

**Synopsis of Dental Laboratory Microscopes (Project 06-08) (1/07)**

Microscopes are a necessary piece of equipment in today's quality conscience dental laboratory. There are as many different and varied types of microscopes available as there are ways to use them. Deciding which microscope to purchase can be a difficult decision and there are many factors to consider before buying a new microscope. Factors such as price, available lab space, lighting needs and magnification are just a few things to keep in mind when deciding what's best for your lab. Prices for lab microscopes can vary from a few hundred dollars to a few thousand dollars. Most of the microscopes listed in this synopsis can also be purchased with different options and configurations which can increase the price from that shown in the table. One of the many options to consider before purchase is the type of stand preferred. Most manufacturers have several types of stands to choose from (see below). Magnification needs are more of a personal preference, but normally a magnification range between 10X and 20X is all that is needed for most lab procedures. There are also many lighting options to choose from (see below), ranging from single spot incandescent to fiber optic ring lights. Choosing the right light for your lab needs is another important thing to consider when choosing the right microscope.

The purpose of this synopsis is to provide information on selected laboratory microscopes giving federal service customers a starting point for researching and purchasing a laboratory microscope. The most commonly used laboratory microscopes or the most basic model from each manufacturer was selected for use in this synopsis. Additional models, if available from the manufacturer are also listed. The listing or omission of a product in this table does not imply endorsement, approval or disapproval by DECS. When reviewing the tables, please remember that the information has been provided by the manufacturers, and not necessarily confirmed by DECS evaluation.

See tables below: The dental laboratory microscopes are listed alphabetically by company.

The following are a few examples of the terms used in this synopsis:

**STAND TYPES**



Adjustable Arm



Dovetail



Pole



BoomArm



Bench Stand



Universal Stand

**LIGHTING CONFIGURATIONS**



Single Spot



Ring



Double Spot



**SYNOPSIS OF DENTAL LABORATORY MICROSCOPES\***

Product/Model	#3065 	SMP-13 	Stemi DV4 
<b>Manufacturer</b>	Accu-Scope Inc. 7 Littleworth Lane Sea Cliff, NY 11579 (516) 759-1000 (516) 674-3309 FAX <a href="http://www.accu-scope.com">www.accu-scope.com</a>	C & A Scientific Co. 7241 Gabe Court Manassas, VA 20109 (703) 330-1413 (703) 330-7510 FAX <a href="http://www.cnascientific.com">www.cnascientific.com</a>	Carl Zeiss MicroImaging One Zeiss Drive Thornwood, NY 10594 (800) 233-2343 (914) 681-7446 FAX <a href="http://www.zeiss.com/micro">www.zeiss.com/micro</a>
<b>Other Models</b>	#3067, #3050	SMZ-02, SMZ-04, SMP-24, SMP-05, SMJ Series	Stemi 2000, Stemi DV4 Spot
<b>Price (retail/govt)</b>	\$992.00/\$565.00	\$240.00/Call for price	Call for prices
<b>GSA Contract</b>	No	No	Yes
<b>Warranty</b>	5 years	5 years/1 year electrical	1 year
<b>Dimensions (inches) (H x W x D)</b>	15 x 7 x 9.75	12 x 4.5 x 7.5	13.8 x 9.1 x 11.8
<b>Magnification Range</b>	6.5X - 45X	10X/30X	8X - 32X
<b>Field of View</b>	21 mm	20 mm	25 mm
<b>Working Distance</b>	95 mm	90 mm	92 mm
<b>Viewer Type</b>	Stereo Binocular	Stereo Binocular	Stereo Binocular
<b>Range of Inclination</b>	45°	45°	0° to 90°
<b>Lighting Type</b>	Halogen and Fluorescent	Halogen Lamps	Halogen, Metal Halide
<b>Lighting Configuration Options</b>	Single spot halogen light from above and fluorescent light from below	Single spot halogen light from above and below	Ring, Single or Double spot fiberoptic
<b>Stand Options</b>	Dovetail	Pole	Boom arm, Dovetail, Pole or Universal
<b>Additional Information</b>	360° Rotatable head, 110v or 220v lighting is standard	110v lighting is standard, 220v is special order	115v or 230v lighting sold separately
<b>DECS Evaluation</b>	Not Evaluated	Not Evaluated	Not Evaluated

\*Manufacturers provided the data for these tables. The listing or omission of a product in this table does not imply endorsement, approval, or disapproval by DECS.

