

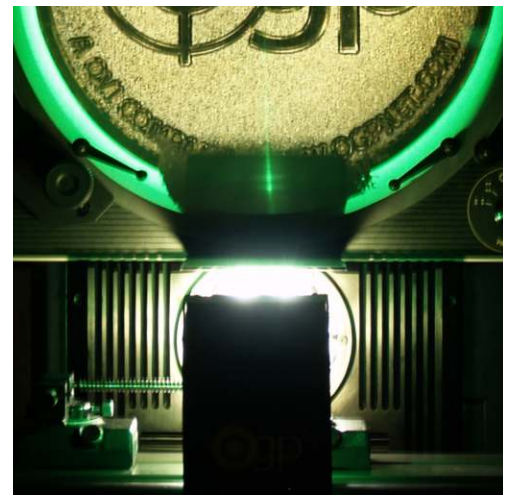


# Focus Advance<sup>®</sup>

## 16" Horizontal Contour Projector<sup>®</sup>

OGP<sup>®</sup> has provided state-of-the-art optical comparators to the industrial marketplace for more than a half century. That effort culminates in the new Focus<sup>™</sup> Advance 16" Horizontal Contour Projector — a rugged and capable benchtop workhorse with ground-breaking technologies and value-add options. With Focus Advance, you get everything the OGP name has to offer.

- **Superb optics yield sharp images.** Focus Advance provides completely telecentric optics that yield upright and reversed images that are crystal-clear and undistorted on its large 16" diameter viewing screen. Mag lenses are internally mounted with room to store others. Unique "Mag ID" automatically displays the magnification of the current lens.
- **Constant working distance at all magnifications speeds setups and measurements.** Unique in its class, you can change magnification on Focus Advance without touching your part setup — a real time saver.
- **Bright, cost effective all-LED illumination.** Focus Advance offers a world first — all-LED TruLight<sup>™</sup> illumination — a truly innovative technology in contour projection. A high-brightness monochromatic green LED back light is standard. The ground-breaking optional TruLight Ringlight with its 8 white LEDs that can be switched on in six fixed directional patterns for optimal surface illumination, is also standard. Optional white LED TTL coaxial surface light provides unsurpassed direct surface illumination. TruLight LEDs offer variable intensities, are extremely bright, and provide consistent performance. Long-lived, they provide many years of uninterrupted service, while consuming only a fraction of the energy required for tungsten illumination.
- **Rigid cast base for metrological stability.** A substantial mineral cast base provides excellent metrological stability, and you can trust the integrity of the measurements you get.
- **Multifunctional digital readout for geometric processing power is included.** The OGP Q-Check<sup>®</sup> Digital Readout with its dual backlit 2-line LCD displays and durable construction will survive in almost any shop environment. This geometric processor makes quick work of tough measurements.
- **Hardware and software options expand Focus capabilities even further.** Focus Advance is also available with a number of high-value hardware options, including extended 18" X travel (standard X travel is 15"); 20x, 50x, and 100x mag lenses; motorized worktable; OGP-exclusive Projectron<sup>™</sup> internal automatic edge detection; and digital video image capture. Software options include eChek<sup>™</sup> metrology software; eCAD<sup>™</sup> electronic CAD overlay and chart screen projection software; new comparator metrology software (for motorized systems); and MeasureFit<sup>®</sup> Plus profile fitting and GD&T analysis software.



- Standard
- Optional

# Focus Advance Features & Specifications

- **Viewing area:** 16" (406 mm)
- **Screen type:** Ground glass with 90° centerlines and clips for mounting standard 16" (406 mm) overlay charts
- **Protractor:** Digital screen display, ±360° readout with 1.0' (0.017") resolution
- **Optical system:** Telecentric, horizontal, with upright reversed image, constant working distance 3.5" (90 mm), 10x mag lens
- **Lenses:** Telecentric mag lenses; 20x, 50x, 100x
- **Lens changing:** Manual, with operator-accessible internal mag lens storage rack
- **Throat clearance:** 9.5" (240 mm)

- **Illumination (TruLight™):** Backlight, bright green LED, continuously variable intensity
- Oblique (darkfield), TruLight Ringlight with 8 white LEDs, 6 switch-selectable patterns for effective directional lighting
- TruLight TTL surface, white brightfield LED coaxial internal, continuously variable intensity

