



OGP QL-20



Midrange Contour Projector

	mm	in
Screen diameter	510	20
X travel	380	15
X travel extended (opt.)	450	18
Y travel	230	9
Worktable length	815	32
Worktable depth	200	8
Focus travel	75	3
Constant working clearance	215	8.38
Throat clearance	465	18.38

The OGP® QL-20™ Contour Projector® is an outstanding value. It has more than double the image area of systems with a 14" screen and features rigid construction for measurement stability, as well as patented optics for visual acuity. The QL-20 is ideal for virtually every inspection application.

This machine is known for its ergonomics. Controls are located at natural positions for fatigue-free operation. The bright screen and digital readout displays are conveniently located at eye level. And the in-line design is well-suited for easy access to the part and fixtures.

- True telecentric design for fully corrected images, guaranteed image accuracy, and image size that doesn't change with focus setting.
- Projection lenses with constant working distance. Measure large parts, even at the highest magnification.
- Unparalleled screen brightness and flat field. Measure with confidence, even at the extreme edges of the screen.
- Heavy duty, high precision worktable, with 250 kg (550 pound) capacity, and DC servo motor drive with joystick control, for smooth, quiet, fast movement of the worktable.
- Extra value options include internally mounted Projectron™ edge detection, and 32 bit SmartCheck® for Windows™ measurement software.

“Best in class”
features
and
performance

Technical Specifications

● Standard ○ Option

- **Screen size:** 510 mm (20") diameter
- **Screen type:** Ground glass with 90° centerlines and clips for mounting standard overlay charts
- **Protractor:** Screen rotation protractor with ±360° motion, digital display, thermal compensation function, 0.01° or 1' display
- **Optical system:** Telecentric, with fully corrected image, constant working clearance 215 mm (8.38")
- **Lenses:** Telecentric projection lenses; 10x, 20x, 31.25x, 50x, 62.5x, 100x
- **Lens mount:** One-position, fixed
- Five position, motorized turret, with automatic magnification sensing
- **Throat clearance:** 465 mm (18.38")
- **Illumination:** 100 W tungsten halogen, direct projection, with green filter
- 200 W mercury arc direct projection, 250 W tungsten halogen surface, and/or 200 W mercury arc surface

- **Travel:** XY - 380 x 230 mm (15" x 9"); Focus - 75 mm (3"), with precision fine adjustment
- Extended X axis travel - 450 mm (18")
- **XY motion:** Precision mechanical bearing slides attached to heavy duty cast worktable support structure
- **XY positioning:** Motorized, DC servo, with variable speed joystick and X axis fine adjustment knob
- **XY scale resolution:** 1.0 μm (.00004")
- **Worktable:** Nickel plated iron with 3 fixturing slots, 815 x 200 mm (32" x 8"), 250 kg (550 lb) load capacity
- **Helix motion:** ±7.5° with pivoting worktable assembly and zero stop
- **Dimensions (approx DWH):** 1700 x 965 x 1900 mm (67" x 38" x 75"), 730 kg (1600 lb)

- **Geometric measuring processor:** Includes (2) 16 digit by 2 line LCDs and 25 key membrane panel with functions for inch/millimeter, Cartesian/polar, decimal degrees/dms, XY zero, skew alignment, absolute/incremental, point, distance, angle, width, radius, diameter, intersection, included angle, size, location, straightness, roundness, and serial and parallel interfaces
- **Software:** SmartCheck®, SmartFit™, SmartReport®, QC-Calc™, SmartChartGage™

- **Power requirements:** 115 vac, 50/60 Hz, 1 φ, 2500 W
- **Rated environment:** 20-23° C (68-75° F), 30-80% humidity (non-condensing), vibration <0.005g below 10 Hz
- **Operating environment:** 15-30° C (59-86° F)

- **XY accuracy (worktable linear):** Within 8 μm (.0003") total band over full travel*

*Applies to thermally stable system in rated environment, with 50x lens installed. Depending on load distribution, accuracy at maximum rated load may be less than standard accuracy.

Options:

- **Projectron™** internally mounted automatic edge detection
- Overscreen Fresnel lens
- Surface illumination concentrator (for 50x and above lenses)
- Adjustable iris assembly, adjustable slit iris assembly
- Overhead curtain
- Fixtures and calibration accessories
- Service and support contracts

- **Warranty:** Two year, limited (North America only)



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