

# Finescope Price List No. 1730

By Product Category

Effective April 1, 2004

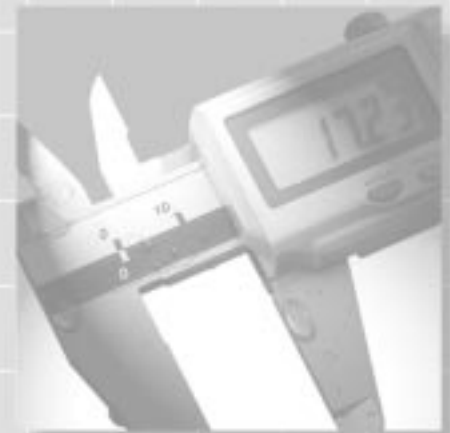
Supersedes previous

Price List No. 1482

Microscopes and Objectives

# Mitutoyo

Measuring Instruments



**To Order, Please Call Customer Service:**

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**Mitutoyo America Corporation**

[www.mitutoyo.com](http://www.mitutoyo.com)



## **VMU VIDEO MICROSCOPE UNITS FOR MACHINE VISION (BRIGHTFIELD) AND LASER CUTTING APPLICATIONS**

<b>Order No</b>		<b>Description</b>	<b>List Price</b>
378-505	VMU-V	BRIGHTFIELD, ERECT IMAGE, VERTICAL CAMERA MOUNT . . . . . Requires Objective, Fiber Optic Light Pipe & Power Supply (See Accessories)	\$ 2,865.00
378-506	VMU-H	BRIGHTFIELD, ERECT IMAGE, HORIZONTAL CAMERA MOUNT . . . . . Requires Objective, Fiber Optic Light Pipe & Power Supply (See Accessories)	\$ 3,540.00
378-507	VMU-L	BRIGHTFIELD, LASER PORT FOR 1064/532/355, ERECT IMAGE, VERTICAL CAMERA MOUNT . \$ Requires Objective, Fiber Optic Light Pipe & Power Supply (See Accessories)	4,933.00
378-508	VMU-L4	BRIGHTFIELD, LASER PORT FOR 532/266 ERECT IMAGE, VERTICAL CAMERA MOUNT . . . . \$ Requires Objective, Fiber Optic Light Pipe & Power Supply (See Accessories)	7,757.00

### **VMU ACCESSORIES**

378-020	X/Y 4" X 2" LOW POSITION RIGHT HAND STAGE FOR 378-730 . . . . .	\$ 1,564.00
378-025	X/Y TABLE 2" X 2" TRAVEL FOR 164-162 (2) DIGIMATIC DRO FOR 378-730 . . . . .	\$ 1,082.00
164-162	DIGITAL READOUT MICROMETERS-EACH:REQUIRES 2 FOR 378-025 . . . . .	\$ 698.00
378-087	VIDEO 1X ADAPTER "C" MOUNT FOR VMU-L AND L4 . . . . .	\$ 149.00
378-700A	12V/100W SCHOTT-HOYA FIBEROPTIC POWER SUPPLY AND FIBER OPTIC CABLE-6 FOOT METAL CLAD . \$	1,228.00
378-703	VIDEO 2.0X ADAPTER "C" MOUNT FOR VMU-V/L . . . . .	\$ 1,165.00
378-704	VIDEO 0.5X ADAPTER "C" MOUNT FOR VMU-V/L . . . . .	\$ 1,165.00
378-705	FOCUS BLOCK W/COARSE AND FINE (1u/TURN) ADJUSTMENT SHORT CLEARANCE . . . . .	\$ 2,152.00
378-707	MANUAL BRIGHTFIELD 4X TURRET-VMU . . . . .	\$ 934.00
378-708A	POWER BRIGHTFIELD 4X TURRET WITH CONTROLLER-VMU . . . . .	\$ 4,513.00
956990	CONTOUR ILLUMINATION (BOTTOM) FOR 378-730: REQUIRES 378-700A OR EQUIVALENT . . . . .	\$ 980.00
378-730	PLAIN STAND-TALL- USE WITH X/Y STAGES-NO FOCUS BLOCK . . . . .	\$ 1,281.00
378-731	PLAIN STAND-SHORT FOR VMU WITH OUT X/Y STAGES-NO FOCUS BLOCK . . . . .	\$ 1,226.00
378-710	POLARIZER VMU . . . . .	\$ 1,259.00
12AAB251	ND-2 NEUTRAL DENSITY 2 FILTER . . . . .	\$ 42.00
12AAB252	ND-8 NEUTRAL DENSITY 8 FILTER . . . . .	\$ 42.00
12AAB253	GIF GREEN INTERFERENCE FILTER . . . . .	\$ 84.00
12AAB254	LB80 DAYLIGHT BALANCE FILTER 80 . . . . .	\$ 42.00
50AAB310	FIBER OPTIC LIGHT PIPE ONLY WITH RIGHT ANGLE METAL BEND FS70/VMU-BLACK PLASTIC CLAD . . . \$	224.00

# Mitutoyo

## MICROSCOPES

## FS-70 SERIES

Order No	Description	List Price
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### ***FS70 STANDARD 1-2X Zoom Microscope Body-BRIGHTFIELD***

378-185-2	<b>FS70Z-S</b> BRIGHTFIELD W/ 1X-2X VARIABLE MAGNIFICATION CHANGER, ERECT IMAGE .....\$ 5,143.00 50%/50% TRINOCULAR BODY (FN=24), W/FOCUS BLOCK, F/O ILLUMINATION PORT (TOP MOUNT) REQUIRES F/O ILLUMINATOR W/ LIGHT PIPE, TURRET AND EYEPIECES (SEE ACCESSORIES)	
378-185-4	<b>FS70Z-THS</b> BRIGHTFIELD W/ 1X-2X VARIABLE MAGNIFICATION CHANGER, .....\$ 8,292.00 TILTING ERGONOMIC ERECT IMAGE 50%50% TRINOCULAR BODY (FN=24), W/FOCUS BLOCK, F/O ILLUMINATION PORT (TOP MOUNT): REQUIRES F/O ILLUMINATOR W/LIGHT PIPE (378-700A), TURRET AND EYEPIECES (SEE ACCESSORIES)	

