



Optical Inspection

Loupes • Magnifiers • Hand-Held Microscopes

SOLUTIONS FOR YOUR BUSINESS

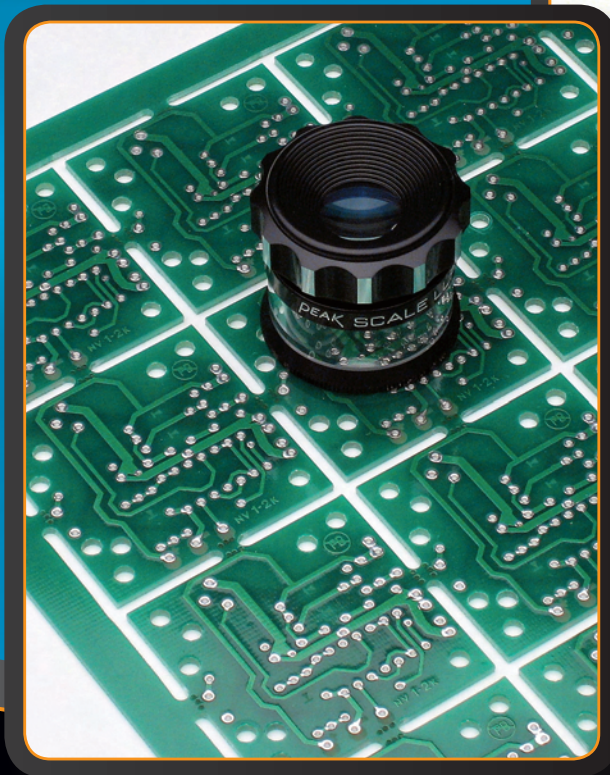


TABLE OF CONTENTS

MAGNIFIERS

Aspheric Magnifiers.	1
Benchtop Magnifiers.	2
Eyeglass Magnifiers.	3
Headband Magnifiers.	4
Linen Testers.	5
Fixed Focus Loupes.	6
Hand Loupes.	7
Jewelers Eye Loupes.	8
Jewelers Loupes.	9
Measuring Loupes.	10
Measuring Loupe Scales.	12
Measuring Loupes.	14
Pocket Specialty Loupes.	15
Graphic Arts & Photography Loupes.	16

MICROSCOPES

Pocket Microscopes.	17
Stand Microscopes.	18
Wide Stand Microscopes.	19
Specialty Microscopes.	21

ABOUT ASPHERIC MAGNIFIERS

Aspheric magnifiers, unlike spherical magnifiers, provide an "orthoscopic" image. Our aspheric lenses are shaped with a variant radii calculated to produce a sharp image right to the edge of the lens. This allows for distortion free viewing over the entire lens area with greater magnification than is possible with a normal spherical lens.

START International

WIDE FIELD MAGNIFIERS

- Features:
- Large viewing area
 - Clear acrylic base

Catalog #	OP8250	GM7003
Power	6X	3.5X
Lens Material	Acrylic	Acrylic
Lens Diameter	2.36" (60mm)	2.44" (62mm)
Field of View	2" (51mm)	2" (51mm)
Dimensions	3.3ø X 2" (83 x 51mm)	3.3ø X 2" (83 x 51mm)
Weight	3.3 oz. (94g)	4 oz. (113g)



START International

DOUBLE LENS ASPHERIC MAGNIFIERS

- Features:
- Cutaway base provides room for critical touch-up and minute mechanical changes to the subject matter
 - Clear acrylic base permits light to the subject being inspected
 - Rugged black anodized aluminum lens holder
 - Locking ring sets focus for repeated use
 - Clear acrylic lens

Catalog #	OP8253
Power	6X
Lens Diameter	1.32" (33.5mm)
Field of View	1.5" (38mm)
Dimensions	3ø x 2.75" (76 x 70mm)
Weight	3.3 oz. (94g)



Donegan Optical

ASPHERIC MAGNIFIERS

- Features:
- Prefocused viewing stand
 - Large viewing area
 - Large distortion free viewing
 - Clear acrylic lens

Catalog #	DOA2028	DOA2072
Power	5X	3X
Lens Size	2.36" (60mm)	2 x 4" (51 x 102mm)
Focal length	3" (76.2mm)	3" (76.2mm)
Dimensions	3.5ø x 3" (90 x 76mm)	3.25 x 4.25 x 4.5" (83 x 108 x 144mm)
Weight	2 oz. (57g)	5 oz. (142g)

DOA2028



DOA2072



START International HIGH POWER BENCH TOP MAGNIFIERS

- Features:
- Compact with a small bench footprint
 - 2 magnifications to choose fro
 - All metal construction
 - Clear glass lenses
 - 22 watt bulb with bulb cover

Catalog #	GM127-2	GM127-4
Lens Power	2X (4 Diopter)	4X (16 Diopter)
Lens Aperture	4.75" (120mm)	4.75" (120mm)
Field of View	6.50" (165mm)	5.25" (133mm)
Working Distance	6.30" (160mm)	4.33" (110mm)
Eye Point	5.91" (150mm)	5.12" (130mm)
Base Dimensions	11.5 x 7.25" (295 x 184mm)	
Horizontal bar	4.25" (108mm)	
Vertical Support Bar	9" (229mm)	
Bulb Type	22W	
Electrical	115V 50/60 Hz	
Weight	8.46 lb. (3.84kg)	9.10 lb. (4.13kg)



Peak PROFESSIONAL ACHROMATIC STAND LOUPE

- Features:
- Distortion free color corrected optical glass
 - Heavy duty lens frame is coated with a knurled rubber cover
 - Double lens system gives you edge to edge clarity
 - 11" (280mm) plastic coated flexible arm
 - 5.3" (135mm) heavy duty metal base

Catalog #	Power	Lens Diameter	Weight
TS2057-75	1.3x	2.95" (75mm)	3.2 lbs (1460g)
TS2057-55	2.0x	2.13" (54mm)	2.9 lbs (1309g)
TS2057-57	4.0x	1.46" (37mm)	2.8 lbs (1280g)



EYEGLOSS MAGNIFIERS

General Features for ALL eyeglass magnifiers:

- Lightweight and comfortable
- Reduce eye fatigue
- Swing out of the line of vision when not in use

**Donegan Optical
BINOCULAR MAGNIFIERS**

- Features:
- Optical quality acrylic lens
 - Frame and lens weight less than 1.3 oz. (37g)
 - Frame made of a special highly durable and flexible plastic
 - Lens can clip onto

your EXISTING pair of glasses

Catalog #	Power	Working Distance
DOC03	1.75X	14" (356mm)
DOC04	2.00X	10" (254mm)
DOC05	2.50X	8" (200mm)
DOC07	2.75X	6" (150mm)

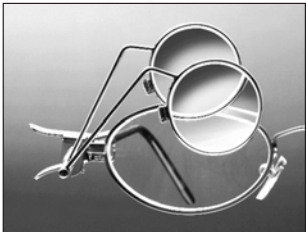


Complete with lens, clip and frame!

