

Laser marking machines



Laser marking machines

These machines are mainly used to mark and engrave directly on metals and plastics. There are three different kind of laser sources available:

- CO2
- YAG
- Fiber

With a Fiber marking machine it is even possible to mark in color on stainless steel.

Youtube example movie for color marking: <https://www.youtube.com/watch?v=UA78NiiT8pQ>

The machines can be delivered as stationary or portable design. These machines are widely used for engraving or marking QR codes, serial numbers, text, pictures, photos etc. directly in steel or on plastics.

Branches:

- Automotive industry
- Process industry
- Production industry
- Parts making
- Aviation and Space industry
- Engraving companies
- Medical instruments and machines manufacturers
- Electronic components like IC manufacturers
- Weapon industry
- Military

The available sizes:

- 100 x 100 mm (standard size)
- 120 x 120 mm
- 150 x 150 mm
- 170 x 170 mm
- 200 x 200 mm
- 250 x 250 mm
- 300 x 300 mm (maximum due to the lens capabilities and the accuracy)

The prices depends on the laser power source, the power of the laser (Watt), work area and the brand of laser power.

Laser marking machine TI-FL/CL/YG-xxx-xxW	Description:
	<ul style="list-style-type: none"> - CO2 (sealed metal), YAG or Fiber laser (imported or made in China) - Galvometrical scanhead - Airpump for cooling - Red dot for marking - Automatically up/down table - Computer system - Optional rotary ax possible - Optional closed cover model
 <p data-bbox="274 1135 689 1167">Fiber laser generator, CO2 or YAG</p>	 <p data-bbox="884 1128 1311 1160">High speed laserhead (galvometric)</p>
 <p data-bbox="395 1357 568 1388">Up/down table</p>	 <p data-bbox="1031 1361 1161 1393">PC system</p>
 <p data-bbox="399 1608 564 1639">Special optics</p>	 <p data-bbox="963 1603 1232 1635">Red dot laser indicator</p>
 <p data-bbox="418 1827 549 1859">Rotary ax</p>	

Specifications:

Accuracy of the machine	- < 0.0015 mm
Repeatability	- < 0.001 mm
Warranty	- 1 year warranty, Fiber laser source 2 years
Lifetime of the laser	- Depends on the laser source, minimum will be 20.000 hours.
Maintenance cost of the laser and mirrors	- With CO2 or YAG it is possible that the laser power source gets less. Fiber will be maintenance free.
Manufacturer of motors and drives	- Servo motors imported from Japan
Speeds	- Very high speed (higher than the laser engraving machines with X/Y table)
Slice thickness	- None. Not made for cutting
Marking depth	- Depends on the material and Laser power, Aluminium can be marked up to 0.5 mm depth (if you run multiple runs it can go deeper)
Possible file types	- AI, DXF, BMP, JPG, PLT, PNG, Coreldraw and Autocad.

Some examples of laser marking within different branches:





