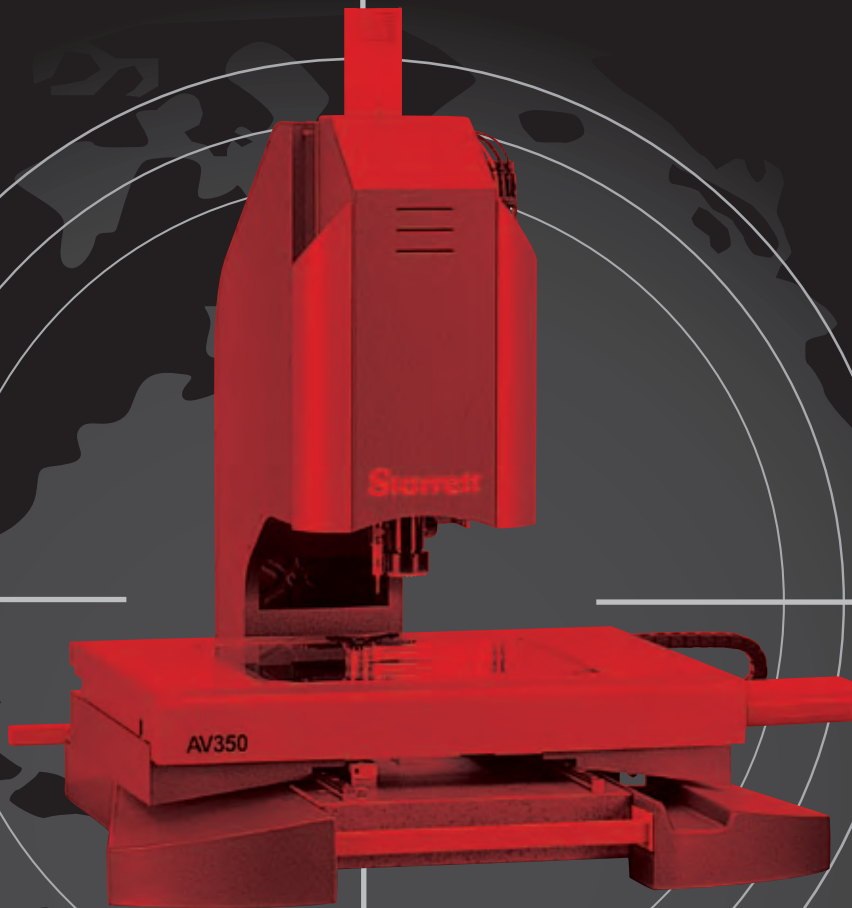


Starrett®

Starrett® GLOBAL



Starrett's success as a global manufacturer began in the 1950's with the establishment of facilities in Brazil and the U.K. Today, Starrett has nine manufacturing locations worldwide: Brazil, The U.K., China, The Dominican Republic, and five in the United States.

Regardless of the country of origin, the Starrett name is your assurance of unmatched precision and quality. After more than 125 years, Starrett remains "The World's Greatest Toolmakers" – the continuing standard of excellence.

METROLOGY  SOLUTIONS

OPTICAL COMPARATORS

Optical comparators provide a time tested, cost effective, solution for non-contact measurement. They are found in lab and shop environments, often near product manufacturing activity. Optical comparators are used for an exceptionally wide range of dimensional inspection applications. In recent years, Starrett's enhanced mechanical designs have combined with an advancement in microprocessor capability to make our current products even more accurate, repeatable, efficient and easy to use.

At the heart of these systems are precision optics, superb lighting and a highly accurate workstage. They combine to ensure bright, sharp images and exceptional accuracy.

Generally, horizontal models work well with parts that need to be fixtured, held in a vise, or on centers. Vertical models provide comparable accuracy and are ideal for parts that are placed on the glass insert of the workstage.

Vertical systems work well when the parts to be measured are flexible or soft (i.e., plastic, thin stampings or electrical components).

The versatile Starrett line includes optical systems from 16"-30" (400-750mm) screen diameters, horizontal and vertical models and a wide range of special machines.

We offer many choices of optical magnification, manual, motor-driven or CNC workstage travel, with PC or LCD metrology readouts.