**Bausch & Lomb®
CLASSIC METAL EYEGLOSS LOUPES**

- Features:
- Universal mount that fits all eyeglass frames
 - Precision ground glass lenses that flip out of the way when not in use
 - Completely adjustable for each user
 - Loupe can be attached to either temple

	Catalog #	Power	Working Distance
Single lens	BL814117	3X	3.3" (84mm)
	BL814127	4X	2.5" (64mm)
	BL814137	5X	2.0" (51mm)
	BL814147	7X	1.5" (38mm)
Double lens	BL814178	4X / 7X	2.5-1.5" (64-38mm)
	BL814179	3X / 5X	3.3-2.0" (84-51mm)



BINOCULAR HEADBAND MAGNIFIERS

General Features for ALL headband magnifiers:

- Unrestricted view while reducing eye strain
- Can be worn over prescription eyeglasses
- Pivots out of the way when not in use
- Leaves both hands free
- Adjustable contoured headband

START International

TRIPLE LENS HEADBAND MAGNIFIER

- Features:
- Change from 2.2X to 5.2X without removing the headband
 - Hard coated scratch resistant optical quality acrylic lenses
 - Headband is attached with Velcro like material
 - Lightweight only 4.2oz. (114g)

Catalog #	Power	Working Distance
GM7004	2.2X	6.7" (170mm)
	3.3X	4.0" (110mm)
	4.1X	2.5" (65.0mm)
	5.2X	1.8" (45.0mm)



Donegan Optical OPTIVISOR®

HEADBAND MAGNIFIER

- Features:
- Genuine leather padded comfort headband
 - Optical glass prismatic lenses
 - Weight 5.6 oz. (159g)

Catalog #	Power	Working Distance
DODA2	1.50X	20" (508mm)
DODA3	1.75X	14" (356mm)
DODA4	2.00X	10" (254mm)
DODA5	2.50X	8" (200mm)
DODA7	2.75X	6" (150mm)
DPDA10	3.50X	4" (110mm)
*DOLP1	2.50X	

*Optiloupe adds 2.5X and is for monocular use, attaches to either eye of the Optivisor



Bausch & Lomb®

MAGNA-VISOR®

- Features:
- Comes with 3 interchangeable lenses
 - Optical quality acrylic lenses
 - Weighs 6 oz. (170g)

Catalog #	Power	Working Distance
BL814200	1.90X	12" (305mm)
	2.50X	8" (200mm)
	2.75X	6" (150mm)



**Peak
METAL FRAME LINEN TESTERS**

- Features:
- High quality, optical color corrected glass lenses
 - Precision machined aluminum frames



	Catalog #	Power	Lens Diameter	Field of View	Weight
Single Lens Models	TS1209SA3	9X	0.5" (12.7mm)	.50" (12.7mm)	0.5 oz. (14g)
	TS3407SA3	7X	0.8" (20.3mm)	.75" (19.1mm)	0.9 oz. (26g)
	TS1006SA3	6X	1.1" (27.9mm)	1.0" (25.4mm)	1.5 oz. (43g)

	Catalog #	Power	Lens Diameter	Field of View	Weight
Double Lens Models	TS1006WZ3*	6X	1.10" (27.9mm)	1.00" (25.4mm)	2.2 oz. (46g)
	TS2003WA3	3X	1.80" (45.7mm)	2.00" (50.8mm)	5.2 oz. (114g)

* Machined from zinc, all others aluminum



**START International
ECONOMY METAL LINEN TESTER**

- Features:
- Single element glass lens
 - Vinyl case included
 - Heavy duty frame

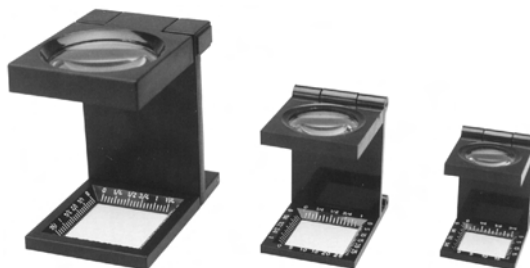
Catalog #	Power	Lens Diameter	Field of View	Weight
GM7007	7X	0.59" (15.0mm)	0.54" (13.7mm)	1.5 oz. (43g)
GM7006	6X	1.10" (27.9mm)	1.00" (25.4mm)	3.3 oz. (94g)



**START International
PLASTIC LINEN TESTERS**

- Features:
- Impact resistant plastic frame
 - Optical quality acrylic lens

Catalog #	Power	Lens Diameter	Field of View	Weight
LEFD20	8X	0.75" (19.0mm)	0.75" (19.0mm)	0.4 oz. (11.0g)
LEFD30	6X	1.13" (28.6mm)	1.00" (25.4mm)	0.8 oz. (22.0g)
LEFD50	4X	1.75" (44.4mm)	1.25" (32.0mm)	2.0 oz. (56.7g)



FIXED FOCUS LOUPES

Peak FIXED FOCUS LOUPES

- Features:
- 360° clear acrylic base admits light from all directions
 - Optical quality glass lens elements, except TS2032 (optical quality acrylic)
 - TS1962 and TS1964 have coated glass achromatic lenses