### ***FS70-BRIGHTFIELD AND THREE LASER (1064/532/355) MICROSCOPE BODY***

378-186-2	<b>FS70L-S</b> BRIGHTFIELD & NIR, 1X TUBE LENS: SUPPORTS THREE (YAG ) LASER .....\$ 5,983.00 WAVELENGTHS:1064nm,532nm,355nm; ERECT IMAGE : SWITCHABLE EYEPIECE-LASER PORT 100/0 or 0/100 (FN=24), W/FOCUS BLOCK, SIDE F/O ILLUMINATION PORT: REQUIRES F/O ILLUMINATOR W/LIGHT PIPE, TURRET AND EYEPIECES	
378-186-4	<b>FS70L-THS</b> BRIGHTFIELD & NIR, 1X TUBE LENS:FOR THREE (YAG) LASER WAVELENGTHS: .....\$ 9,131.00 1064nm,532nm,355nm;TILTING ERGONOMIC ERECT IMAGE: SWITCHABLE EYEPIECE-LASER PORT:100/0 OR 0/100 (FN=24), W/FOCUS BLOCK, SIDE F/O ILLUMINATION PORT: REQUIRES F/O ILLUMINATOR W/LIGHT PIPE, TURRET AND EYEPIECES	

### ***FS70 BRIGHTFIELD AND ULTRA VIOLET (355/266) MICROSCOPE BODY***

378-187-2	<b>FS70L4-S</b> BRIGHTFIELD AND UV, 1X TUBE LENS:FOR 2 LASER WAVELENGTHS: .....\$ 7,295.00 532nm,266nm; ERECT IMAGE: SWITCHABLE : EYEPIECE-LASER PORT 100/0 OR 0/100 (FN=24), W/FOCUS BLOCK, SIDE F/O ILLUMINATION PORT: REQUIRES F/O ILLUMINATOR W/,LIGHT PIPE, TURRET AND EYEPIECES	
378-187-4	<b>FS70L4-THS</b> BRIGHTFIELD AND UV, 1X TUBE LENS:FOR 2 LASER WAVELENGTHS: .....\$ 10,444.00 532nm,266nm;ERECT IMAGE: SWITCHABLE: EYEPIECE-LASERPORT: 100/0 OR 0/100 TILTING ERGONOMIC TRINOCULAR (FN=24) ,W/FOCUS BLOCK, SIDE F/O ILLUMINATION PORT: REQUIRES F/O ILLUMINATOR W/, LIGHT PIPE, TURRET AND EYEPIECES	

## FS70 ACCESSORIES

Order No	Description	List Price
<b>POLARIZER / DIC SET FOR FS 70 SERIES</b>		
378-092	POLARIZER / ANALYZER FOR 378-185-2 AND 378-185-4	\$ 546.00
378-093	POLARIZER/ ANALYZER FOR 378-186-2 AND 378-186-4	\$ 546.00
378-094	POLARIZER/ ANALYZER FOR 378-187-2 AND 378-187-4	\$ 546.00
378-078	DIC WOLLASTON PRISM FOR ABOVE SETS AND BEST GENERAL USE	\$ 2,050.00
<b>EYEPIECES-FOCUSING PAIRED SET</b>		
378-856	10X WIDE FIELD FOCUSING EYEPIECES (2) FN=24 ACCEPTS 25MM DIAMETER RETICULES	\$ 654.00
218380	RUBBER EYEGUARD FOR 378-856 EACH	\$ 4.00
378-857	15X FOCUSING EYEPIECES (2) FN=16	\$ 966.00
378-858	20X FOCUSING EYEPIECES (2) FN=12	\$ 994.00
<b>EYEPIECE RETICULES: O.D.=25mm/1mm THICK</b>		
516848	90 DEGREE CROSS FULL LINES	\$ 94.50
516849	GRADUATED LINES:P=0.1/10mm	\$ 92.50
516850	GRADUATED LINES:P=0.05/5mm	\$ 92.50
516576	90 DEGREE/ 60 DEGREE/ CHAIN LINES	\$ 92.50
516577	GRADUATED LINE AND CROSS LINE P=0.1/20mm	\$ 92.50
516578	CONCENTRIC CIRCLE W/CROSS LIN P=1.2/1.2-18mm	\$ 92.50
<b>TURRETS</b>		
378-018	ADJUSTABLE CENTERABLE TURRET -4 BRIGHTFIELD OBJECTIVE POSTIONS: ONE FIXED AND 3 ADJUSTABLE POSITIONS	\$ 1,144.00
378-019	FS70 STANDARD 4 POSITION (4X) MANUAL BRIGHTFIELD TURRET: NON—ADJUSTABLE/CENTERABLE	\$ 598.00
12BAC033	ADJUSTABLE TURRET WRENCH-EXTRA	\$ 30.00
378-016A	4X MOTORIZED ADJUSTABLE TURRET - 1 FIXED+3 ADJUSTABLE BRIGHTFIELD POSITIONS: FS70 AND MF-UA SERIES	\$ 4,513.00
99MBA019A	INSTRUCTION MANUAL FOR POWER REVOLVER FS70 (MOTORIZED TURRET)	\$ 6.50
378-116A	5X MOTORIZED ADJUSTABLE TURRET FS70 BRIGHTFIELD TURRET: FS70 AND MF-UA SERIES	\$ 4,633.00
<b>MOTORIZED FOCUS ACCESSORY FOR ALL FS70 SERIES:185,186, AND 187 AND 378-062</b>		
378-061A	MANUAL RETRO-FIT: Key pad, DC power supply, Limit switches, motordrive, RS232 compatible	\$ 3,359.00
378-062	STANDARD MANUAL FOCUS BLOCK FS70 (ACCEPTS 378-061A): REPLACEMENT FOR FS60 FOCUS BLOCKS	\$ 1,784.00
<b>FIBER OPTIC ILLUMINATION</b>		
378-700A	12V/100 SCHOTT HOYA W F/O SURFACE LIGHT SOURCE, AND 6 FOOT F/O LIGHT METAL GUIDE, CE APPROVED, SPARE LAMP	\$ 1,228.00
989-103	21V/150W, 200 HOURS, QUARTZ HALOGEN POWER SUPPLY WITH 6 FOOT REMOTE INTENSITY ADJUST CONTROL	\$ 630.00
50AAB310	FIBER OPTIC LIGHT GUIDE W/90 DEGREE METAL PROTECTOR-6 FOOT	\$ 224.00
010066	21V/150W, 200 HOURS, SPARE QUARTZ HALOGEN LAMP FOR FORMER 989-103 F/O POWER SUPPLY	\$ 68.80
<b>COLOR FILTERS FOR FS 70 BODY</b>		
12AAA643	NEUTRAL DENSITY 2	\$ 42.00
12AAA644	NEUTRAL DENSITY 8	\$ 42.00
12AAA645	GREEN INTERFERENCE FILTER	\$ 73.50
12AAA646	LB 80-LIGHT BALANCING DAYLIGHT FILTER	\$ 42.00
226143	DUST PLUGS FOR FS 70 RUBBER CAP FOR ANALYZER SLOT-RECTANGULAR SHAPE	\$ 5.50
12BAB293	RUBBER CAP FOR DIC SLOT ABOVE TURRET-CURVED SHAPE	\$ 5.50
513659	DUST PLUGS-PLASTIC- FOR ALL BRIGHTFIELD TURRETS	\$ 2.80
383106	38 MM CAP FOR PHOTO TUBE-PLASTIC	\$ 1.50
938086	38 MM ALUMINUM ANODIZED CAP FOR PHOTO TUBE WITH SET SCREW	\$ 53.00