HE400

HB400, HD400

VB400, VF600

HF600, HF750

HS600, HS750

OPTIONS & ACCESSORIES

HORIZONTAL BENCHTOP HE400

HE400

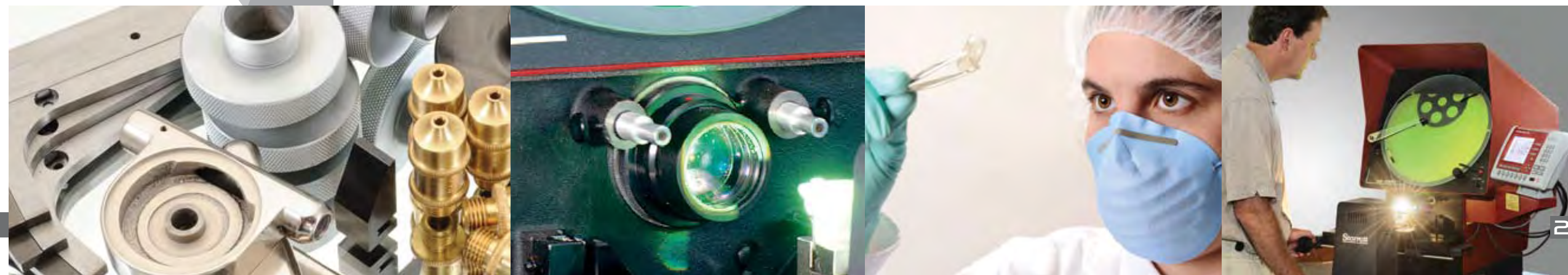
Updated from our original HE350, this machine offers a 400mm screen, 250mm x-axis table travel, bayonet fitting lenses and Q-axis angular readout; all to improve capacity and performance. These latest horizontal projectors are fitted with industry-leading Quadra-Chek digital readout systems as standard, making them simple to use, but having the power to satisfy the most complex measuring requirements.

FEATURES AND SPECIFICATIONS

- Fully usable 16" (400mm) screen diameter
- All metal construction
- Large measuring travel: 10" X-axis, 4" Y-Axis (254mm x 100mm)
- Digital protractor for accurate angle measurements: 1' resolution
- Lamphouse mounted helix adjustment for accurate thread form inspection
- Available with the full range of Quadra-Chek readout systems
- Fine adjustment on all axes, plus zero backlash, fast traverse mechanism on the X-axis
- Fully retractable duplex fiber optic surface illumination
- Optional automatic edge detection



HE400



HORIZONTAL BENCHTOP

HB400 HD400

HB400

A robust, compact horizontal axis bench top projector, the leader in its class and the one all others are compared against. The HB400 provides a vertically correct image on a fully useable 16" (400mm) diameter screen. With a significantly larger measuring capacity, this projector provides a measurement range previously only possible on floor-standing units.

HD400

The HD400 includes these additional standard features:

- Dual lens slide providing an ultra-quick lens change
- One third more X-axis travel than HB400
- Larger top plate area

FEATURES AND SPECIFICATIONS

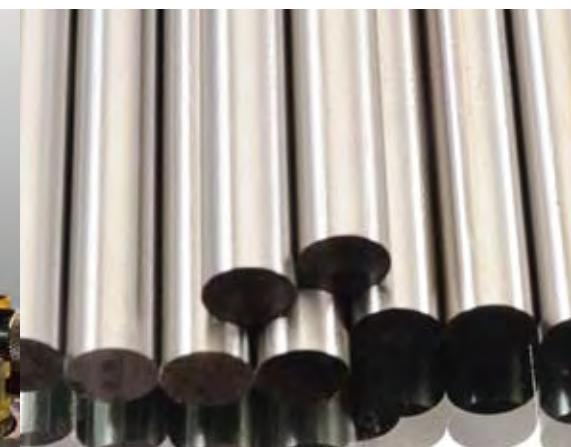
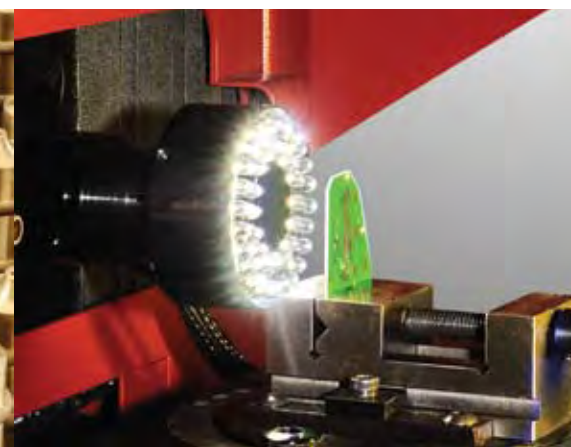
- Fully usable 16" (400mm) screen diameter
- Exceptionally stable, all metal construction for optimum performance and accuracy
- Large measuring travel: 12" X-axis, 6" Y-Axis (300mm x 150mm) for HB400 and 16" X-axis, 6" Y-Axis (405mm x 150mm) for HD400
- High precision workstage with 21.25" x 5" top plate, with two machine slots for easy fixturing
- Stage weight capacity: 100 lbs
- Dual mirror design for vertically correct image
- Available with the full range of Quadra-Chek readout systems
- Digital protractor for accurate angle measurements, 1' resolution
- $\pm 15^\circ$ Workstage helix adjustment for accurate thread form inspection
- Fine adjustment on all axes, plus zero backlash, fast traverse mechanism on the X-axis
- Fully retractable fiber optic surface illumination with heavy-duty shielding
- Automatic edge detection option
- Motorized and CNC workstage options
- Dual lens mount with slide action for quick magnification changes on HD400



