

Renfert Mobiloskop 'S' Stereo Microscope (Project # 06-09) (10/07)



The Mobiloskop 'S' is an adjustable stereo microscope designed for dental laboratory use. The Mobiloskop 'S' components include the microscope head with standard or extended swivel arm, lens retainer, 10x eyepieces, protecting glass, plastic cover, operating instructions and bench top clamp. This evaluation was conducted using the 120V fiber optic cold light source.



The microscope has a swivel arm that is purported to allow it to be shared between two or more workstations. It can be switched between two magnification powers: 1 and 0.5 via the knob on the side of the microscope head. Additional magnification eyepieces of different powers (5x and 20x) can be purchased if personal preference dictates. Interpupillary distance between the oculars is adjustable for optimal field of view. The Mobiloskop purportedly has a 22 mm field of view and a working distance of 150 mm. The standard swiveling arm is 30.7" long, the extended version is 37.4" and the whole unit (excluding the light source) weighs approximately 6 lbs.

The 120V fiber optic cold light source has a four-position switch: Off and three intensity levels. The fiber optic cable locks into place into the power supply box, runs along the arm and inserts into the two holders at the microscope head. The bulb can be replaced by opening the side compartment and pulling out the 8V, 20W light bulb. The fiber optic light box is 7.9" x 5" x 4.9" (L x W x H) and weighs 3.53 lbs and is available in 120V/60Hz or 230V/50Hz. The fiber optic cord is 58" long and the unit has an 8' 4" power cord.

Manufacturer:

Renfert USA Inc.
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St.Charles, Illinois 60174
(800) 336-7422
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www.renfertusa.com

Suggested Retail Price:

\$1,368.00	Halogen
\$1,978.00	Fiber Optic
\$178.33	20X Eyepiece Ocular Pair

- Mobiloskop 'S' microscope head with Standard or Extended Swivel Arm (#2200-0802 or #2200-0602 respectively)
- Retainer Ring (#9000-30737)
- 5/10x Eyepiece oculars pair (#2200-0110)
- Protecting Glass (#3-0743)
- Table Clamp (#2200-0900)
- Connecting Cable (#20600)
- Plastic Cover
- Operating Instructions
- 120V Fiber Optic Cold Light Source (#2200-4000)—Sold separately, but used for this evaluation.

Government Price:

\$936.29 Halogen
\$1,346.04 Fiber Optic
\$150.93 20X eyepiece ocular pair
(item number and contents as listed above)

ADVANTAGES:

- + Lightweight
- + Easy to use instruction manual
- + Minimal maintenance required
- + Competitively priced (GSA contract)
- + Excellent working distance
- + Unlimited range of inclination
- + Three lighting intensities
- + Two lighting options (dual spot fiber optic, dual spot halogen bulbs)
- + Convenient handle on light box
- + Easily accessible light bulb
- + Easily shared between two or more techs if strategically placed

DISADVANTAGES:

- Swivel arm must be tightened to keep from sagging
- Swivel arm must be loosened to readjust height
- No continuous zoom adjustment; only 1X and 0.5X
- Swivel arm holder is made of plastic (could break)
- Swivel arm option only (no tabletop version)
- Swivel arm holder must be clamped to bench top, which could limit placement

SUMMARY AND CONCLUSIONS:

The Renfert Mobiloskop 'S' is a stereo microscope with a swivel arm that can be shared between two or more workstations if strategically placed. A separate table adapter or wall adapter may need to be purchased to place the microscope in the most convenient position. It has one of the best working distances of all microscopes on the market and an average field-of-view. It requires very little maintenance and is easy to set-up and use. The fiber optic light received high marks and provided adequate lighting that could be adjusted to three different intensities. The Mobiloskop comes standard with a pair of 10X eyepieces. If higher magnification is preferred, additional eyepieces or lenses must be purchased separately. It also has a zoom adjustment of 1X and 0.5X, which allows for 10X and 5X magnification with the 10X eyepieces, but no continuous zoom adjustment is possible. The Renfert Mobiloskop was recommended for use by three of four evaluators. The Renfert Mobiloskop was found to be priced competitively with other stereo microscopes used in the federal dental services. The **Renfert Mobiloskop 'S' Stereo Microscope** is rated **Acceptable** for use in US Air Force dental facilities.