NAP Series Pneumatic Optical Tables, Three-Wire Pendulum, 100 mm Top, 500 kg

Model NAP Series · waveqvanta.com/products/nap-series-pneumatic-optical-tables

Compact pneumatic optical table with three-wire pendulum isolation for microscopes and small optical setups.



The NAP Series is a compact pneumatic optical table using three-wire pendulum isolation with laminar damping, for tabletops from 1000 × 800 mm to 1500 × 1200 mm. All models have a 100 mm thick top, an 800 mm total height and a 500 kg load capacity, with resonant frequencies below 1.5–2.5 Hz vertically and 1–1.5 Hz horizontally. Each size is available with a welded honeycomb top or as a -K version with a bonded trussed honeycomb top and individual cleaning cups.

Key features

- Three-wire pendulum pneumatic isolation in vertical and horizontal directions
- Laminar damping elements for sensitive response
- Isolation efficiency at 10 Hz: 90–95% vertical, 92–98% horizontal
- Tabletop height indicator for easier height adjustment (−10 to +15 mm)
- Welded three-layer sandwich honeycomb top, or bonded trussed honeycomb top with individual cleaning cups (-K)
- SUS430 (1Cr17) working surface as standard; SUS304 (-304) or SUS316 (-316) optional
- Portable air compressor included by default; -WQB without compressor

Specifications

Isolation Mechanism	Three-wire pendulum pneumatic isolation
Damping	Laminar damping
Resonant Frequency, Vertical	Below 1.5–2.5 Hz
Resonant Frequency, Horizontal	Below 1–1.5 Hz
Isolation Efficiency, Vertical	75–92% at 5 Hz; 90–95% at 10 Hz
Isolation Efficiency, Horizontal	88–94% at 5 Hz; 92–98% at 10 Hz
Tabletop	Three-layer sandwich honeycomb, welded (default); bonded trussed with cleaning cups (-K)
Flatness, Welded Top	0.02–0.05 mm / 600 mm × 600 mm
Flatness, Bonded Top (-K)	0.1 mm / 600 mm × 600 mm
Tabletop Sizes	1000 × 800 mm to 1500 × 1200 mm
Tabletop Thickness	100 mm
Working Surface	4–6 mm thick stainless steel, SUS430 (1Cr17) standard
Optional Surface Materials	SUS304 (-304), SUS316 (-316)
Bottom Skin	4–6 mm thick carbon steel
Side Panels	Blue PU leather (welded top), black PU leather (-K top)
Mounting Holes	M6 on 25 mm × 25 mm grid, 37.5 mm from border
Total Height (Tabletop and Frame)	800 mm

Height Adjustment	−10 to +15 mm
Load Capacity	500 kg
Supports	4 legs, 100 × 100 mm foot area
Maximum Air Pressure	0.6 MPa
Recommended Working Pressure	0.3–0.4 MPa
Horizontal Repeatability	±0.5 mm
Air Supply	Portable air compressor and oil/water separator; -WQB without compressor
Accessories	Wrench, bullseye level

Model overview

Model	Size L × W × H (mm)	Tabletop	Top Weight (kg)
NAP10-08	1000 × 800 × 800	Welded	96
NAP12-08	1200 × 800 × 800	Welded	115
NAP12-09	1200 × 900 × 800	Welded	130
NAP12-10	1200 × 1000 × 800	Welded	144
NAP12-12	1200 × 1200 × 800	Welded	173
NAP15-09	1500 × 900 × 800	Welded	162
NAP15-10	1500 × 1000 × 800	Welded	180
NAP15-12	1500 × 1200 × 800	Welded	216
NAP10-08-K	1000 × 800 × 800	Bonded trussed honeycomb (-K)	92
NAP12-08-K	1200 × 800 × 800	Bonded trussed honeycomb (-K)	111
NAP12-09-K	1200 × 900 × 800	Bonded trussed honeycomb (-K)	124
NAP12-10-K	1200 × 1000 × 800	Bonded trussed honeycomb (-K)	138
NAP12-12-K	1200 × 1200 × 800	Bonded trussed honeycomb (-K)	166
NAP15-09-K	1500 × 900 × 800	Bonded trussed honeycomb (-K)	155
NAP15-10-K	1500 × 1000 × 800	Bonded trussed honeycomb (-K)	173
NAP15-12-K	1500 × 1200 × 800	Bonded trussed honeycomb (-K)	207

Typical applications

- High-magnification microscopy
- Laser confocal microscopy
- Precision optical instruments
- Compact optical paths in optical communication