## FS70 ACCESSORIES (Continued)

Order No	Description	List Price
<b>LASER KIT TO CONVERT 378-185-2 &amp; 378-185-4 (REQUIRES REMOVAL OF VARIABLE MAGNIFICATION CHANGER)</b>		
12AAC083	LASER CONVERSION RETRO-FIT KIT TO REMODEL FS70Z-S AND FS70Z-THS TO ACCEPT THREE YAG LASER WAVELENGTHS:1064/532/355 -LIMITED STOCK (REPLACES THE 1-2X ZOOM LENS: ASSEMBLY REQUIRED)	\$ 1,889.00
<b>"C" MOUNT VIDEO/CCD ADAPTERS</b>		
378-042	1X "C" MOUNT (NO LENS) ADAPTER B	\$ 140.00
375-054	0.5X "C" MOUNT ADAPTER-USE WITH 378-042 TO INCREASE FIELD OF VIEW TO CAMERA	\$ 1,574.00
378-657	90 DEGREE "C" MOUNT ADAPTER 1X	\$ 565.00
<b>Plain Stand and Stage Accessories for FS70</b>		
378-730	PLAIN COLUMN STAND FOR FS70 SERIES	\$ 1,281.00
956990	TRANS ILLUMINATION ACC FOR 378-730 STAND: REQUIRES F/O LIGHT GUIDE AND POWER SUPPLY	\$ 980.00
319-101	2" X 2" X/Y TABLE FOR DIGITAL MICROMETERS.-Note: User must custom fixture for 378-730	\$ 1,090.00
164-162	DIGIMATIC MICROMETER -REQ 2 FOR X/Y MEASUREMENT 319-101 / 378-025	\$ 698.00
378-020	2" X 4" X/Y STAGE W/LOW POSITION RIGHT HAND CONTROL AND GLASS PLATE FOR TRANSMITTED LIGHT APPLICATIONS	\$ 1,564.00
378-025	2" X 2" X/Y TABLE W/ GLASS PLATE FOR TRANS LIGHT :REQUIRES (2)164- 162: USER MUST TAP MOUNTING HOLES IN 378-730 STAND	\$ 1,082.00
<b>FS70 Miscellaneous Accessories</b>		
99MBA014A1	FS 70 MICROSCOPE MANUAL	\$ 12.50
99MBA022B	MANUAL FOR ADJUSTABLE REVOLVER 378-018 FOR FS70	\$ 12.50
12BAC033	WRENCH FOR ADJUSTABLE REVOLVER 378-018 FOR FS70	\$ 30.00
99MBA016A	MANUAL FOR POWER FOCUS UNIT FOR FS70	\$ 12.50
538613	ALLEN KEY 1.5mm TO FIX ADJUSTABLE REVOLVER TO FS70 BODY	\$ 0.70
378-062	FOCUS BLOCK FS/60/FS70- SPECIAL ORDER- NON STOCK	\$ 1,784.00
<b>FS60 ACCESSORIES AND REPLACEMENT PARTS</b>		
4627GB	FS 60 USER MANUAL-CALL FOR AVAILABILITY-LIMITED STOCK	\$ 12.50
956529	FS60 YAG ADAPTER-LIMITED STOCK-SPECIAL ORDER	\$ 892.00
378-070	POLARIZER UNIT FOR (DISCONTINUED) FS60-limited stock	\$ 1,051.00
378-091	TILTING TRINOCULAR BODY FOR FS60-LIMITED STOCK-SPECIAL ORDER	\$ 7,862.00
563547	REPLACEMENT DETENT SPRING FOR FS60/SF110 NOSEPIECE/TURRET	\$ 17.00
971857	FS60 ADJUSTABLE TURRET -SPECIAL ORDER NON STOCK	\$ 798.00
939081	6V/20W TRANSFORMER	\$ 182.00
939444	12V/50W TRANSFORMER	\$ 394.00
218380	RUBBER EYE GUARD FOR 378-856 EYEPIECES -ONE UNIT EACH	\$ 4.00
519349	PINION GEAR ASSEMBLY FOR FS60 FOCUS BLOCK-LIMITED STOCK (ORDER WITH 970706)	\$ 89.00
970706	SECOND (FINE FOCUS GEAR FOR 519349) GEAR FOR FS60 FOCUS BLOCK-LIMITED STOCK	\$ 111.00