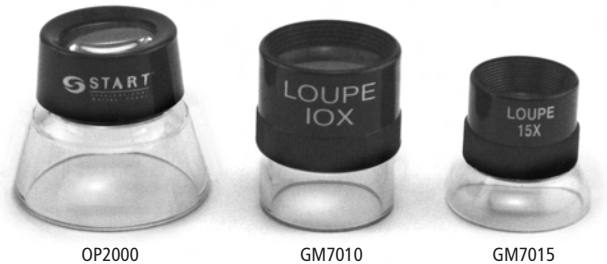


Catalog #	TS1960	TS2032	TS1961	TS1962	TS1964	TS1996
Power	5X	10X	10X	15X	22X	30X
Lens Diameter	1.00" (25.4mm)	1.00" (25.4mm)	0.95" (24mm)	0.75" (19.1mm)	0.75" (19.1mm)	0.27" (6.9mm)
Field of View	1.20" (30.5mm)	1.10" (28.0mm)	1.10" (28mm)	0.79" (20.0mm)	0.40" (10.0mm)	0.20" (5.1mm)
Optical System	1 lens	2 lens	2 lens	3 lens	4 lens	4 lens
Weight	1.10 oz. (31g)	0.63 oz. (18g)	1.10 oz. (31g)	0.64 oz. (18g)	0.60 oz. (17g)	0.60 oz. (17g)
Overall Dimensions	1.43ø x 2.62" (36.0 x 66.6mm)	1.77ø x 1.57" (45.0 x 40.0mm)	1.36ø x 1.60" (34.5 x 40.6mm)	1.41ø x 1.33" (35.8 x 33.8mm)	1.12ø x 1.18" (28.5 x 30.0mm)	1.42ø x 1.10" (36.2 x 27.9mm)

START International FIXED FOCUS LOUPES

- Features:
- 360° clear acrylic base admits light from all directions
 - Quality at a economical price
 - OP2000 can be printed with your LOGO and is made in the United States

Catalog #	OP2000	GM7010	GM7015
Power	8X	10X	15X
Lens Diameter	0.95" (24mm)	1.18" (30mm)	.75" (19.1mm)
Field of View	1.25" (32mm)	1.25" (32mm)	.50" (12.7mm)
Optical System	2 lens	2 lens	2 lens
Lens Material	Acrylic	Acrylic	Optical Glass
Weight	1.0 oz. (28g)	0.9 oz. (25.5g)	0.7 oz. (19.8g)
Overall Dimensions	1.93ø x 1.67" (49.0 x 42.0mm)	1.43ø x 1.68" (36.3 x 42.7mm)	1.40ø x 1.34" (35.5 x 34.0mm)



FIXED FOCUS ILLUMINATED LOUPES

- Feature:
- Optical quality glass lens elements

Catalog #	TS1966	OPM100	TS2023
Power	10X	10X	15X
Lens Diameter	1.00" (25.4mm)	1.07" (27.2mm)	.80" (20.3mm)
Field of View	1.10" (27.9mm)	1.00" (25.4mm)	.77" (19.6mm)
Optical System	1 lens	2 lens	2 lens
Lens Material	Optical Glass	Optical Glass	Optical Glass
Weight	2.9 oz. (82g)	3.5 oz. (99g)	2.9 oz. (82g)
Battery Type *	two 1.5V "C" cell	two 1.5V "C" cell	two 1.5V "C" cell

* batteries not included



**Peak
PROFESSIONAL ACHROMATIC HAND LOUPE**

- Features:
- Totally distortion free color corrected optical glass
 - Double lens system gives you edge to edge clarity

- Heavy duty lens frame is coated with a knurled rubber cover
- Rosewood handle with a velvet padded leather lens cover

Catalog #	Power	Lens Diameter	Dimensions	Weight
TS2022-75	1.3X	2.95" (75mm)	3.03 x 7.68 x .98" (77 x 195 x 25mm)	8.64 oz. (245g)
TS2022-55	2.0X	2.13" (54mm)	2.20 x 6.89 x .87" (56 x 175 x 22mm)	4.13 oz. (117g)
TS2022-35	4.0X	1.46" (37mm)	1.54 x 6.10 x .60" (39 x 155 x 15mm)	2.35 oz. (67.0g)



**Bausch & Lomb®
GLASS LENS READING MAGNIFIER**

- Features:
- Distortion free
 - Protective cover included
 - Provides true color representation

Catalog #	Power	Lens Diameter
BL813405	2X	5" (127mm)



**Bausch & Lomb®
ACRYLIC LENS READING MAGNIFIER**

- Features:
- Ergo Touch® grip molded into the handle for two handed positioning
 - Precision optical quality acrylic lens

Catalog #	Power	Lens Diameter	Power Insert
BL813303	2X	3.5" (89.0mm)	4X
BL813304	2X	4" (101.1mm)	6X
BL813305	2X	5" (127.0mm)	4X



**START International
ACRYLIC LENS READING MAGNIFIER**

- Features:
- Optical quality hard coated lens
 - Quality at a affordable price
 - One piece ergonomically designed lightweight handle
 - Made in the USA

Catalog #	Power	Lens Diameter	Power Insert
USV2	4X	2" (50.80mm)	none
USV3	3X	3" (76.20mm)	5X
USV4	3X	4" (101.6mm)	5X



**START International
ECONOMY ACRYLIC LENS READING MAGNIFIER**

- Features:
- Black plastic frame and handle

Catalog #	LE8775
Power	2.5X
Lens Diameter	3.25" (75mm)
Power Insert	5X



JEWELERS EYE LOUPES

Peak JEWELERS LOUPES

- Features:
- Soft vinyl housing for comfort or spun aluminum housing for durability
 - High quality optical glass lenses
 - Small hole in eyepiece helps prevent clouding of the lens when in use
 - Lenses in spun aluminum loupes are easily removed for cleaning

Aluminum Body

	Catalog #	Power	# lenses	Focal Length	Lens Diameter
Single Lens	TS2048A13	3.3X	1	3.0" (76.2mm)	.9" (23mm)
	TS2048A16	4.0X	1	2.5" (63.5mm)	.9" (23mm)
	TS2048A20	5.0X	1	2.0" (50.8mm)	.9" (23mm)
	TS2048A26	6.7X	1	1.5" (38.1mm)	.9" (23mm)
Double Lens	TS2048A40D	4X/10X	2	1.0" (25.4mm)	.6" (15mm)

Soft Vinyl Body

	Catalog #	Power	# lenses	Focal Length	Lens Diameter
Single Lens	TS2048V13	3.3X	1	3.0" (76.2mm)	.9" (23mm)
	TS2048V16	4.0X	1	2.5" (63.5mm)	.9" (23mm)
	TS2048V20	5.0X	1	2.0" (50.8mm)	.9" (23mm)
	TS2048V26	6.7X	1	1.5" (38.1mm)	.9" (23mm)