HB400



HD400



VERTICAL

VB400 VF600

VB400

With a large measuring capacity, the VB400 has the versatility to be at home in many different working environments. It is ideal for high volume or low batch production, routine component sampling, or general purpose tool room use. In fact, the VB400 can be found wherever there is the need to verify and measure complex shapes and hole patterns, and where accuracy, ease of use and speed are essential.

Designed with unique surface illumination options, the VB400 can be configured to match exact measuring requirements.

FEATURES AND SPECIFICATIONS

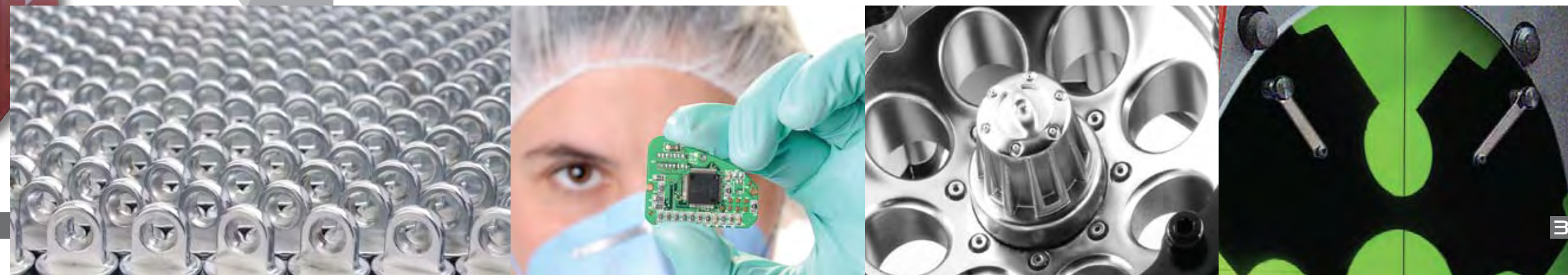
- Fully usable 16" (400mm) screen diameter
- Exceptionally stable, all metal, design and construction for optimum performance and accuracy
- Large measuring travel: 8" X-axis, 4" Y-Axis (200mm x 100mm)
- High precision workstage with 16" x 9" top plate, with machine slot for easy fixturing
- Stage weight capacity: 22lb

VF600

If your measuring requirements determine the use of a large screen vertical axis projector, then look no further than the Starrett VF600. A design based on 35 years of knowledge in the manufacture of high performing optical projectors, the VF600 is ideal for the larger components found in the electronics, pressings and extrusion industries.

With its helix facility, single or multiple lens turret, choice of workstages and large range of digital readout options, the VF600 is the ultimate in vertical axis profile projectors.

- Available with the full range of Quadra-Chek readout systems
- Unique surface illumination, standard fiber optic or optional dual lamp system
- Digital protractor for accurate angle measurements, 1' resolution
- Fine adjustment on all axes, plus zero backlash, fast traverse mechanism on the X and Y axis
- Fully retractable fiber optic surface illumination with heavy duty shielding
- Automatic edge detection option



HORIZONTAL FLOOR STANDING

HF600 HF750

HF600

Starrett's floor model optical comparators are well known throughout the world for superior value and exceptional measuring performance across the full measuring range and at all magnifications. The HF600 sets the standard in all applications from the QC lab to the production floor.

