGES**

The optics of the SMZ-171 are based on a Greenough system with a magnification range of 7.5 - 50X. The zoom system delivers impressive images with 5 "click-stops" for defined magnifications, a necessary precondition for reproducible measurements. Due to the parfocal optical design, a re-adjustment of the focus position is not necessary while zooming. The extended Field of View (23mm) presents a quick image overview for a fast throughput of samples.



### **ILLUMINATION**

The packages of the SMZ-171 feature diverse illuminations. The stands with integrated illumination carry 3W LEDs for both transmitted and incident light. In transmitted light stands a tilting device allows an oblique illumination. Packages without any illumination require at least an external incident light. For boom stands a cold light source is mostly necessary due to the working distance of the setup. A ring light generates a shadow-free image as the sample is illuminated from all directions. A unilateral illumination with light guides is recommended to accentuate the topographic surface of the sample.



### A HIGHLIGHT WITHIN MOTIC'S SMZ SERIES

The SMZ-171 is a powerful member of Motic's SMZ microscope line. A set of basic packages already covers a wide range of applications. An upgrade to more powerful solutions is possible by combining the SMZ-171 optics with flexible stands and external illumination. Additional eyepieces and auxiliary objectives from the SMZ family expand the basic magnification range of the SMZ-171 from 7.5X – 50X to 2.25X – 200X. For electrostatic sensitive samples, a variety of ESD stands are available.



Our MOTICAM range offers the choice between several imaging options. Besides the standard USB cameras, we offer solutions like the Moticam Full HD cameras, tablet solutions, and Wi-Fi cameras working with our free "MotiConnect" App.



#### **SMZ**171





| Model                    | <b>SMZ</b> 171- <b>BP</b>                      | <b>SMZ</b> 171- <b>TP</b> | SMZ171-BLED                                            | SMZ171-TLED |
|--------------------------|------------------------------------------------|---------------------------|--------------------------------------------------------|-------------|
| Optical System           | Greenough                                      |                           |                                                        |             |
| Observation tube         | Binocular                                      | Trinocular                | Binocular                                              | Trinocular  |
| Interpupillary distance  | 52 - 75 mm                                     |                           |                                                        |             |
| Trinocular light split   | -                                              | Fixed 50:50               | -                                                      | Fixed 50:50 |
| Inclination              | 45° inclined                                   |                           |                                                        |             |
| Eyepieces                | Widefield N-WF10X/23mm with diopter adjustment |                           |                                                        |             |
| Objectives system        | Zoom, ratio 6.7:1                              |                           |                                                        |             |
| Objectives magnification | 0.75X ~ 5X                                     |                           |                                                        |             |
| Working distance         | 110mm                                          |                           |                                                        |             |
| Stand                    | Pole type stand without illumination           |                           | Pole type stand with transmitted/incident illumination |             |
|                          |                                                |                           | & cold light input                                     |             |
| Base                     | 303x239mm                                      |                           |                                                        |             |
| Column / Arm             | Height 290mm, Ø 32mm                           |                           | Height 232mm, Ø 32mm                                   |             |
| Head holder              | For Ø 32mm column and Ø 76mm head              |                           |                                                        |             |
| Focus mechanism          | Coarse focusing system with tension adjustment |                           |                                                        |             |
| Focusing stroke          | 49mm                                           |                           |                                                        |             |
| Incident illumination    | -                                              |                           | LED 3W with intensity control                          |             |
| Transmitted illumination | -                                              |                           | LED 3W with reflector and intensity control            |             |
| Transformer              |                                                |                           | Internal                                               |             |
| Power supply             | -                                              |                           | 100-240V (CE)                                          |             |
| Accessories included     | Dust cover, black/white stage plate            |                           | Dust cover, black/white and frosted stage plates       |             |
| Dimensions               | 303x239x370mm                                  |                           | 303x239x405mm                                          |             |
| Weight                   | 5,45kg                                         | 5,7kg                     | 5,95kg                                                 | 6,2kg       |
| Contrast techniques      |                                                |                           |                                                        |             |
| Brightfield              | Yes                                            |                           |                                                        |             |
| Simple Polarization      | Optional add-on                                |                           |                                                        |             |
| Simple Darkfield         | Optional add-on                                |                           |                                                        |             |

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