Single Lens
Aluminum
Body



Double
Lens



Single Lens
Soft Vinyl
Body

Bausch & Lomb® WATCH MAKERS LOUPES

- Features:
- Optical glass lenses
 - Black plastic body

	Catalog #	Power	# lenses	Focal Length	Lens Diameter
Single Lens	BL814173	4X	1	2.5" (63.5mm)	1" (25.4mm)
	BL814172	5X	1	2.0" (50.8mm)	1" (25.4mm)
	BL814171	7X	1	1.5" (38.1mm)	1" (25.4mm)
	BL814170	10X	1	1.0" (25.4mm)	1" (25.4mm)
Double Lens	BL814108	8X/17X	2	1.25/0.50" (31.8/12.7mm)	.87/.49" (22.2/12.5mm)



Single
Lens



Double
Lens

START International DOUBLET MAGNIFIER

- Features:
- Double glass lenses in a chrome plated housing
 - Extra large lens diameter
 - Plastic carrying case included

Catalog #	Power	Lens Diameter	Weight
YE8020	10X	.83" (21mm)	1.3 oz (37g)



Large 21mm Lens

START International TRIPLER MAGNIFIER

- Features:
- Triple glass lenses in a chrome plated housing with a knurled rubber cover
 - Clear sharp image with no distortion

Catalog #	Power	Lens Diameter	Weight
YE8015	10X	.83" (21mm)	2.2 oz. (62g)



Large 21mm Lens

Peak STEINHEIL TRIPLER MAGNIFIERS

- Features:
- Special lens is made of crown glass and two negative meniscus lenses of flint glass
 - Lens is molded into a high impact plastic for added protection
 - Small compact design 1.51 x .95 x .87" (39 x 24 x 22mm)
 - Color corrected lens

Catalog #	Power	Lens Diameter	Weight
TS1985-07	7X	.63" (16.0mm)	.78 oz. (22g)
TS1985-10	10X	.61" (15.5mm)	.67oz. (19g)
TS1985-14	14X	.47" (12.0mm)	.63 oz. (18g)
TS1985-20	20X	.28" (7.00mm)	.63 oz.(18g)



Bausch & Lomb® TRIPLER MAGNIFIERS

- Features:
- Hasting triplet color corrected lens
 - Lens has a plastic housing that swings into the nickel plated case

Catalog #	Power	Lens Diameter	Weight
BL816168	7X	.78" (19.8mm)	.7 oz. (20g)
BL816171	10X	.62" (15.8mm)	.5 oz. (15g)



Bausch & Lomb® CODDINGTON ILLUMINATED MAGNIFIER

- Features:
- The same lens as above with the addition of a light.
 - Uses two "AA" batteries not included

Catalog #	Power	Lens Diameter	Weight
BL813434	10X	.78" (19.8mm)	1.1 oz. (31g)



MEASURING LOUPES

Peak

FULL FOCUS MEASURING LOUPES

Reticule
Included

- Features:
- High resolution achromatic color corrected lens
 - 360° clear acrylic base
 - Optional light source
 - Optional reticules with white markings
 - Comes complete with measuring reticule, protective carrying case and lens cleaning cloth
 - Focusing from +2 to -2 Diopter with a smooth helicoid focus mechanism



Catalog #	TS2015 *	TS1975 *	TS1983 *	TS2016 **	TS2055M***	TS2037M***
Power	7X	7X	10X	15X	20X	30X
Lens Diameter	.64" (16mm)	.71" (18mm)	.80" (20mm)	.51" (13mm)	.47" (12mm)	.27" (7mm)
Field of View	.94" (24mm)	.94" (24mm)	1.1" (28mm)	.55" (14mm)	.47" (12mm)	.20" (5mm)
Optical System	2 lens	3 lens	4 lens	4 lens	3 lens	4 lens
Scale Division	.005"/.1mm	.005"/.1mm	.005"/.1mm	.005"/.1mm	.1mm	.05mm
Measuring Range	.8" /20mm	.8" /20mm	.8" /20mm	.5" /14mm	8mm	5mm
Overall Dimensions	1.14ø x 1.81" (29 x 64mm)	1.42ø x 2.44" (36 x 62mm)	1.81ø x 1.73" (46 x 44mm)	1.38ø x 1.41" (35 x 36mm)	1.38ø x .91" (35 x 23mm)	1.41ø x 1.1" (36 x 26mm)
Weight	1.0 oz. (28g)	2.0 oz. (56g)	2.5 oz. (74g)	1.3 oz. (40g)	1.3 oz (40g)	0.6 oz (17g)

* inch/metric scale included

**inch scale included for metric add M to end of catalog number

***metric scale only

Peak

ILLUMINATORS FOR MEASURING LOUPES

Catalog #	For use with	Battery Type*
TS1975B	TS1975 & TS1999	two "C"
TS1983B	TS1983 & TS2044	two "C"
TS2016B	TS2016	two "AA"
TS2055B	TS2055M	two "AA"
TS2037B	TS2037M	two "AA"

*Batteries not included



Peak

MEASURING LOUPE COMBINATION SET

- Features:
- Sets include five different scales # 2, 3, 5, 8, and 12
 - Loupe and scales come in a plastic storage box

Catalog #	Scale loupe	Weight
TS2004	TS1983	6.8 oz. (192g)

See pages 15 and 16 for scale specifications



Peak ZOOM (8 - 16X) MEASURING LOUPE

- Features:
- Precision zoom mechanism with click stops at 8X, 10X, 12X, 14X and 16X
 - Object being inspected and scale remain in focus through complete range
 - High resolution achromatic color corrected lens
 - 360° clear acrylic base
 - Comes complete with measuring reticule, protective carrying case and lens cleaning cloth

- Focusing from +2 to -2 Diopter with a smooth helicoid focus mechanism
- Dual inch/metric interchangeable scale
- Optional light source

Catalog #	TS2044	TS2066
Power	8-16X	10-20X
Lens Diameter	.40" (10mm)	.28" (9mm)
Field of View	.79-.40" (20-10mm)	.51-.26 (13-7mm)
Optical System	8 lens	8 lens
Scale Division	.005/.1mm	.005/.1mm
Measuring Range	.60"/16mm	.05"/12mm
Overall Dimensions	1.75ø x 2.50" (45 x 65mm)	1.65ø x 2.05" (42 x 52mm)
Weight	4.9 oz. (139g)	3.35 oz. (95g)



Peak ANASTIGMATIC MEASURING LOUPE

- Features:
- Excellent eye relief because the entire field may be inspected by merely moving your eye
 - High resolution achromatic color corrected lens
 - 360° clear acrylic base
 - Comes complete with measuring reticule, protective carrying case and lens cleaning cloth
 - Focusing from +2 to -2 Diopter with a smooth helicoid focus mechanism
 - Extremely sharp edge-to-edge clarity