**SYNOPSIS OF DENTAL LABORATORY MICROSCOPES\***

Product/Model	Professional	S4 E	Achiever
			
<b>Manufacturer</b>	EZ-Scope 250 H St. PMB 633 Blaine, WA 98230 (866) 307-2673 (877) 307-2673 FAX <a href="http://www.ez-scope.com">www.ez-scope.com</a>	Leica Microsystems Inc. 2345 Waukegan Rd. Bannockburn, IL 60015 (800) 248-0123 (847) 405-0164 FAX <a href="http://www.leica.com">www.leica.com</a>	LWScientific 865 Marathon Parkway Lawrenceville, GA 30045 (770) 270-1394 (770) 270-2389 FAX <a href="http://www.lwscientific.com">www.lwscientific.com</a>
<b>Other Models</b>	Standard	S6 T, S6 and S6 E	Paragon, Vision
<b>Price (retail/govt)</b>	\$720.00/\$670.00	\$1,411.00/\$1,294.60	\$380.00/Call for price
<b>GSA Contract</b>	No	Yes	No
<b>Warranty</b>	2 years	5 years parts/2 years labor	Lifetime
<b>Dimensions (inches) (H x W x D)</b>	17.5 x 6.5 x 6.5	14.7 x 8.1 x 10.9	12.8 x 6.5 x 9
<b>Magnification Range</b>	8X	6.3X - 30X	10x/20x
<b>Field of View</b>	25.5 mm	36.5 mm	20 mm
<b>Working Distance</b>	120 mm	110 mm	90 mm
<b>Viewer Type</b>	Stereo Binocular	Stereo Binocular	Stereo Binocular
<b>Range of Inclination</b>	Unlimited	38°	45°
<b>Lighting Source</b>	Fluorescent	LED, Fluorescent	Fluorescent
<b>Lighting Configuration Options</b>	Ring	Ring, Single or Double spot fiberoptic	Single spot fluorescent light from above and below
<b>Stand Options</b>	Adjustable arm	Boom arm, Dovetail, Pole or Universal	Dovetail
<b>Additional Information</b>	16X lens available upon request, 110v lighting sold separately	120v or 230v lighting sold separately	10x/30x and 20x/40x magnification available, 110v lighting is standard, 220v available
<b>DECS Evaluation</b>	Not Evaluated	Not Evaluated	Not Evaluated

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**SYNOPSIS OF DENTAL LABORATORY MICROSCOPES\***

<b>Product/Model</b>	<b>BM-1</b> 	<b>SMZ645</b> 	<b>SZ51</b> 
<b>Manufacturer</b>	Meiji Techno America 3010 Olcott Street Santa Clara, CA 95054 (800) 832-0060 (408) 970-5054 FAX <a href="http://www.meijitechno.com">www.meijitechno.com</a>	Nikon Inc. 1300 Walt Whitman Rd Melville, NY 11747 (631) 547-8500 (631) 547-0306 FAX <a href="http://www.nikonusa.com">www.nikonusa.com</a>	Olympus America Inc. 3500 Corporate Parkway P.O. Box 610 Center Valley, PA 18034 (800) 446-5967 (484) 896-7130 FAX <a href="http://www.olympusamerica.com">www.olympusamerica.com</a>
<b>Other Models</b>	BM-2, BMK-1 & 2, EMT Series, EMF Series, EMX-1, EMZ Series, SKT Series	SMZ660	SZ61, SD, SF Series
<b>Price (retail/govt)</b>	\$599.00/\$540.00	Call for prices	\$1,419.00/\$1,263.00
<b>GSA Contract</b>	No	Yes	Yes
<b>Warranty</b>	Lifetime	5 years/1 year electrical	5 years
<b>Dimensions (inches) (H x W x D)</b>	13 x 5.5 x 13	14.5 x 11.5 x 12	12.6 x 6.3 x 7.3
<b>Magnification Range</b>	5X/10X/20X	8X - 50X	8X - 40X
<b>Field of View</b>	20 mm	27.5 mm	27.5 mm
<b>Working Distance</b>	170 mm	115 mm	110 mm
<b>Viewer Type</b>	Stereo Binocular	Stereo Binocular	Stereo Binocular
<b>Range of Inclination</b>	Unlimited	45°	45° or 60° depending on the model
<b>Lighting Type</b>	Incandescent	Halogen fiberoptic, Fluorescent	Halogen fiberoptic, LED
<b>Lighting Configuration Options</b>	Single Spot	Ring, Single or Double spot	Ring, Single or Double spot
<b>Stand Options</b>	Pole	Boom arm, Dovetail or Pole	Pole, Dovetail or Universal Pole
<b>Additional Information</b>	110v 50/60 Hz lighting is standard	115v or 230v lighting sold separately	100-120v/200-240v 50/60Hz lighting sold separately
<b>DECS Evaluation</b>	Not Evaluated	Not Evaluated	Not Evaluated