NOTE: ALL FINESCOPE FS 70 BODIES INCLUDE STANDARD MANUAL MITUTOYO FOCUS BLOCK:  
PLEASE SELECT BODY TUBE TYPE, EYEPIECES, TURRET, ILLUMINATION AND OBJECTIVES FROM ACCESSORIES LISTING

# Mitutoyo

## MICROSCOPES

## FS 110 SERIES

Order No	Description	List Price
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### FS110 STAND:

378-121A	FS 110T TRANSMITTED AND REFLECTED LIGHT STAND TO ACCEPT 6X6 OR 8X8 X/Y STAGE	\$ 5,140.00
378-122A	FS 110 REFLECTED LIGHT STAND TO ACCEPT 6X6 OR 8X8 X/Y STAGE	\$ 4,110.00

### TRINOCULAR BODY TUBES:

378-001	FS 110 ULWD ERECT IMAGE TRINO BODY TUBE W/ 1X /2X MAG FN=30 REQUIRES 378-851 ULTRA WIDE EYEPIECES FN=30	\$ 3,502.00
378-003	FS 110 ERECT IMAGE TRINOCULAR BODY TUBE 1X WITH OPTICAL PATH SLIDER 100%/80%/100% FN=24	\$ 3,255.00
378-004	FS 110 TRINOCULAR BODY TUBE,1X INVERTED IMAGE FIXED PRISM 100%/100% FN=24	\$ 2,070.00

### EYEPIECES

378-851	10X ULTRA WIDE FIELD FOCUSING EYEPIECES (2) FN=30 FOR #378-001 ULTRA WIDE TRINOCULAR BODY ONLY :FN=30	\$ 701.00
378-856	10X WIDE FIELD FOCUSING EYEPIECES (2) FN=24 FOR 378-003,328-004 AND 378-241 TRINOCULAR BODIES	\$ 654.00
378-857	15X WIDE FIELD FOCUSING EYEPIECES (2) FN=16 FOR 378-003 ,328-004 AND 378-241TRINOCULAR BODIES	\$ 966.00
378-858	20X WIDE FIELD FOCUSING EYEPIECES (2) FN=12 FOR 378-003, 328-004 AND 378-241 TRINOCULAR BODIES	\$ 994.00

### EYEPIECE RETICULES: 25mm DIAMETER 1.0mm THICK

516848	91 DEGREE CROSS FULL LINES	\$ 94.50
516849	GRADUATED LINES:P=0.1/10mm	\$ 92.50
516850	GRADUATED LINES:P=0.05/5mm	\$ 92.50
516851	GRIDS 1mm/10mm	\$ 92.50
516576	91 DEGREE/ 60 DEGREE/ CHAIN LINES	\$ 92.50
516577	GRADUATED LINE AND CROSS LINE P=0.1/20mm	\$ 92.50
516578	CONCENTRIC CIRCLES W/CROSSLINE p-1.2/1.2/18mm	\$ 92.50

### EPI-ILLUMINATION ACCESSORY FOR BRIGHTFIELD AND DARKFIELD: TRANSMITTED AND REFLECTED LIGHT

378-031	REFLECTED BRIGHTFIELD/DARKFIELD EPI- ILLUMINATOR-REQUIRES 378-075 DF SLIDER IF USED FOR DARKFIELD ILLUMINATION	\$ 1,638.00
378-032	REFLECTED BRIGHTFIELD ONLY EPI- ILLUMINATOR	\$ 1,566.00
955384	DIFFUSER FILTER FOR FS110 REFLECTED LIGHT ACCESSORY 378-031	\$ 48.50
378-075	DARKFIELD SLIDER FOR 378-031	\$ 146.00
378-085	12V/50W QH LAMPHOUSE/SOCKET AND BULB-REFLECTED LIGHT	\$ 353.00
970807	12V/100W LAMPHOUSE AND SOCKET FOR DARKFIELD ,POLARIZED LIGHT AND DIC APPLICATIONS	\$ 947.00
378-659	12V /100W TRANSFORMER FOR 97087	

### FILTERS

938901	DIFFUSION FILTER FOR 2X OBJECTIVE-REFLECTED LIGHT 378-085 LAMPHOUSE	\$ 65.00
938902	DAYLIGHT BALANCING FILTER LB 60	\$ 56.00
938903	NEUTRAL DENSITY FILTER ND 2	\$ 56.00
938904	NEUTRAL DENSITY FILTER ND 8	\$ 56.00
938905	GREEN INTERFERENCE FILTER GIF	\$ 66.00
955384	DARKFIELD DIFFUSION FILTER FOR TRANSMITTED ILLUMINATION	\$ 49.50

