

Lens Handler™

Optics Preparation and Handling System

Integrate cleaning, handling, processing and assembly of precision optics



Integrate cleaning, painting and other preparation techniques, and installation of optical elements into one smooth, continuous cycle with the model LCS-002 Lens Handler™ optics preparation and handling system. You will see an increase in productivity and quality of coating, assembly and QA processes. The number of times (and ways) you handle optics is reduced. Cleanliness is easier to maintain. Accidental damage is minimized. And, cross-training is simplified and process uniformity is easier to achieve.

Applications:

- Assembly of multi-element lenses
- Cleaning optical elements
- Painting edges
- Disassembly of optical systems
- Cleaning for cosmetic inspection
- Loading coating racks and fixtures

Three fundamental principles guided the development of the Lens Handler™:

- Hands-free, rotational motion of an optical element allows for the most convenient and effective contact cleaning of a precision surface.
- Cleaning, painting, and assembling optical components with one table-top machine eliminates unnecessary and clumsy handling of optics.
- Vacuum with Delrin™ suction cups provides the cleanest and safest way to pick-up, hold and transfer delicate optics.

Here's how it works.

An optical element is secured by vacuum on a rotating spindle, thus freeing the operator's hands for delicate work. Techniques such as cleaning, painting, beveling edges, or other optical preparation techniques that require rotation can be optimized by varying the spindle speed from 40 to 200rpm. Spindle rotation is controlled by a foot pedal. A vacuum pincette allows the transfer and precise placement of optical elements without exposing sensitive surfaces to fingerprints, chipping, or other accidental damage. Control the suction to the pincette cup by using your finger to close or open the bypass hole. A wide range of tools and accessories can accommodate diameters from 1 to 300mm. Custom inquiries are welcome.

FEATURE

Easy-to-use
Integrates multiple step optical processing
Hand-operated vacuum pincette
Variable spindle speed
Solid Delrin™ vacuum chucks
Maintenance-free
Epoxy paint finish

No oil mist or heat
Whisper quiet
Wide variety of accessories

BENEFIT

Training/cross-training is simplified
Increases productivity and quality
Reduces hand soreness from tweezers or other tools
Optimize process control
Residue-free contact with optical surfaces
Maximum uptime and reduced costs
Durable and resistant to alcohol, MEK, acetone and other solvents commonly used with optics
Useable in a cleanroom
Maintains good working environment
Optimize your process

Ordering information:

LCS-002

Includes: Lens Handler™ table-top unit, power cord, compressed air hook-up hose, foot-switch, one vacuum pincette with 1/2-20 vacuum cup fitting and coil-hose and fittings, one pair of vacuum cups (same size).

Specifications:

Height x Width x Depth:	5 inches (12.7cm) x 10 inches (24.5cm) x 6.3 inches (15.8cm)
Weight:	12 pounds (5.5kg)
Air consumption:	1.46cfm @ 87psi
Maximum Vacuum:	20.0 inches Hg @ 87psi
Maximum Holding Force @ 20" Hg:	70mm cup: 37.4lbs/17kg 30mm cup: 14.5lbs/6.5kg 10mm cup: 2.2lbs/1kg 1mm cup: 0.31oz/9.0g
Requirements:	electrical: 110/220V, 60/50Hz compressed air: 80-100psi

Accessories:

Delrin™ Vacuum Cups

Size	Fitting / Connector	Part Number
70mm	1/2-20 thread	021039
60mm	1/2-20 thread	021040
50mm	1/2-20 thread	021041
40mm	1/2-20 thread	021042
30mm	1/2-20 thread	021044
20mm	1/2-20 thread	021046
10mm	1/2-20 thread	021045
8mm	Luer	020151
6mm	Luer	020150
4mm	Luer	020149
2mm	Luer	020292
1mm	Luer	020291

Pincettes, Wands and Adapters

Description	Part Number
Extra pincette with 10' coil hose and fittings	021050
3" pincette extension tube	020088
Manual rotating wand with Luer connector	021143
90° manual rotating wand with Luer connector	020144
Small cup pincette adapter (see note 1)	020142
Large cup adapter for wands	020145

Accessory notes:

- 1) 1-8mm vacuum cups require vacuum cup adapters part number 020142.
- 2) Aluminum vacuum cups with O-ring are available, contact the factory.
- 3) Non-standard vacuum cups are available, contact the factory



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