HF750

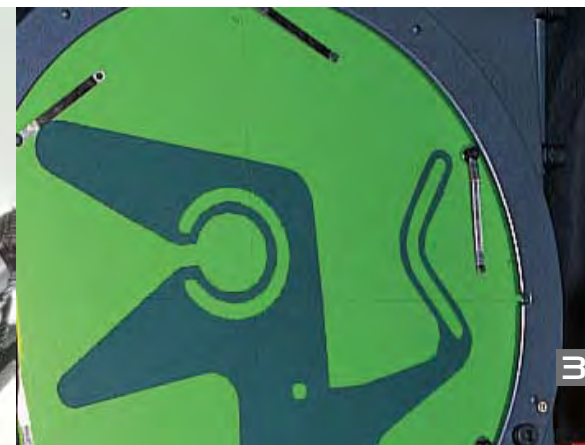
The same exemplary build standards as the HF600, the HF750 super capacity optical comparator delivers benefits from an even larger 30" (762mm) screen. This large, fully usable screen sets a new standard for clarity and brightness.

Ideal for use over a broad spectrum of industries and applications, the HF750 projector is designed and built to satisfy the requirements of measuring small to large work pieces with total precision, ruggedness and efficiency.

Side bed models, HS600 and HS750, are also available.

FEATURES AND SPECIFICATION

- Fully usable 30" (762mm) screen diameter
- Floor model design for optimum large workpiece performance and accuracy
- Large measuring travel: 12" X-axis, 8" Y-Axis (300mm x 200mm)
- High precision workstage with 25" x 9" top plate, with 2 machine slots for easy fixturing
- Stage weight capacity: 330lb
- Dual mirror design for vertically correct image
- 2-lens condenser, turret mounted
- Available with the full range of Quadra-Chek readout systems
- Digital protractor for accurate angle measurements, 1' resolution
- $\pm 15^\circ$ Sub workstage helix adjustment for accurate thread form inspection
- Standard with 3-lens indexable turret
- Power workstage on vertical and horizontal axis
- Fully retractable fiber optic surface illumination with heavy duty shielding
- Canopy and curtains included standard
- Automatic edge detection option
- CNC workstage options



