

FabLight FL1500/FL3000/FL4500

Technical Specifications



The FabLight is an industrial quality laser cutter for sheet metal and tubes. It uses a pulsed fiber laser to cut, engrave, and raster metals using only a regular 110V electrical outlet and shop air. With a small footprint and extremely low operating cost, it is a perfect fit for many prototyping and production environments. Easy to use software and an add-in for Solidworks are included.

Available in Sheet only, or Tube & Sheet configurations, each with a choice of three laser powers.

To place an order or get more information, call (415) 870-3335 or go to www.3dfablight.com.

Capabilities

Materials	Steel, stainless steel, spring steel, aluminum, copper, brass, bronze, titanium, and more
Sheets	Up to 25"x50" (635mm x 1270mm) – fits 1/4 standard metric or imperial sheet
Tubes	Round: 0.5" to 3" (12-75mm) for standard lengths up to 52" (1320mm) 0.5" to 2" (12-50mm) for extended lengths up to 77" (1956mm) Square and rectangle: 0.5" to 2" (12mm to 50mm) for extended lengths up to 77" (1956mm)
Thickness	FL1500 laser cuts up to 0.080" (2mm) steel using only clean, dry compressed air – thicker with the FL3000 and FL4500 laser options
Axes	Four-axis machine: Z-axis travel of 1.5" (38mm), plus separate focus axis travel of 0.4" (10mm)
Engraving & Marking	Vector and raster engraving
Motion	Moves up to 50"/second (1270mm/second), cut up to 5"/second (127mm/second) Accuracy of ± 0.002 "/foot (0.15mm/m)
Exhaust	Simple HEPA dust collector exhaust, with no need for external venting

Benefits

- Small footprint for low rent and easy integration into any shop environment – 74" L x 40" W x 56" H (1.88m x 1m x 1.42m)
- Air-cooled, pulsed 1500W, 3000W, or 4500W fiber laser
- No installation required
- Runs off standard 110V, 20A outlet (converts to 220V for overseas use)
- Ergonomic drawer for sheet loading, simple chucks for tube loading
- Included software provides easy CAD-to-part workflow

Three Power Levels

1,500W*	cuts steel up to:	0.080" (2mm)
3,000W*		0.160" (4mm)
4,500W*		0.250" (6mm)

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