

Profile Projectors

PH-3515F SERIES 172 — Profile Projector

- Benchtop model uses a horizontal optical system.
- Suitable for thread pitch measurements—blurred or distorted images will not be produced when workpiece is angled.
- Erect image on the day-bright screen.
- Standard twin fiber-optic illumination.
- 14" (353mm) diameter protractor screen with cross-hairs and staggered lines for easy alignment.
- Digital angle measurement to 1' or 0.01°.
- Heavy-duty workpiece table incorporates linear scales for fast, accurate measurement.
- Built-in linear scales for use with optional display counters.



Built-in Surface Illumination



Includes Built-in Twin Fiber Optics to assist with measuring surface features/defects.

Flexible housing allows the lighting condition to be easily manipulated for a user dealing with a lighting situation.

PH-3515 offers a variety of illumination options from crisp couture illumination users have come to expect, as well as coaxial and surfaces illumination.

- Inspect edges with ease
- Amplify surface features
- Examine small changes in typography (markings, scratching, dents)



Accessories for Common Industry Applications



Durable working stage with built-in T slots allows for fixtures to be seamlessly mounted to a stage. Mitutoyo offers a variety of fixturing options on the PH-3515F which were made to accommodate common industry applications

- In the picture to the left is the Mitutoyo Tipped Saw Support Stand (172-001) used for streamlined inspection of each tooth grind, ensuring its consistency and accuracy across teeth on a saw blade



172-001



172-002

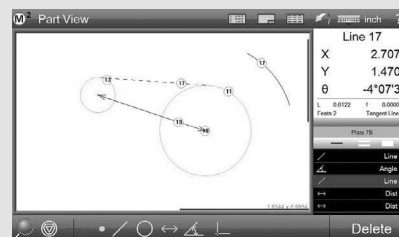


2D Coordinate Interfacing RETROFITS

Model No.	Description
64PKA-M2-P	M2 Non-edge Detection Unit with ASUS Touchscreen PC
64PKA-M2-PE	M2 with Edge Detection Unit & ASUS Touchscreen PC
264-161-13A	QM-DATA200 Arm Type (PJ-Plus)

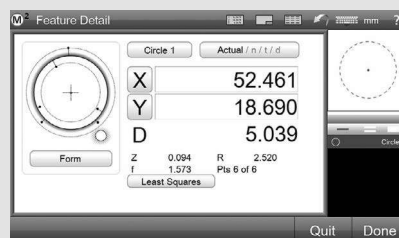


KA Counter (174-183A)
(Refer to page H-8 for more details.)
64AAB149: Counter stand



M2 Graphics-based "Part View" constructions

Generate popular construction types, like distances and tangent lines, from within the graphical part view.

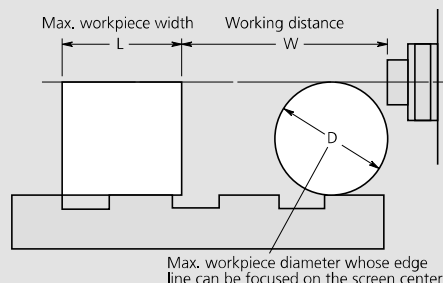


M2 Geometric tolerance view

Measure features, set nominals, apply tolerances and view deviation results with only a few quick clicks.

Profile Projectors

Projection Capacity



PH-3515F Unit: mm

	Magnification			
	10X (standard)	20X	50X	100X
View field	35.3	17.65	7.06	3.5
L	235	235	80	109
W	93 (41)	40	14.6	9.5
D	152.4	116	30.4	19

(): When using surface illumination

Optional Accessories

- 172-482:** 10X projection lens set (standard accessory)
- 172-483:** 10X projection lens
- 172-484:** 20X projection lens set
- 172-485:** 20X projection lens
- 172-486:** 50X projection lens set
- 172-487:** 50X projection lens
- 172-166:** 100X projection lens set
- 64PMI308:** Machine stand
- 172-116:** Standard scale (50mm)
- 172-117:** Standard scale (2")
- 172-118:** Reading scale (200mm)
- 172-161:** Reading scale (300mm)
- 172-119:** Reading scale (8")
- 172-162:** Reading scale (12")
- 172-286:** Green filter
- 512305:** Halogen bulb (24V, 150W) (standard accessory)
- 172-425:** Twin surface illumination

Fixture and Stage Accessories*

- 172-600:** Center support
- 172-601:** Center support riser
- 172-602:** Rotary vise (Max. workpiece dia.: 2.3" / 60mm)
- 172-603:** V-block with clamp (Max. workpiece dia.: 2" / 50mm)
- 172-132:** Vertical holder
- 172-001:** Tipped-saw support stand
- 172-002:** Cutter support stand

* See page I-13 for details



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SPECIFICATIONS

Model No.		PH-3515F
Order No.		172-868-11A*
Projected image		Erect image
Protractor screen	Effective diameter	14" / 353mm
	Screen material	Fine ground glass
	Reference line	Cross hair line
	Screen rotation	±360°, fine feed and clamp
	Angle display (LED)	Resolution: 1' or 0.01° (switchable), Range: ±370°, Functions: ABSOLUTE/incremental mode switching, Zero set
Projection lens		Standard accessory: 10X (172-184), Optional accessories: 5X, 20X, 50X, 100X
Magnification accuracy	Contour illumination	±0.1% or less
	Surface illumination	±0.15% or less
Contour illumination	Light source	Halogen bulb (24V 150W)
	Optical system	Telecentric system
	Functions	2-step brightness switch, Heat-absorbing filter, Cooling fan
Surface illumination (Optional accessories)	Light source	Halogen bulb (24V 150W)
	Functions	Adjustable condenser lens, Heat-absorbing filter, Cooling fan
	Table travel (X-axis)	10" / 254mm
	Table size (X, Z)	17.7"x5.7" / 450x146mm
	Vertical travel (Y-axis)	6" / 152mm
	Resolution	0.001mm/0.0005"*
	Measuring Unit	Built-in Linear scale
	Max. workpiece width	See (L) in chart to left
	Max. workpiece load	100lbs / 45kg
Power supply		120V AC, 50/60Hz
Mass		333lbs / 150kg
Standard accessories		10X projection lens set, work stage, power cord, halogen bulb, tube fuse, grounding wire, allen wrench

* Counter not included

DIMENSIONS