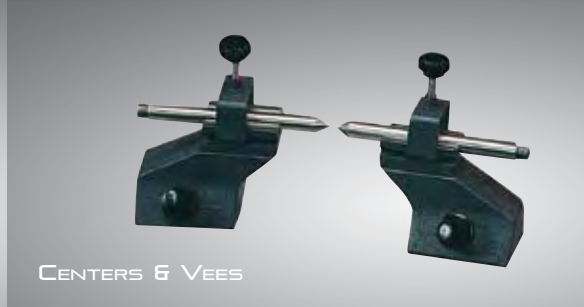
Options & Accessories



OV2 VIDEO CAMERA



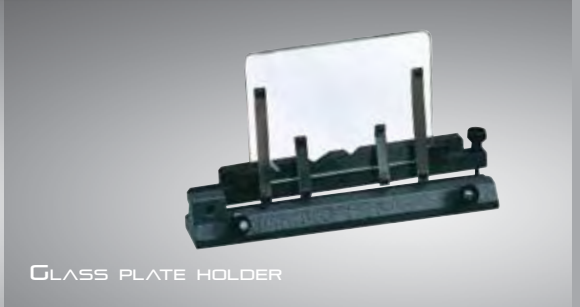
OV² RING LIGHT



CENTERS & VEEs



ROTARY WORKSTAGE



GLASS PLATE HOLDER

MODEL	HE400	HB400	HD400	VB400	VF600	HF600	HF750	HS600	HS750
Bench-Top Projector	X	X	X	X					
Floor-Standing Projector					X	X	X	X	X
Side-mounted Projection Screen								X	X
Horizontal Projector	X	X	X			X	X	X	X
Vertical Projector				X	X				
5X Magnification Lens					X	X	X	X	X
10X Magnification Lens	O	O	O	O	O	O	O	O	O
20X Magnification Lens	O	O	O	O	O	O	O	O	O
25X Magnification Lens	O	O	O	O	O	O	O	O	O
31.25X Magnification Lens	O	O	O	O	O	O	O	O	O
50X Magnification Lens	O	O	O	O	O	O	O	O	O
100X Magnification Lens	O	O	O	O	O	O	O	O	O
Twin Fiber Optic Surface Illumination	X	X	X	X	X	X	X	X	X
Precision Glass Graticule	O	O	O	O		O	O	O	O
Iris Diaphragm	O	O	O		O	O	O	O	O
Precision Rotary Vise	O	O	O			O	O	O	O
Vee Block on Rotary Base	O	O	O			O	O	O	O
Precision Rotary Work Stage with 360 degree graduated scale and vernier segment				O	O				
Precision Fixed Vise, 1-1/4" Capacity	O	O	O			O	O	O	O
Helix Center Support Fixture				O	O				X
Precision Centers and Vee's	O	O	O	O	O	O	O	O	O
Glass Plate Work Holder	O	O	O			O	O	O	O
Cabinet Stand, 32" high	O	O	O						
Cabinet Stand, 23" high	O	O	O	O					
Motorized X-Y Axis		O	O		X	X	X	X	X
Canopy and Curtains	O	O	O	O	X	X	X	X	X
Heavy-Duty Work Stage						O	O	O	O
Q-Axis Digital Protractor for angular measurements	X	X	X	X	X	X	X	X	X
16" Diameter Screen	X	X	X	X					
24" Diameter Screen					X	X		X	
30" Diameter Screen							X		X

MODEL	HE400	HB400	HD400	VB400	VF600	HF600	HF750	HS600	HS750
8" Horizontal Travel				X	X				
10" Horizontal Travel	X								
12" Horizontal Travel		X				X	X	X	X
16" Horizontal Travel			X						
20" Horizontal Travel						X	X	X	X
4" Vertical Travel	X			X	X				
6" Vertical Travel		X	X						
8" Vertical Travel						X	X	X	X
2" Focus Travel		X	X						
3" Focus Travel						X	X	X	X
4" Focus Travel				X					
Single Lens Mount with quick action lens change	X	X		X					
Dual Lens Mount with quick action lens change			X						
Lens Turret with three lens capacity							X		X
Lens Turret with four lens capacity					X	X		X	
Dual Rotary Lens Condenser System for hi/low mag lenses					X	X	X	X	X
Collimating condenser with yellow/green filter and provision to mount further accessories.	X	X	X						
Optional Fully-Automatic CNC control		O	O		O	O	O	O	O
Linear Encoder (glass scale) on both X and Y axes	X	X	X	X	X	X	X	X	X
Video Edge Detection (with QC300 series)	O	O	O			O	O	O	O
Optical Edge Detection (with QC200E or QC300E series)	O	O	O	O	O	O	O	O	O
Internal Auto Edge Sensing		O	O						
OV² Video Camera capable of 240X video magnification. (Versions for LCD color monitor, QC300 or QC5000 series)	O	O	O			O	O	O	O
Color Monitor option for OV² Video Camera System with 15" LCD Monitor, cross-hair generator and mounting arm.	O	O	O			O	O	O	O
Adapter for OV2 Video Camera System						O	O	O	O
OV² Ring Light with manual control	O	O	O			O	O	O	O
OV² Ring Light for QC300 DROs	O	O	O			O	O	O	O

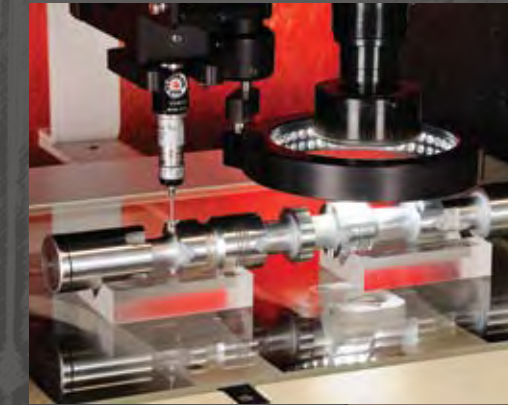
X = Standard Feature, O = Option

Starrett®

For over 125 years, manufacturers, builders and craftsmen worldwide have depended upon The L.S. Starrett Company's products to ensure the consistent quality of their work.

They know that the Starrett name on a saw blade, hand tool or measuring tool ensures unprecedented quality, innovative products, exceptional service and expert technical assistance.

