

# Tube cutting machine AL-RB

## The laser system for cutting metal tubes



The tube cutting machine AL-RB from ALPHA LASER allows effortless cutting of

metal tubes up to 12 mm in diameter.

The automatic cutting process takes place in an enclosed working chamber and can be viewed through protection glass.



### Components of the laser system

- Power supply with laser control unit and integrated water-to-air cooling
- Laser objective
- Leica viewing objective
- Cutting head
- Workbench with pneumatic collets, illumination, suction channel, drawer for tube sections
- Enclosed working chamber (laser protection class 1)
- Touch screen
- Rotating axis
- Automatic tube feed
- UV ray protection
- Laser safety system
- CNC software (for 3 axes of motion X, Z, R), 1 manual axis of motion (Y)
- Cutting gas feed
- CAD/CAM module (PC based)

### Options

- Smoke exhaustion
- Joystick
- Foot switch
- Side console
- Cross-hairs Synchro Adapter for synchronization of the cross hairs. Useful for working outside the welding spot.

## Technical data

External Dimensions	Device (W x L x H)	270 cm x 100 cm x 150 cm
	Footprint	300 cm x 120 cm x 150 cm
	Weight	approx. 913 kg
Electrical connection	Three-phase	3 x 400 V, 50 - 60 Hz, 3 x 10 A, + neutral conductor and grounding conductor
Laser	Active medium	Ytterbium
	Wavelength	1070 ± 10 nm (invisible, near infrared)
	Pilot laser	630 – 680 nm (≤ 1mW)
	Laser protection class	1
	Average power	250 W (CW), 150 W (pulsed)
	Peak pulse power	250 W (CW), 1500 W (pulsed)
	Pulse duration	0,2 ms – CW (continuous wave)
	Pulse frequency	0-10 kHz
	Laser cooling system	Integrated air cooling
Cutting	Welding spot Ø	approx. 80 µm
	Viewing objective	Stereo microscope attachment 10x ocular, field of view Ø 16 mm
	Focusing distance	f=80, optional f=56 mm
	Cutting gas feed	Included
	Smoke exhaustion	Can be connected externally

You can order the tube cutting laser system AL-RB from us under item number 000-3200B.