## FS 110 SERIES (Continued)

Order No	Description	List Price
<b>"C" MOUNT VIDEO ADAPTERS</b>		
378-041	1X "C" MOUNT (NO LENS) ADAPTER A FOR FS110	\$ 140.00
375-054	0.5X "C" MOUNT-USE W/378-041 OR 378-042	\$ 1,574.00
378-657	90 DEGREE "C" MOUNT ADAPTER 1X	\$ 565.00
<b>STAGES</b>		
378-021	6 X 6 INCH RIGHT HAND X/Y STAGE-TRANSMITTED W/O GLASS PLATE #514024	\$ 2,276.00
378-023	8 X 8 INCH RIGHT HAND X/Y STAGE-TRANSMITTED W/O GLASS PLATE #514025	\$ 3,801.00
514024	6 X 6 INCH GLASS PLATE INSERT FOR 378-021	\$ 131.50
514025	8 X 8 INCH GLASS PLATE INSERT FOR 378-021	\$ 152.50
378-051	6 INCH WAFER HOLDER FOR 378-021	\$ 268.00
378-055	3 INCH MASK HOLDER FOR 378-021	\$ 308.00
378-056	4 INCH MASK HOLDER FOR 378-021	\$ 308.00
378-057	5 INCH MASK HOLDER FOR 378-021	\$ 308.00
378-058	6 INCH MASK HOLDER FOR 378-021	\$ 314.00
378-059	7 INCH MASK HOLDER FOR 378-022	\$ 314.00
<b>NOSEPIECES FS110</b>		
378-012	4X REVOLVER HORIZONTAL STYLE (FS100/110 SERIES) FOR BRIGHTFIELD OBJECTIVES ONLY-SPECIAL ORDER NON-STOCK	\$ 300.00
378-013	4X NOSEPIECE FOR BRIGHTFIELD/DARKFIELD OBJECTIVES ONLY FS110-FORWARD FACING OBJECTIVE STYLE	\$ 572.00
378-026-1	REDUCTION INSERT FOR BF/DF NOSEPIECE: FOR USING BRIGHTFIELD OBJECTIVES IN DARKFIELD TURRET (378-013 AND 176-211)	\$ 113.00
378-014	4X BRIGHTFIELD NOSEPIECE (TURRET REVOLVER)- FORWARD FACING OBJECTIVE MOUNTS FS110	\$ 442.00
378-015	5X BRIGHTFIELD NOSEPIECE (TURRET/REVOLVER)-FORWARD FACING OBJECTIVE MOUNTS FS110	\$ 442.00
<b>DIC ACCESSORIES</b>		
378-074	POLARIZER /ANALYZER UNIT-REQUIRED FOR DIC PRISMS	\$ 496.00
378-076	DIC UNIT- ROTATABLE WOLLASTON PRISM F/100X/ SL80X/ SL50X	\$ 2,050.00
378-078	DIC UNIT- ROTATABLE WOLLASTON PRISM F/50X/ SL20X: BEST FOR GENERAL USE	\$ 2,050.00
378-079	DIC UNIT- ROTATABLE WOLLASTON PRISM F/20X	\$ 2,050.00
378-080	DIC UNIT- ROTATABLE WOLLASTON PRISM F/5X / 10X	\$ 2,050.00
<b>BULBS</b>		
513666	6V/20W QUARTZ HALOGEN BULB	\$ 34.00
513667	12V/50W QUARTZ HALOGEN BULB	\$ 38.00
<b>REPLACEMENT PARTS FS60/FS110</b>		
937885	POWER CIRCUIT BOARD FOR FS110 ( MP-81002)	\$ 445.00
218380	RUBBER EYEGUARD FOR FN=24 EYEPIECES (10X)	\$ 4.00
513659	PLASTIC NOSE PIECE PLUGS FOR BF OBJECTIVES	\$ 2.50
513665	VINYL COVER FOR FS50,60,70 AND FS110	\$ 31.50
1304-0005	REPLACEMENT CERAMIC SOCKET FOR 12V/50W FS110 #378-085	\$ 21.00
357559	REPLACEMENT CERAMIC SOCKET FOR 6V/20W FS110 IN BASE ILLUMINATOR	\$ 23.00
956413	FOURTH GEAR ASSEMBLY FS110 NON-STOCK SPECIAL ORDER	\$ 1,407.00
970704	MAIN PINION GEAR FS60/FS110	\$ 136.50
970705	GEAR ASSEMBLY FS60/FS110	\$ 106.00
970706	SECOND GEAR FOR FS 60 BLOCK FS60/FS110	\$ 111.00
970707	THIRD GEAR ASSEMBLY FS60 FOCUS BLOCK/FS110	\$ 83.50
518896	PINION SHAFT FS60/FS110	\$ 67.00
513465	DETENT SPRING FOR TURRETS 378-013,378-014 AND 378-015	\$ 7.00
971857	FS60 ADJUSTABLE TURRET-SPECIAL ORDER-NON STOCK	\$ 798.00
956529	YAG ADAPTER FOR FS60-LIMITED STOCK-SPECIAL ORDER	\$ 892.00
4400	INSTRUCTION MANUAL FOR FS110-CALL FOR AVAILABILITY	\$ 12.50

## MICROSCOPES

## FS SERIES 300 MITUTOYO 12 INCH WAFER INSPECTION MICROSCOPE

Order No	Description	List Price
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**BASIC UNIT**

378-327A	FS300DT2 FOR REFLECTED BRIGHTFIELD/DARKFIELD . . . . . \$ 28,737.00 AND TRANSMITTED BRIGHTFIELD LIGHT TECHNIQUES W/ ERGONOMIC TILTING TRINOCULAR BODY (FN=24), 12V/100W QUARTZ HALOGEN EPI-ILUMINATION, 12V/100W FIBER OPTIC TRANS-ILLUMINATION, 10X EYEPIECES, 12" x 14" X/Y STAGE WITH QUICK RELEASE CLUTCH, AND 4X BF/DF MOTORIZED NOSEPIECE,DUST COVER, & POWER CORD	
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**NOTE: THE BASIC UNIT PART NUMBER 378-327A, CONSISTS OF THE FOLLOWING:**