With strict quality control, state-of-the-art equipment and an ongoing commitment to producing superior tools, the thousands of products in today's Starrett line continue to be the most accurate, robust and durable tools available.



METROLOGY EQUIPMENT
PRECISION HAND TOOLS
POWER TOOL ACCESSORIES
JOBSITE & WORKSHOP TOOLS
BAND SAW BLADES
CUSTOM GRANITE SOLUTIONS

Starrett®

Starrett®
Global

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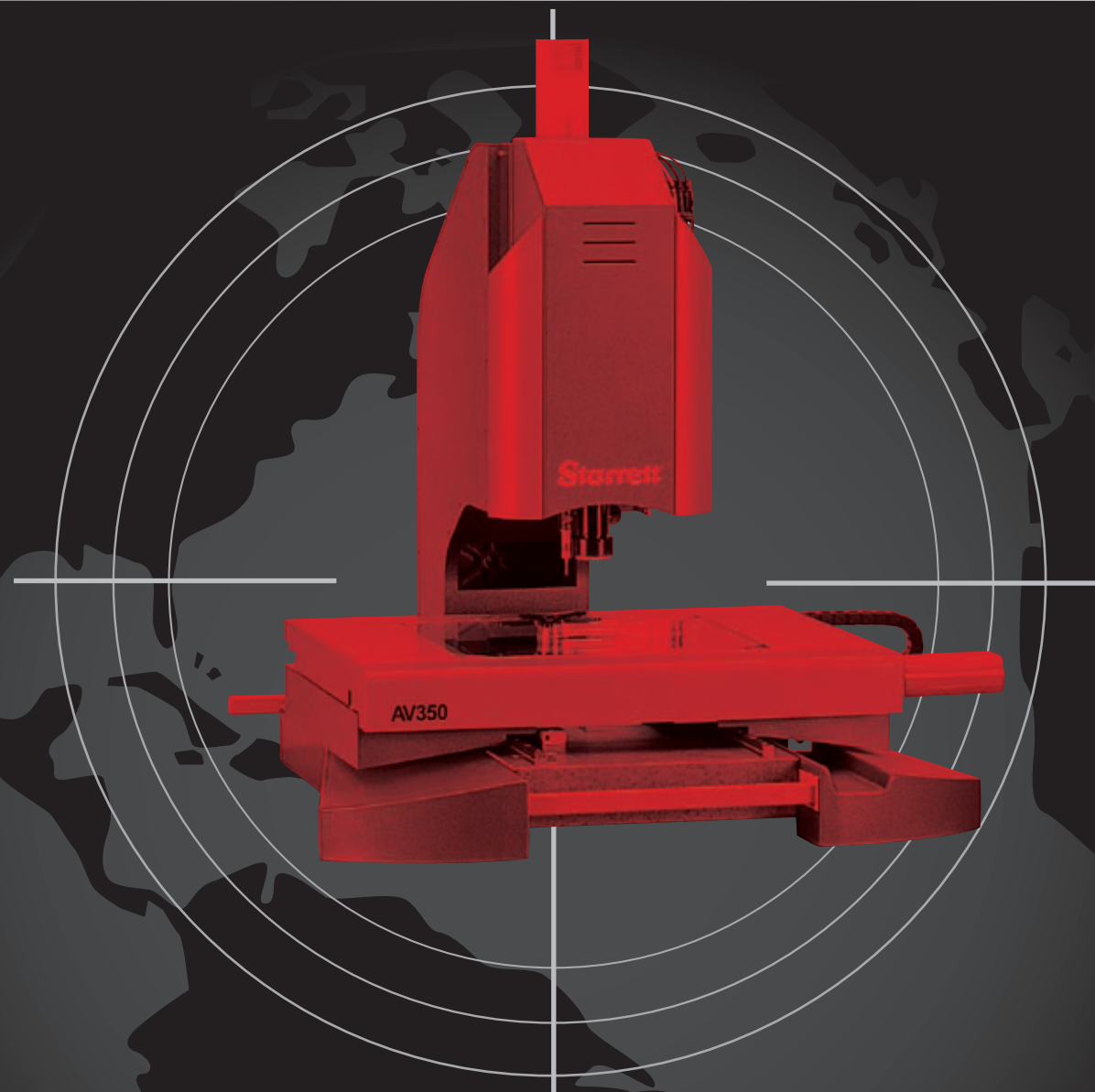
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