Catalog #	TS1990-4	TS1990-7
Power	4X	7X
Lens Diameter	1.18" (30mm)	.864" (21.9mm)
Field of View	2.28" (58mm)	1.61" (41.0mm)
Optical System	4 lens	3 lens
Scale Division	.1mm	.1mm
Measuring Range	54mm	43mm
Overall Dimensions	2.87ø x 3.03" (73 x 77mm)	2.16ø x 2.09" (55 x 53mm)
Weight	9.8 oz. (272g)	3.7 oz. (103g)



Peak TELECENTRIC MEASURING LOUPE

Catalog #	TS1999
Power	7X
Lens Diameter	.04-.12" (1-3mm)
Field of View	.94" (24mm)
Optical System	3 lens
Scale Division	.005/.1mm
Measuring Range	.8"/20mm
Overall Dimensions	1.5ø x 2.9" (38 x 74mm)
Weight	2.6 oz. (73g)

- Features:
- A Telecentric loupe is characterized by a small opening fixed at the focal point of the lens system, through which you can measure the length and width of flat as well as 3 dimensional objects without the error caused by parallax.
 - Optional light source
 - High resolution achromatic color corrected lens
 - 360° clear acrylic base
 - Comes complete with measuring reticule, protective carrying case and lens cleaning cloth
 - Focusing from +2 to -2 Diopter with a smooth helicoid focus mechanism
 - Dual inch/metric interchangeable scale

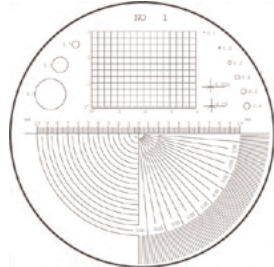


Peak LOUPE PRECISION RETICULES

- Features:
- High quality, optical glass construction
 - Will fit many other magnifiers in addition to PEAK brand
 - Pattern on reticule is high precision chromium
 - Right reading for ease of use
 - Pattern image is on bottom of reticule to minimum parallax error and increase accuracy
 - Inch / metric reticules with white marking are available for 7X & 10X loupes (See page 16)

For Loupe

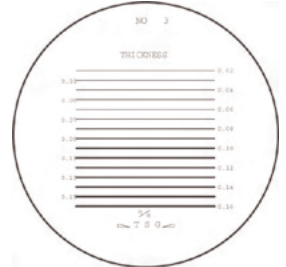
Catalog #	Power
TSPS01-10	10X
TSPS02-10	10X
TSPS03-07	7X
TSPS03-10	10X
TSPS04-10	10X
TSPS05-07	7X
TSPS05-10	10X
TSPS07-10	10X
TSPS08-10	10X
TSPS12-07	7X
TSPS12-10	10X
TSPS13-10	10X
TSPS13-15	15X
TSPS14-07	7X
TSPS14-10	10X



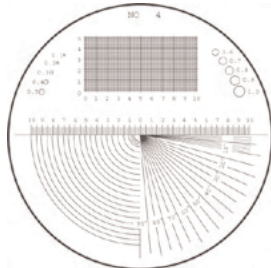
TSPS01



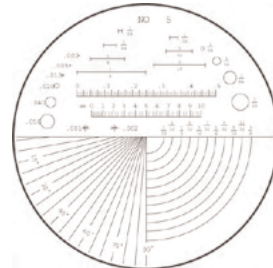
TSPS02



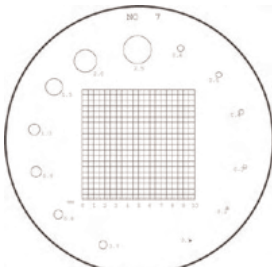
TSPS03



TSPS04



TSPS05



TSPS07

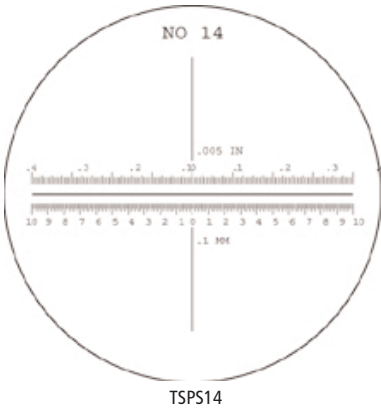
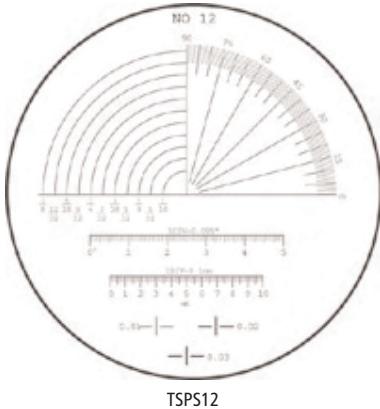


TSPS08

Drawings Not to Scale

RETICULE DESCRIPTION	TSPS01	TSPS02	TSPS03	TSPS04	TSPS05	TSPS07	TSPS08	TSPS12	TSPS13	TSPS14
inch scale, .005" divisions		•						•	•	•
inch scale, .0025" divisions					•					
inch scale, 1/32" divisions										
mm scale, .05mm divisions		•		•						
mm scale, .025mm divisions	•	•		•	•		•		•	
grid with .025mm squares	•									
grid with .5mm squares						•				
grid with .1mm squares				•						
angles, 1° increments	•							•		
angles, 5° increments		•		•	•					
circles, 1/64" increments					•					
radii, 1/32" increments					•					
radii, .5mm increments		•		•						
radii, .1mm increments	•			•		•				
hole sizes, inch increments		•								
hole sizes, mm increments	•	•		•		•				
thread scales, .25-1 threads/mm										
thread scale, 14-50 threads/in.										
line widths, .02-.16mm (PC work)			•							

Peak
LOUPE PRECISION RETICULES

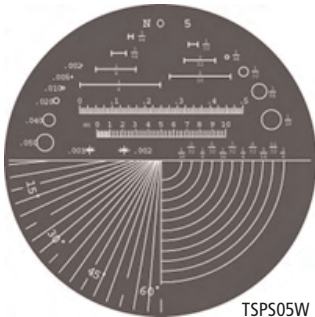


Drawings Not to Scale

START International
WHITE RETICULES PRODUCE SHARP

Easy to Read Images on Dark Backgrounds

- Features:
- Upgrade your existing 7X or 10X loupe
 - Accurately measure and inspect negatives and other dark or light surfaces
 - High quality optical glass construction
 - Pattern image is on bottom of reticule to minimize parallax error and increase accuracy



BEFORE
Standard black reticules disappear on dark surfaces

AFTER
White reticule reads easily on both dark and light surfaces



Drawings Not to Scale



Catalog #	For Loupe Power
TSPS05-10W	10X
TSPS14-07W	7X
TSPS14-10W	10X

START International FULL FOCUSING MEASURING LOUPE

- Features:
- Focusing from +2 to -2 Diopter with a smooth helicoid focus mechanism
 - High resolution achromatic color corrected lens

- 360° clear acrylic base
- Comes complete with measuring reticule, protective carrying case.
- Optional reticules with white markings, see page 16.

