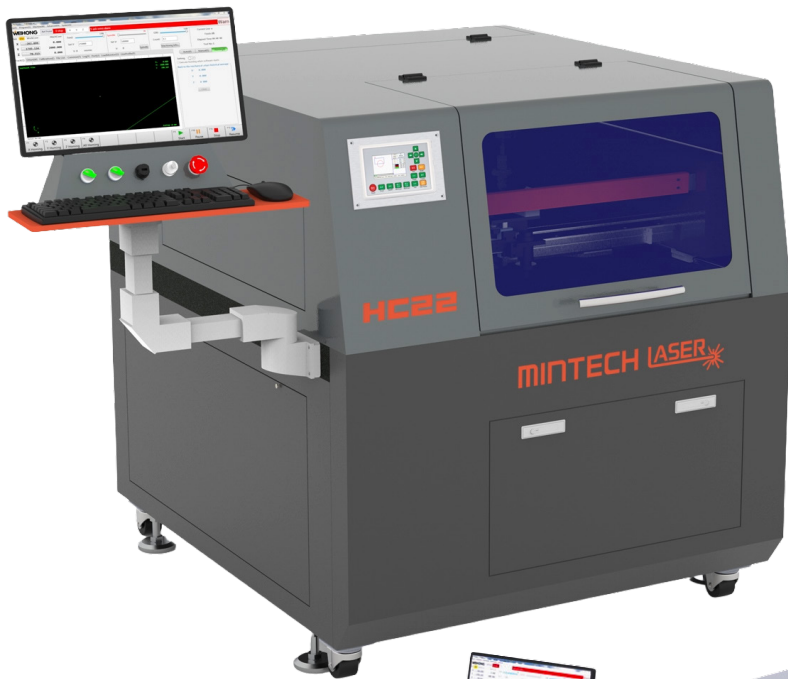
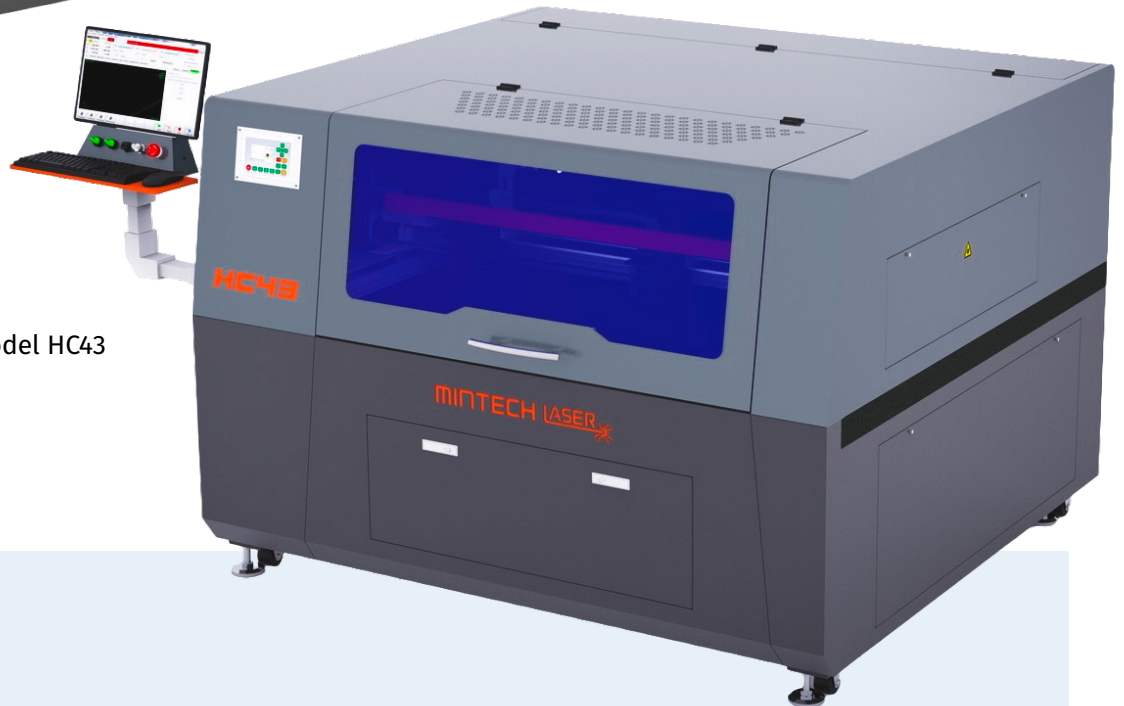




Model HC22



Model HC43

Mintech CO₂ Laser Cutters
HC SERIES



Product Overview

HC Series CO₂ Laser Cutting System High-Precision CO₂ Laser Cutter for Industrial, 3C Electronics, and Manufacturing Applications. The HC Series represents the pinnacle of CO₂ laser cutting and engraving technology, designed for precision manufacturing, industrial production, and advanced processing of flexible materials. Built on a solid granite base, the HC Series offers outstanding stability and vibration suppression, ensuring exceptional accuracy, smooth motion, and long-term reliability. To meet the demands of global manufacturing standards, the HC Series can be equipped with world-renowned RF CO₂ laser sources, including Synrad, Iradion, and Luxinar, delivering superior beam quality, long lifespan, and unmatched cutting consistency.