378-241 TILTING TRINOCULAR TUBE 100/100%  
 378-856 10 X WIDEFIELD FOCUSING EYEPIECES -PAIR FN=24  
 378-333A MAIN BODY W/BF/DKFD 12V/100W QH EPI- ILLUMINATOR,POWER NOSEPIECE,  
 F/O TRANS ILLUMATOR 12V/100  
 378-248 12V/100W LAMPHOUSE/SOCKET-FOR REFLECTED LIGHT  
 378-251 MOTORIZED 4 PLACE DARKFIELD /BRIGHTFIELD NOSEPIECE  
 378-344 12" X 14" INCH X/Y STAGE W/CLUTCH W/O STAGE GLASS  
 378-700A 100W QH FIBER OPTIC TRANSMITTED LIGHT SOURCE W/  
 FIBER OPTIC CABLE WITH 90 DEGREE METAL  
 PROTECTIVE BEND TO MICROSCOPE BODY  
 517181 12V/100W QUARTZ HALOGEN LAMP-200 HRS

**FS300 ACCESSORIES LIST:**

378-241	TILTING TRINOCUALR BODY TUBE . . . . . \$ 4,841.00	
378-333A	FS300 MAIN BODY W/O STAGE, W/O EYEPC, W/O TRINO . . . . . \$ 18,334.00 BODY ; W/O TOP OR BOTTOM ILLUM; WITH MOTORIZED NOSEPIECE	
378-700A	FIBER OPTIC 12V/100W BOTTOM ILLUMINATION . . . . . \$ 1,228.00	
378-856	WIDEFIELD 10X FOCUSING EYEPIECES FN=24 . . . . . \$ 681.00	
378-344	X/Y STAGE 12" X 14' FOR FS300 . . . . . \$ 7,004.00	
378-248	12V/100W QH LAMPHOUSE AND SOCKET . . . . . .QUOTE	
378-251	MOTORIZED 4 PLACE NOSEPIECE FS300 ONLY . . . . . .QUOTE	

## FS300 ACCESSORIES

Order No	Description	List Price
<b>EYEPIECES</b>		
378-856	10X WIDEFIELD FOCUSING EYEPIECES FN=24	\$ 654.00
378-857	15X EYEPIECES FOCUSING FN=16	\$ 966.00
378-858	20X EYEPIECES FOCUSING FN=12	\$ 994.00
<b>FILTERS AND REPLACEMENT BULBS</b>		
378-255	NEUTRAL DENSITY 2 ND2 FILTER	\$ 113.00
378-256	NEUTRAL DENSITY 8 ND8 FILTER	\$ 113.00
378-257	DAYLIGHT BALANCE FILTER LB80	\$ 144.00
378-258	GREEN INTERFERENCE FILTER GIF	\$ 144.00
517181	12V/100W QUARTZ HALOGEN BULB-REFLECTED LIGHT	\$ 72.50
<b>STAGE ACCESSORIES</b>		
378-362	MASK/WAFER HOLDER WITH INSERT F/12" WAFER	\$ 1,597.00
378-363	GLASS INSERT FOR 14" STAGE	\$ 299.00
<b>BREATH SHIELD</b>		
378-260	BREATH SHIELD	\$ 361.00
<b>VIDEO CAMERA ADAPTER</b>		
378-054	0.5X VIDEO CAMERA ADAPTER USED WITH 378-042	\$ 1,574.00
378-042	1X VIDEO CAMERA ADAPTER B -NO LENS	\$ 140.00
<b>DIFFERENTIAL INTERFERENCE CONTRAST EQUIPMENT-DIC</b>		
378-076	WOLLASTON PRISM FOR M/G PLAN APO 100X,M PLAN APO SL80X, AND SL 50X OBJECTIVE	\$ 2,050.00
378-078	WOLLASTON PRISM FOR M/G PLAN APO 50X,M PLAN APO SL20X NOTE; BEST FOR GENERAL USE	\$ 2,050.00
378-079	WOLLASTON PRISM FOR M/G PLAN APO 20X	\$ 2,050.00
378-080	WOLLASTON PRISM FOR M/G PLAN APO 10X,5X	\$ 2,050.00
378-259	POLARIZING UNIT-REQUIRED FOR DIC TECHNIQUES	\$ 1,133.00
<b>REDUCTION ADAPTER TO USE BRIGHTFIELD OBJECTIVES ON DARKFIELD FS300/FS110 TURRET</b>		
378-026-1	REDUCTION RING INSERT FOR BRIGHTFIELD OBJECTIVES TO DARKFIELD TURRETS (NOSEPIECES)	\$ 113.00
<b>OBJECTIVES</b>		
PLEASE SELECT FINESCOPE OBJECTIVES FROM OBJECTIVE PRICE LIST		

## 40:1 MOTORIZED ZOOM VIDEO MICROSCOPE SYSTEMS VMZ-40 SERIES FOR BRIGHTFIELD AND LASER APPLICATIONS

Order No	Description	List Price
<b>VMZ40 MANUAL ZOOM VIDEO MICROSCOPE FOR NEAR-INFRARED, VISIBLE, NEAR ULTRA-VIOLET ILLUMINATION, ACCEPTS TWO OBJECTIVES</b>		
378-171A	VMZ40M-VIDEO 40:1 MANUAL ZOOM FOCUS, W/21V/150W F/O ILLUM W/SELECTABLE PRE-SETS, RS232 COMPATIBLE, W/O BINOCULAR, "C" VIDEO MOUNT, 10X HR (NA=0.42) MPLAN APO TWO POSITION OBJECTIVE, OBJECTIVE SLIDER HOLDER, BRIGHTFIELD, ERECT IMAGE TO VIDEO PORT, W/O STAND	\$ 18,375.00
378-182A	VMZ40R-BL4 VIDEO ZOOM 40:1 MOTORIZED ZOOM WITH BINOCULAR.WI/ 10X WF FOCUSING EYEPIECES, TWO POSITION OBJECTIVE" SLIDER HOLDER, W/ 10X HR (NA=0.42) M PLAN APO OBJECTIVE, BRIGHTFIELD,ERECT IMAGE, FOR VISIBLE AND ULTRA-VIOLET 535nm /266nm, W/O STAND, WITH LASER PORT, 21V/150W F/O ILLUM, W/SELECTABLE PRE-SETS,RS232 COMPATIBLE, W/O STAND	\$ 37,080.00
378-178A	VMZ 40 R-BL FOR 1064/532/355 LASER APPLICATIONS ,VIDEO ZM 40:1 MOTOR ZOOM W/BINOCULAR, W/ HR 10X M PLAN APO OBJECTIVE, TWO POSITION OBJECTIVE SLIDER HOLDER, W/10X EYEPIECES, W/PORT FOR YAG LASER, BRIGHTFIELD, ERECT IMAGE, 21V/150W F/O ILLUMINATOR W/SELECTABLE PRE-SETS,RS232 COMPATIBLE, W/O STAND	\$ 27,814.00