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**SYNOPSIS OF DENTAL LABORATORY MICROSCOPES\***

Product/Model	ZoomMaster 65	Mobiloskop "S"	TSZM-6
			
<b>Manufacturer</b>	Prior Scientific Inc. 80 Reservoir Park Drive Rockland, MA 02370 (781) 878-8442 (781) 878-8736 FAX <a href="http://www.prior.com">www.prior.com</a>	Renfert USA Inc. 3718 Illinois Avenue St.Charles, Il 60174 (800) 336-7422 (630) 762-9787 FAX <a href="http://www.renfert.com">www.renfert.com</a>	Titan Tool Supply Inc. 68 Comet Ave. Buffalo, NY 14216 (716) 873-9907 (716) 873-9998 FAX <a href="http://www.titantoolsupply.com">www.titantoolsupply.com</a>
<b>Other Models</b>	SM3		FX-6, FX-4, FX-3, RX-2, PS
<b>Price (retail/govt)</b>	\$1,095.00/Call for price	\$1,368.00/\$936.29 Halogen \$1,978.00/\$1,346.04 Fiber Optic	\$879.00
<b>GSA Contract</b>	No	Yes	No
<b>Warranty</b>	5 years	3 years	6 months
<b>Dimensions (inches) (H x W x D)</b>	14 x 7 x 9	8 x 4.3 x 4	12 x 5 x 7
<b>Magnification Range</b>	7X - 45X	5X/10X	7X - 160X
<b>Field of View</b>	22 mm	22 mm	27.5 mm
<b>Working Distance</b>	108 mm	150 mm	96.5 mm
<b>Viewer Type</b>	Stereo Binocular	Stereo Binocular	Stereo Binocular
<b>Range of Inclination</b>	45°	Unlimited	45°
<b>Lighting Type</b>	Fluorescent, Fiberoptic	Halogen lamps, Fiberoptic	Halogen fiberoptic
<b>Lighting Configuration Options</b>	Ring, Single or Double spot	Double spot	Ring or Double spot
<b>Stand Options</b>	Pole, Dovetail or Universal	Boom arm	Pole
<b>Additional Information</b>	115v/230v lighting sold separately	10X/20X magnification also available, 120v/60Hz or 230v/50Hz fiber optic lighting sold separately	120v/60 Hz lighting sold separately
<b>DECS Evaluation</b>	Not Evaluated	Not Evaluated	Not Evaluated

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**SYNOPSIS OF DENTAL LABORATORY MICROSCOPES\***

<b>Product/Model</b>	<b>MSZSBL</b> 	<b>Mantis Elite</b> 
<b>Manufacturer</b>	Unitron LTD. 120-C Wilbur Place Bohemia, NY 11746 (631) 589-6666 (631) 589-6975 FAX <a href="http://www.unitronusa.com">www.unitronusa.com</a>	Vision Engineering Inc. 570 Danbury Road New Milford, CT 06776 (860) 355-3776 (860) 355-0712 FAX <a href="http://www.visioneng.com">www.visioneng.com</a>
<b>Other Models</b>	M Series, MS Series and ZF Series	Compact, Macro
<b>Price (retail/govt)</b>	\$823.00/\$746.70	\$2,632.50/Call for price
<b>GSA Contract</b>	No	No
<b>Warranty</b>	5 years	1 year
<b>Dimensions (inches) (H x W x D)</b>	9.8 x 5.5 x 7.9	25.7 x 12 x 19.2
<b>Magnification Range</b>	7X - 45X	4X - 20X
<b>Field of View</b>	33 mm	34 mm
<b>Working Distance</b>	93 mm	96 mm
<b>Viewer Type</b>	Stereo Binocular	Dynascope
<b>Range of Inclination</b>	45°	5° - 20°
<b>Lighting Type</b>	Halogen	LED
<b>Lighting Configuration Options</b>	Single spot halogen light from above and below	Ring
<b>Stand Options</b>	Dovetail	Bench Stand
<b>Additional Information</b>	115v lighting is standard	110v/240v lighting is standard
<b>DECS Evaluation</b>	Not Evaluated	Not Evaluated

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