Catalog #	YE5010
Power	10X
Lens Diameter	.85" (22mm)
Field of View	1.0" (25.4mm)
Optical System	3 lens
Scale Division	0.01" / 1.0mm
Measuring Range	0.60" / 15mm
Overall Dimensions	2.66ø x 1.77" (67.6 x 45mm)
Weight	2.66 oz. (75g)



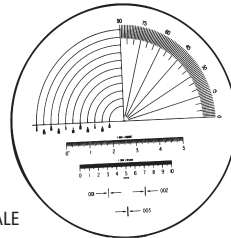
Bausch & Lomb® HASTINGS TRIPLET WITH OPTIONAL SCALE

- Features:
- Adjustable focus with a flat distortion free image.
 - 360° clear acrylic base
 - Comes with a leather case

Catalog #	Power	Lens Diameter	Focal Length	Weight
BL813435	7X	.8" (19.0mm)	1.5" (38mm)	1.1 oz. (30g)
BL813433	10X	.6" (15.8mm)	1.0" (25mm)	1.1 oz. (30g)

OPTIONAL RETICULES

Catalog #	Description
BL813436	General purpose scale for measuring radii from 1/16" to 3/8", angles in single degrees to 90, .005" and .1mm scales, line widths of .001, .002 & .003
BL813437	Inch scale, 3/4" in .005 increments
BL813438	Metric scale, 20mm in .0mm increments



BL813436 - SCALE



Bausch & Lomb® ILLUMINATED LENSCOPE

- Features:
- Two angled illumination lamps (45° or 90°)
 - Interchangeable Hastings triplet lenses 7X or 10X
 - Adjustable focus with a flat distortion free image.
 - 360° clear acrylic base
 - Hinged -top storage case

Lenscope and Storage Case

Catalog #	Power	Lens Diameter	Focal Length	Weight
BL813443	7X	.8" (19.0mm)	1.5" (38mm)	2.6 oz. (72g)
BL813442	10X	.6" (15.8mm)	1.0" (25mm)	2.2 oz. (60g)

Uses two "AA" Batteries not included.



**START International
FOLDING MAGNIFIERS**

- Features:
- Optical quality acrylic lens
 - Lenses fold into case for easy storage
 - Compact and lightweight
 - Made in the USA

	Catalog #	Power	Lens Diameter
Double Lens	OP602	5X/10X	1.0" (25.4mm)
	OP512	5X/7X/12X	1.0" (25.4mm)
	OP604	3X/6X	1.38" (35mm)



**Bausch & Lomb®
FOLDING MAGNIFIERS**

- Features:
- Optical crown glass lens
 - Compact and lightweight
 - Lenses fold into case for easy storage

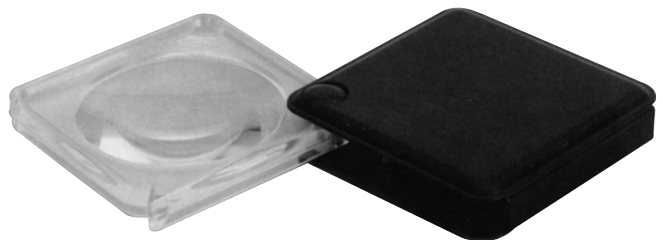
	Catalog #	Power	Lens Diameter
Double Lens	BL812364	4X/5X/9X	.90" (23.0mm)
Triple Lens	BL812367	5X/7X/9X	.8" (20.3mm)
		12X/14X	.8" (20.3mm)
		16X/20X	.6" (15.2mm)



**START International
FOLDING MAGNIFIER**

- Features:
- Optical quality acrylic lens
 - Compact and light
 - Economically priced
 - Lens can be used in combination or alone
 - Lens folds into case for easy storage

Catalog #	Power	Lens Diameter	Case
OP8843	3.5X	1.7" (43mm)	Hard



Peak PROFESSIONAL PHOTOGRAPHERS LOUPE

- Features:
- High resolution achromatic color corrected lens
 - Diopter focusing adjustment by a precision helicoil screw
 - Two bottom skirts - one black and one semitransparent
 - Comes with a comfortable neck strap
 - Square wide field of view

Catalog #	Power	Field of View	Dimensions	Weight
TS2038	4X	1.77 X 1.77" (45 X 45mm)	2.00 x 2.56 x 2.00" (51 X 65 X 51mm)	1.83 oz. (52g)



Peak MICROFILM VIEWER

- Features:
- High precision achromatic multi lens (4) system
 - Fully coated color corrected lenses
 - Diopter focusing adjustment by a precision helicoil
 - Designed for use with film, microfiche and aperture card
 - Film holder prevents film from getting scratched

Catalog #	Power	Field of View	Dimensions	Weight
TS2026-15	15X	.75" (19mm)	5.43 x 1.73 x 1.81" (138 x 44 x 46mm)	3.21 oz. (91.0g)
TS2026-20	20X	.43" (11mm)	5.43 x 1.73 x 1.81" (138 x 44 x 46mm)	3.88 oz. (110g)



Peak 35MM FILM VIEWER

- Features:
- High precision achromatic multi lens (3) system
 - Diopter focusing adjustment by a precision helicoil screw
 - TS2026 has a holder that prevents film from getting scratched
 - Fully coated color corrected glass lenses
 - Optional film holder and marker for TS2018
 - View covers the entire 35mm film

Catalog #	Power	Field of View	Dimensions	Weight
TS2018	8X	35mm	1.81 x 1.93 x 1.54" (46 x 49 x 39mm)	1.83 oz. (52g)
TS2018-PH	Film Punch		2.36 x 1.83 x 0.59" (60 x 47.3 x 15mm)	0.46 oz. (13g)



Peak SWING & CASSETTE LOUPES

- Features:
- High precision achromatic multi lens (3) system
 - Diopter focusing adjustment by a precision helicoil screw
 - Fully coated color corrected glass lenses