## OBJECTIVES

## FINESCOPE

Order No	Description			List Price
<b>M PLAN APOCHROMAT BRIGHTFIELD OBJECTIVES</b>				
378-800	M PLAN APO	1X NA 0.025	WD 11.0mm (WITH 1/4 WAVE PLATE FOR GLARE REDUCTION)	\$. 1,858.00
378-801	M PLAN APO	2X NA 0.055	WD 34.0mm	\$. 712.00
378-802-2	M PLAN APO	5X NA 0.14	WD 34.0mm	\$. 532.00
378-803-2	M PLAN APO	10X NA 0.28	WD 33.5mm	\$. 668.00
378-804-2	M PLAN APO	20X NA 0.42	WD 20.0mm	\$. 1,564.00
378-805-2	M PLAN APO	50X NA 0.55	WD 13.0mm	\$. 2,047.00
378-806-3	M PLAN APO	100X NA 0.70	WD 6.0mm	\$. 2,656.00
<b>M PLAN APOCHROMAT BRIGHTFIELD SUPER LONG (SL) WORKING DISTANCE OBJECTIVES</b>				
378-810-3	M PLAN APO SL	20X NA 0.28	WD 30.5mm	\$. 2,362.00
378-811-3	M PLAN APO SL	50X NA 0.42	WD 20.5mm	\$. 2,572.00
378-812-3	M PLAN APO SL	80X NA 0.50	WD 15.0mm	\$. 3,065.00
378-813-3	M PLAN APO SL	100X NA 0.55	WD 13.0mm	\$. 3,652.00
378-816-3	M PLAN APO SL	200X NA 0.62	WD 13.0mm	\$. 8,533.00
<b>M PLAN APOCHROMAT HIGH RESOLUTION BRIGHTFIELD OBJECTIVES</b>				
378-788-4	M PLAN APO HR	10X NA 0.42	WD 15.0 mm	\$. 6,195.00
378-814-4	M PLAN APO HR	50X NA 0.75,	WD 5.2mm	\$. 4,356.00
378-815-4	M PLAN APO HR	100X NA 0.90,	WD 1.3mm	\$. 4,672.50
<b>G PLAN APOCHROMAT OBJECTIVES WITH COVERSLIP CORRECTIONS 3.5mm AND 5.0mm</b>				
378-847	G PLAN APO BF	20X NA 0.28,	WD 29.42mm T=3.5mm	\$. 3,243.00
Call for Price	G PLAN APO BF	20X NA 0.28,	WD T=5.0mm	SPECIAL ORDER QUOTE
Call for Price	G PLAN APO BF	20X NA 0.28,	T=1.0mm	SPECIAL ORDER QUOTE
378-848-3	G PLAN APO BF	50X NA 0.50,	WD 13.89mm T=3.5mm	\$. 3,307.00
Call for Price	G PLAN APO BF	50X NA 0.50,	T=5.0mm	SPECIAL ORDER QUOTE
<b>M PLAN APOCHROMAT NIR OBJECTIVES</b>				
378-822-4	M PLAN NIR BF	5X NA 0.14,	WD 37.5mm	\$. 1,218.00
378-823-5	M PLAN NIR BF	10X NA 0.26,	WD 30.5mm	\$. 1,406.00
378-824-4	M PLAN NIR BF	20X NA 0.40,	WD 20.0mm	\$. 2,509.00
378-825-5	M PLAN NIR BF	50X NA 0.42,	WD 17.0mm	\$. 3,075.00
378-826-5	M PLAN NIR BF	100X NA 0.50,	WD 12.0mm	\$. 4,072.00
<b>HIGH RESOLUTION NIR M PLAN APOCHROMATS</b>				
378-863-5	M PLAN NIR HR BF	50X NA 0.65,	WD 10.0mm	\$. 6,822.00
378-864-5	M PLAN NIR HR BF	100X NA 0.75,	WD 10.0mm	\$. 8,187.00
<b>LIQUID CRYSTAL DISPLAY LCD M PLAN APOCHROMATS FOR LCD REPAIR</b>				
378-827-4	LCD PLAN NIR BF	20X NA 0.40,	WD 19.98mm T=1.1mm	\$. 3,486.00
378-828-5	LCD PLAN NIR BF	50X NA 0.42,	WD 17.13mm T=1.1mm	\$. 3,936.00
378-829-5	LCD PLAN NIR BF	50X NA 0.42,	WD 17.26mm T=0.7mm	\$. 4,441.00
<b>M PLAN APOCHROMAT NUV OBJECTIVES AND LCD PLAN APOCHROMAT OBJECTIVES</b>				
378-817-4	M PLAN NUV BF	20X NA 0.40,	WD 17.0mm	\$. 4,838.00
378-818-4	M PLAN NUV BF	50X NA 0.42,	WD 15.0mm	\$. 4,720.00
378-819-4	M PLAN NUV BF	100X NA 0.50,	WD 11.0mm	\$. 6,371.00
378-820-4	LCD PLAN NUV BF	50X NA 0.42,	WD 14.76mm	\$. 7,295.00
<b>M PLAN ACHROMAT UV OBJECTIVES FOR 266nm AND BRIGHTFIELD</b>				
378-837-5	M PLAN UV BF	20X NA 0.36,	WD 15.0mm	\$. 12,810.00
378-838-5	M PLAN UV BF	50X NA 0.42,	WD 12.0mm	\$. 13,125.00
378-839-5	M PLAN UV BF	80X NA 0.55,	WD 10.0mm	\$. 17,850.00

