A-C Series

Fully enclosed 5 ft x 10 ft fiber laser cutter with an exchange table

Ascent Lasers Pro
Cut. Weld. Clean. Powered by light



The A-C Series puts the whole cutting area inside an enclosure and adds an exchange table, for safer work and more output. You load the next sheet on the table outside the enclosure. Its top speed is 180 m/min (590 ft/min), at 2.5 G.

Technical data

Laser source	3 kW or 6 kW
Working area	3048 x 1524 mm (120 x 60 in, 10 x 5 ft)
Guarding	Full enclosure with door-open protection
Table	Exchange table
Max. linkage speed	180 m/min (590 ft/min)
Max. acceleration	2.5 G
Positioning accuracy	±0.05 mm/m (±0.00197 in/m)
Repositioning accuracy	±0.03 mm (±0.00118 in)
Z-axis travel	320 mm (12.6 in)
Table load	911 kg (2,008 lb), a 25 mm (1 in) sheet
Machine size (L x W x H)	9392 x 2232 x 2307 mm (30.8 x 7.3 x 7.6 ft)
Machine weight	4150 kg (9,149 lb)
Total power and current, 3 kW source	26.5 kW / 61.9 A
Total power and current, 6 kW source	39 kW / 74.1 A
Average power use per hour, 3 kW source	20.3 kWh
Average power use per hour, 6 kW source	25.6 kWh
Thinnest sheet	0.8 mm (0.0315 in)
Screen	21.5 in

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Some functions and components are optional. Specifications and appearance may change without notice. The drawings and data shipped with the machine prevail.

Features

One-click processing
Edge searching, range checking and metal cutting run in one go.

Visual edge positioning
The machine finds the edge of the sheet visually.

Cutting parameter AutoMatch
It guides the operator through parameter adjustment.

Nesting software
It nests parts to make the best use of the sheet.

Neat cable harness
The cable assembly keeps power levels separated to reduce interference.

Visual collision detection
The system watches for possible collisions and warns before they happen.

Active obstacle avoidance
Sensors in the laser head detect an obstacle such as a tilted part, and the head avoids it.

Remnant layout
From uploaded pictures of a leftover sheet, the machine positions and nests parts on it automatically.

Anti-burning mineral casting plate
The modular plate separates slag automatically and is easy to replace.

Dust removal
Enhanced-partition dust removal and a centrifugal fan are standard.

Options include a sheet loading module, laser scanning cutting and bevel cutting. Cutting parameter AutoMatch and active anti-collision are not available when the optional scan-and-cut feature is selected.

How thick it cuts

Laser source	Carbon steel with oxygen	Stainless steel with nitrogen
3 kW	16 mm (0.63 in)	12 mm (0.47 in)
6 kW	25 mm (0.98 in)	20 mm (0.79 in)

Reference figures for stable cutting. Material quality and gas quality can change them.

Cutting samples



Warranty and what is included

- 5 years on the laser head, the laser source and the control system
- 3 years on the entire system
- Shipping, on-site installation and training included in the price
- Free ongoing software updates and lifetime remote technical support, with technicians in Buffalo, Toronto and Kentucky
- Ascent laser complies with applicable FDA laser product requirements. ETL-certified.

Each machine's warranty agreement sets out the full terms.