- **Worktable:** Hardcoat anodized aluminum with fixturing slot, 23.20" x 4.75" (590 x 120 mm), 60 lb (27.2 kg) load capacity
- **Helix motion:** ±7.5° with pivoting worktable assembly and zero stop
- **Travel:** XY - 15" x 6" (380 x 150 mm); Focal - 2.0" (50 mm), with precision fine adjustment
- Extended X axis travel - 18" (450 mm)
- **XY motion:** Manual, with quick release X axis and fine adjustment knobs in X and Y
- Motorized, with variable speed joystick and fine adjustment knobs in X and Y
- **XY positioning:** Precision, with heavy duty cast iron substage for vertical motion and focus control
- **XY scale resolution:** 1.0 μm (0.00004")

- **Q-Check® geometric measuring processor:** Includes (2) 16 digit by 2 line backlit LCDs showing X, Y, and measurement results. Includes functions for inch/millimeter, Cartesian/polar, decimal degrees/dms, XY zero, skew alignment, absolute/incremental datum, point, distance, angle, width, radius, diameter, intersection, included angle, size, location, straightness, roundness, serial and parallel interfaces, and construction from previously measured features.
- **Metrology software:** eChek™ (available with or without computer, requires motorized worktable), new comparator metrology software (part of video camera automation package)
- **Productivity software:** eCAD™ for electronic CAD overlay & chart screen projection (available with or without computer), MeasureFit® Plus, SmartReport® powered by QC-Calc, QC-Calc™
- **Computer accessory package:** 22" or 24" flat panel LCD monitor, or dual 22" flat panel LCD monitors, keyboard, three-button mouse (or user supplied)

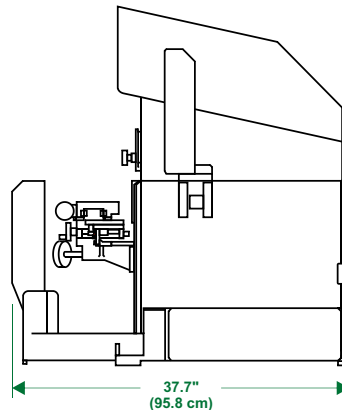
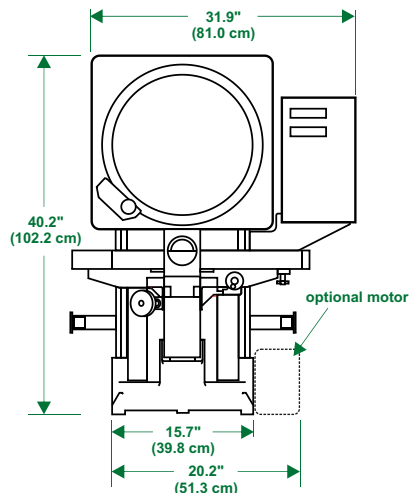
- **Power requirements:** 115 vac, 50/60 Hz, 1 φ, 350 W

## Options:

- Overscreen fresnel lens (recommended for use with TruLight Ringlight and/or TTL surface options)
- Adjustable direct projection iris
- Digital video screen capture
- Fixtures and calibration accessories
- Footswitch
- Glass and plastic chart gages
- Heavy duty cabinet stand with storage space, heavy duty cabinet stand with storage space & overhead light shield
- Projectron™ internally mounted automatic edge detection
- Swing away lamphouse
- Service and support contracts
- Video camera automation package (includes 5 megapixel camera with 4:1 digital zoom, computer, comparator metrology software; requires motorized worktable)

- **Warranty:** Full on-site warranty first year, parts only second year (North America only)

## Made in USA



**Unit Weight**  
 Manual - 475 lb (215.5 kg)  
 Motorized - 495 lb (224.5 kg)



**World Headquarters and Technology Center:** 850 Hudson Avenue • Rochester, NY 14621 USA • Tel 585.544.0400 • Fax 585.544.8092  
**Western USA Regional Office:** 615 South Madison Drive • Tempe, AZ 85281 USA • Tel 480.889.9056 • Fax 480.889.9059  
**OGP Shanghai Co, Ltd:** 17 Lane 593 • East Jin An Rd • Pu Dong New District • Shanghai, China 201204 • Tel 86.21.5045.8383/8989 • Fax 86.21.6845.8800  
**OGP Messtechnik GmbH:** Nassaustr. 11 • 65719 Hofheim-Wallau, Germany • Tel 49.6122.9968.0 • Fax 49.6122.9968.20  
**Optical Gaging (S) Pte Ltd:** 21 Tannery Road, 347733 Singapore • Tel 65.67.41.8880 • Fax 65.68.46.8998  
**Internet:** www.ogpnet.com • info@ogpnet.com