## **BRIGHTFIELD DARKFIELD (BD) OBJECTIVE LENSES:**

### **BRIGHTFIELD DARKFIELD (BD) M PLAN APOCHROMATS**

378-831-4	BD M PLAN APO	2X, N.A. 0.055,	WD 34.0mm	.....\$	753.00
378-832-4	BD M PLAN APO	5X, N.A. 0.14,	WD 34.0mm	.....\$	688.00
378-833-4	BD M PLAN APO	10X, N.A. 0.28,	WD 33.5mm	.....\$	844.00
378-834-4	BD M PLAN APO	20X, N.A. 0.42,	WD 20.0mm	.....\$	1,879.00
378-835-4	BD M PLAN APO	50X, N.A. 0.55,	WD 13.0mm	.....\$	2,529.00
378-836-3	BD M PLAN APO	100X, N.A. 0.70,	WD 6.0mm	.....\$	2,917.00

### **BRIGHTFIELD DARKFIELD (BD) HIGH RESOLUTION M PLAN APOCHROMATS**

378-845	BD M PLAN APO	50X, N.A. 0.75,	WD 5.2mm	.....\$	4,713.00
378-846	BD M PLAN APO	100X, N.A. 0.90,	WD 1.3mm	.....\$	5,059.00

### **BRIGHTFIELD DARKFIELD (BD) SUPER LONG (SL) WORKING DISTANCE M PLAN APOCHROMATS**

378-840-5	BD M PLAN APO	SL 20X, N.A. 0.28,	WD 30.5mm	.....\$	2,530.00
378-841-5	BD M PLAN APO	SL 50X, N.A. 0.42,	WD 20.5mm	.....\$	2,667.00
378-842-5	BD M PLAN APO	SL 80X, N.A. 0.50,	WD 15.0mm	.....\$	3,245.00
378-843-5	BD M PLAN APO	SL 100X, N.A. 0.55,	WD 13.0mm	.....\$	3,832.00

### **OBJECTIVE ADAPTER TO MOUNT BRIGHTFIELD OBJECTIVES TO DARKFIELD TURRETS**

378-026-1	RING ADAPTER FOR MITUTOYO M PLAN AND M PLAN APOCHROMAT BRIGHTFIELD OBJECTIVES TO . . . \$	113.00
	MOUNT ON MITUTOYO DARKFIELD TURRETS 378-013/176-211	
	(FS110, FS300, & MF-UATHD TOOLMAKERS SERIES)	

### **STANDARD OBJECTIVES FOR FINITY (MF/MFA SERIES ONLY)**

375-036	1X	.....\$	1,380.00
375-037	3X	.....\$	825.00
375-034	5X	.....\$	711.00
375-035	10X	.....\$	711.00
375-051	20X	.....\$	1,860.00
375-052	50X	.....\$	2,490.00
375-053	100X	.....\$	3,320.00

### **COMPACT OBJECTIVES FOR FINITY (MF/MFA SERIES ONLY)**

375-031	1X	.....\$	345.00
375-032	2X	.....\$	345.00
375-033	3X	.....\$	350.00
375-038	1X - 5X ZOOM	.....\$	2,100.00

### **EYEPIECES**

378-851	10X ULTRA WIDE FIELD FOCUSING EYEPIECES (2) FN=30 FOR#378-001 ONLY	.....\$	701.00
378-856	10X WIDE FIELD FOCUSING EYEPIECES (2) FN=25 FOR 378-004 AND 378-003 (378-003 NOT SHOWN IN 2004 CATALOG)	.....\$	681.00
378-857	15X FOCUSING EYEPIECES (2) FOR 378-004 AND 378-003	.....\$	1,186.00
378-858	20X FOCUSING EYEPIECES (2) FOR 378-004 AND 378-003	.....\$	1,249.00

### **EYEPIECE RETICULES : 25mm DIAMETER 1.0mm THICK**

516848	91 DEGREE CROSS FULL LINES	.....\$	94.50
516849	GRADUATED LINES:P=0.1/10mm	.....\$	92.50
516850	GRADUATED LINES:P=0.05/5mm	.....\$	92.50
516851	GRIDS 1mm/10mm	.....\$	92.50
516576	91 DEGREE/ 60 DEGREE/ CHAIN LINES	.....\$	92.50
516577	GRADUATED LINE AND CROSS LINE P=0.1/20mm	.....\$	92.50
516578	CONCENTRIC CIRCLES W/CROSSLINE p-1.2/1.2/18mm	.....\$	92.50

### **TUBE LENS FOR CUSTOM APPLICATIONS WITH M PLAN AND M PLAN APOCHROMAT OBJECTIVES**

970208	MT-1 FOR USE IN THE VISIBLE WAVELENGTH RANGE -1X FOCAL LENGTH 200mm	.....\$	539.00
970209	MT-2 FOR USE IN THE VISIBLE WAVELENGTH RANGE -2X FOCAL LENGTH 400mm	.....\$	655.00
378-010	MT-40 FOR USE IN THE VISIBLE WAVELENGTH RANGE -1X FOCAL LENGTH 200mm	.....\$	886.00
378-008	MT-L FOR NEAR ULTRA VIOLET 1X FOCAL LENGTH 200mm	.....\$	1,267.00
378-009	MT-L4 FOR ULTRA VIOLET (266) 1X FOCAL LENGTH 200mm	.....\$	2,730.00



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