- Feature For Swing Loupes: • Lens rotates 360° and comes in a leatherette case
- Feature For Cassette Loupe: • Lens folds into a protective ABS resin cassette

Catalog #	Power	Field of View	Dimensions	Weight
TS2021-15	15X	.75" (19mm)	2.17 x 1.26 x 1.26" (55 x 32 x 32mm)	2.82 oz. (80g)
TS2021-22	22X	.43" (11mm)	2.17 x 1.26 x 1.26" (55 x 32 x 32mm)	2.82 oz. (80g)
TS2019	15X	.75" (19mm)	1.34 x 2.13 x 1.02" (34 x 54 x 26mm)	1.70 oz. (48g)



Peak SUCTION FOCAL PLANE MAGNIFIER

- Features:
- Natural rubber suction cup for cameras when focusing cameras
 - Optical quality multi-lens (2) system

Catalog #	Power	Field of View	Dimensions	Weight
TS1993	10X	1.10" (27.9mm)	1.36ø x 1.60" (35 x 41mm)	1.20 oz. (32g)



**Peak
POCKET MICROSCOPES**

- Features:
- Distortion free magnification at powers up to 100X
 - Rugged and pocket size (.50 x 5"/12.7 x 127mm)
 - High resolution color corrected glass lens
 - Comes with a leatherette carrying case
 - Lightweight 2 oz. (57g)



	Catalog #	Power	Field of View	Scale Div.	Measuring Range
Measuring	TS2036-025M	25X	.130" (3.3mm)	.05mm	3.0mm
	TS2036-050M	50X	.079" (2.0mm)	.02mm	1.6mm
Non-Measuring	TS2001-015	15X	.213" (5.4mm)	N/A	N/A
	TS2001-025	25X	.130" (3.3mm)	N/A	N/A
	TS2001-050	50X	.079" (2.0mm)	N/A	N/A
	TS2001-075	75X	.043" (1.1mm)	N/A	N/A
	TS2001-100	100X	.033" (.84mm)	N/A	N/A

**START International
POCKET MEASURING MICROSCOPES**

- Features:
- High resolution optical glass lens
 - Lightweight 1.5 oz. (42g)
 - Rugged and pocket size .490 x 4.8" (12.4 x 122mm)



Catalog #	Power	Field of View	Scale Div.	Measuring Range
YE7586-020	20X	4.5mm	0.05mm	4.5mm
YE7586-040	40X	2.0mm	0.02mm	2.0mm

**Peak
WIDE FIELD POCKET MICROSCOPES**

- Features:
- Largest field of view available in a pocket microscope
 - Comes with a leatherette carrying case
 - Weights 4 oz. (110g) - dimensions 1.10 x 6.0" (12.7 x 155mm)

- High resolution color corrected glass lens
- Heavy duty aluminum construction

Catalog #	Power	Field of View	Weight
TS2051-30	30X	.23" (5.8mm)	4.05 oz. (115g)
TS2051-60	60X	.14" (3.5mm)	3.35 oz. (100g)



**Peak
ERECT IMAGE MICROSCOPES**

- Features:
- See the image as you would through the naked eye
 - High resolution color corrected glass lens
 - Comes with a leatherette carrying case
 - Dimensions 0.500 x 4.47" (20.7 x 111mm)
 - Precision scale focusing
 - Weight 0.9 oz. (25g)



	Catalog #	Power	Field of View	Scale Div.	Measuring Range
Measuring	TS2050-025	25X	.140" (3.50mm)	.050mm	3.0mm
	TS2050-050	50X	.070" (1.70mm)	.020mm	1.6mm
	TS2050-075	75X	.040" (1.10mm)	.010mm	1.0mm
	TS2050-100	100X	.034" (.860mm)	.005mm	0.8mm
Non-Measuring	TS2056-025	25X	.140" (3.50mm)	N/A	N/A
	TS2056-050	50X	.070" (1.70mm)	N/A	N/A

STAND MICROSCOPES

STAND MICROSCOPES General Features

- High distortion-free magnification with portability
- Pen light uses two "AA batteries - included on both sides of the microscope
- Diopter adjustable eyepiece to focus reticule
- Focusing by smooth rack and pinion with knobs

START International STAND MICROSCOPE

- Features:
- Dual inch / metric scale
 - Size: 2.5ø X 8.5" (63.5 X 216mm)
 - Custom padded storage case included
 - Weight: 22.5 oz. (638g)

Catalog #	OPPN060	OPPN100
Power	60X	100X
Field of View	.090" (2.3mm)	.075" (1.9mm)
Measuring Range	.100" / 2.5mm	.050" / 1.2mm
Scale Division	.001" / .02mm	.006" / .02mm
Working Distance	.94" (23.9mm)	.25" (6.35mm)



Peak PREMIUM STAND MICROSCOPE

- Features:
- Heavy duty machines metal construction
 - Size: 2.4ø x 6.3" (61 x 160mm)
 - High precision Japanese optics
 - Weight: 17.8 oz. (504g)
 - Sturdy metal base with chrome plated optical tube

Catalog #	TS2009-060*	TS2009-100*
Power	60X	100X
Field of View	.087" (2.2mm)	.071" (1.8mm)
Measuring Range	.100" / 1.6mm	.050" / 1.2mm
Scale Division	.0010" / .02mm	.0005" / .01mm
Working Distance	.236" (6.0mm)	.217" (5.5mm)

* For metric scale, add "M" to end of catalog number Price is the same.



Peak ECONOMY STAND MICROSCOPES

- Features:
- Focusing from +2 to -2 Diopter with a smooth helicoid focus mechanism
 - Compact lightweight design. Size 1.61ø x 4.8" (41 x 122mm) Weight 2.9 oz. (83g)
 - High resolution achromatic color corrected lens
 - Anodized aluminum construction
 - Comes in a custom plastic storage case
 - 360° clear acrylic base
 - Soft rubber eyepiece

Catalog #	TS2008-025*	TS2008-050*	TS2008-075*	TS2008-100*
Power	25X	50X	75X	100X
Field of View	.130" (3.3mm)	.079" (2.0mm)	.043" (1.09mm)	.033" (0.84mm)
Measuring Range	.118" (3.0mm)	.063" (1.6mm)	.039" (1.00mm)	.031" (0.80mm)
Scale Division	.0020" / .05mm	.0010" / .02mm	.0005" / .01mm	.0005" / .005mm
Working Distance	.66" (17.0mm)	.46" (12.0mm)	.46" (12.0mm)	.45" (11.4mm)

* For metric scale, add "M" to end of catalog number Price is the same.