Key Features:

- Granite Base Construction:
 - A one-piece granite foundation provides extreme rigidity, thermal stability, and vibration damping—ideal for micro-precision applications and thin-film processing.
- Ball Screw Motion System:
 - High-precision ball screw modules ensure accurate positioning and repeatability, meeting the strict requirements of 3C electronics and industrial manufacturing.
- RF CO₂ Laser Options (Synrad / Iradion / Luxinar):
 - Choose from globally recognized RF CO₂ laser tubes for premium beam quality, fast response, long service life, and exceptional cutting performance on thin films and non-metal materials.
- Industrial-Grade Build Quality:
 - Designed for 24/7 operation in demanding production environments, ensuring consistent output and minimal downtime.
- Wide Material Compatibility:
 - Optimized for cutting and engraving acrylic, wood, leather, textiles, paper, rubber, plastics, EVA foam, cardboard, packaging materials, PET film, PI film, and electronic insulation materials.

Applications:

- 3C Electronics & Thin-Film Processing
- Industrial Manufacturing & Production

The HC Series combines German engineering precision with American manufacturing quality, making it the ideal choice for businesses requiring consistent, high-quality laser cutting capabilities.

Applicable Materials

1. Plastic Materials

- Acrylic (PMMA)/Polycarbonate (PC)/Polyethylene (PE)/Polyester (PET/PETG)

2. Wood and Wood Products

- Wood/Plywood/Medium-density fiberboard (MDF)

3. Textiles and soft materials

- Fabrics/Leather/EVA/Rubber

4. Paper Materials

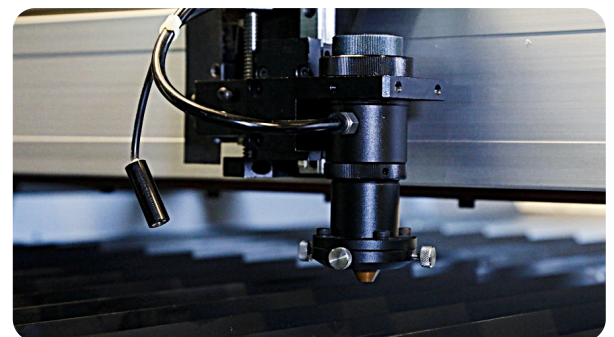
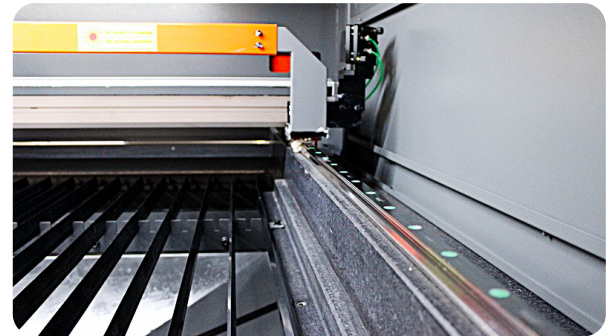
- Cardboard/Corrugated Cardboard/Paper

5. Stone and Non-metal Composite Materials

- Marble/Granite/Slate/Glass/Ceramic/Composite Materials

6. Other Specialty Materials

- Sponge/Resin/Acrylic Composite



Technical Specifications

Model	HC22	HC43
Working size	24" × 24" (610 × 610 mm)	48" × 36" (1220 × 910 mm)
Countertop weight	≤ 220lbs (≤ 100KG)	≤ 440lbs (≤ 200KG)
Machine size	47" × 58" × 53" (1200 × 1470 × 1320 mm)	78" × 88" × 57" (1965 × 2230 × 1440 mm)
Machine weight	1200 lbs	3300 lbs
Power supply	220V, 60Hz, Single Phase, 2.2KW, 12.5A	220V, 60Hz, Single Phase, 4.4KW, 25A
Communication	USB, RJ45, u-disk	
Work environment	Humidity: 40% - 60%, Temperature: 10°C - 30°C (50°F - 86°F)	
Control system	RuiDa	
Air demand	Compressed air 0.6 - 1.0 MPa (6 - 10 bar or 87 - 145 psi), 60 - 150 L/min (2 - 5 CFM)	
Transmission mode	Ball Screw Module & Square Guide Rail	
Focusing method	Electric	
Optical system	Closed constant optical path flying optical path	
CCD Camera	Optional High-resolution CCD camera for precise positioning and material alignment	
Counterpoint	Assembly Redpoint Instructions	
Maximum speed	2.6 ft/s (800mm/s)	
Cutting accuracy	±0.05mm	
Laser type	CO ₂	
Laser power	Optional 60-100W, 100-150W, 150-200W, 250-300W	
Laser class	CLASS IV	
Cooling method	Water Cooling	
Cutting capacity	Solid wood: 18mm, MDF: 12mm, Acrylic: 40mm (Different cutting capabilities for different materials)	
Options	1. Optional High-resolution CCD camera for precise positioning and material alignment 2. Optional Galvanometer-Based Marking and Cutting Integrated System	

CO₂ Laser Sources

All CO₂ laser models are available with the following RF-excited CO₂ laser sources



60-100W Synrad ti Series



100-150W IRADION Infinity Series



150-250W LUXIAR SR Series