Optional: Light Source	Catalog #
	TS2008LH



WIDE STAND MICROSCOPES

General Features for Wide Stand Microscopes

- Lens has a color-corrected coating to ensure a bright contrast of images
- Soft rubber eyepiece
- Reticule and pen light included
- High precision Japanese optics
- Custom storage case included
- Dimensions: 2.48ø x 6.77" (63 x 316mm)
- Weight: 11 oz. (314g)

Peak WIDE STAND HELICOID FOCUSING MICROSCOPES

- Features:
- Focusing by a smooth, helicoid twist ring
 - Anodized aluminum construction with a clear acrylic base
 - Graduated metric dial on focusing ring for depth measurements

Catalog #	Power	Field of View	Measuring Range	Scale Division	Working Distance
TS2034-020*	20X	.283" (7.20mm)	.250" / 6.00mm	.0050" / .100mm	1.41" (36.0mm)
TS2034-040*	40X	.142" (3.60mm)	.120" / 3.00mm	.0020" / .050mm	0.73" (18.7mm)
TS2034-060*	60X	.094" (2.40mm)	.080" / 2.00mm	.0010" / .020mm	0.42" (10.8mm)
TS2034-100*	100X	.057" (1.45mm)	.050" / 1.20mm	.0005" / .010mm	0.22" (5.70mm)
TS2035-150*	150X	.038" (0.96mm)	.035" / 0.90mm	.0002" / .005mm	0.36" (9.20mm)
TS2034-200*	200X	.028" (0.72mm)	.024" / 0.60mm	.0001" / .002mm	0.26" (6.70mm)
TS2034-300**	200X	.48mm	.40mm	.001mm	4mm

* For metric scale, add "M" to end of catalog number. Price is the same.

** Metric scale ONLY



Peak WIDE STAND RACK AND PINION FOCUSING MICROSCOPES

- Feature:
- Solid die-cast aluminum base

Catalog #	Power	Field of View	Measuring Range	Scale Division	Working Distance
TS2054-060*	60X	.094" (2.40mm)	.080" / 2.00mm	.0010" / .020mm	0.42" (10.8mm)
TS2054-100*	100X	.057" (1.45mm)	.050" / 1.20mm	.0005" / .010mm	0.22" (5.70mm)
TS2054-150*	150X	.038" (0.96mm)	.035" / 0.90mm	.0002" / .005mm	0.36" (9.20mm)

* For metric scale, add "M" to end of catalog number. Price is the same.



Peak WIDE STAND RACK AND PINION FOCUSING MICROSCOPES WITH INCIDENT LIGHT ILLUMINATION

Feature: • Through-the-lens illumination for observing objects with a high rate of reflection



Catalog #	Power	Field of View	Measuring Range	Scale Division	Working Distance
TS2054-040CIL*	40X	.142" (3.60mm)	.120" / 3.00mm	.0020" / .050mm	0.73" (18.7mm)
TS2054-060CIL*	60X	.094" (2.40mm)	.080" / 2.00mm	.0010" / .020mm	0.42" (10.8mm)
TS2054-100CIL*	100X	.057" (1.45mm)	.050" / 1.20mm	.0005" / .010mm	0.22" (5.70mm)
TS2054-150CIL*	150X	.038" (0.96mm)	.035" / 0.90mm	.0002" / .005mm	0.36" (9.20mm)
TS2054-200CIL*	200X	.028" (0.72mm)	.024" / 0.60mm	.0001" / .002mm	0.26" (6.70mm)

* For metric scale, add "M" to end of catalog number. Price is the same.

Peak WIDE STAND ERECT IMAGE, RACK AND PINION FOCUSING MICROSCOPES

Features: • Erect image allows you to see the image as you would through the naked eye
• Erect image viewing greatly improves the accuracy in inspection and measuring



Catalog #	Power	Field of View	Measuring Range	Scale Division	Working Distance
TS2054-060EIM*	60X	.094" (2.40mm)	.080" / 2.00mm	.0010" / .020mm	0.42" (10.8mm)
TS2054-100EIM*	100X	.057" (1.45mm)	.050" / 1.20mm	.0005" / .010mm	0.22" (5.70mm)

* For metric scale, add "M" to end of catalog number. Price is the same.

START International
TRUE ERECT IMAGE MICROSCOPE

- Features:
- Can be used as a MICROSCOPE, TELESCOPE OR MAGNIFIER
 - Erect image allows you to see the image as you would through the naked eye
 - Erect image viewing greatly improves the accuracy in inspection and measuring
 - Smooth focus adjustment
 - Fully coated achromatic optics
 - Clear acrylic base lets you see the object without external light
 - Constructed of precision aluminum and plastic that gives you quality and veracity

Catalog #	YE8025	YE8045
Overall Dimensions	2.9ø x 8.25" (74 x 210mm)	2.9ø x 8.25" (74 x 210mm)
Weight	10.4 oz. (290g)	9.74oz. (276g)

When used as a Microscope

Power	25X	45X
Field of View	.31" / 8mm	.18" (4.8mm)
Measuring Range	3/16" / 5.0mm	3.0mm
Scale Division	1/64" / 0.1mm	0.1mm
Working Distance	2.75" (70mm)	2.0" (51mm)

When used as a Magnifier

Power	3.5X	6X
Field of View		

When used as a Telescope

Power	8X	8X
-------	----	----



Magnifier



Telescope



Microscope

START International
DRILL INSPECTION MICROSCOPE

- Features:
- Focusing from +2 to -2 Diopter with a smooth helicoid focus mechanism
 - High resolution achromatic color corrected lens
 - Anodized aluminum construction
 - Soft rubber eyepiece
 - Reticule with measuring scale
 - Holds .125" (3.18mm) shank drills
 - No need to remove depth settings rings to inspect drills
 - Horizontal mount for checking flute, margin and relief
 - Vertical mount for checking geometry and surface finish

Catalog #	SMDRILLCHEK3	SMDRILLCHEK4
Power	25X	50X
Scale Division	.0020 / .05mm	.0010" / .02mm
Overall Dimensions	2 x 2 x 7" (50.8 x 50.8 x 178mm)	
Weight	7.3 oz. (207g)	





START INTERNATIONAL
4270 Airborn Drive
Addison, TX 75001, USA
Toll Free 800.259.1986
Tel 972.248.1999
Fax 972.248.1991
info@startinternational.com

www.startinternational.com

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