

Surgical Instrument Marking Solution, Technical Specification

27th March 2023

# – Equipment Description

## Overview

The Pryor Bench Laser is a bench mounted laser engraving machine. Laser engraving, otherwise known as laser etching or laser marking, offers a non-contact form of permanent marking. It is the fastest and most versatile marking system and is therefore suitable to high volume and high variety output. Laser engraving provides excellent precision on a wide range of materials.

* Non contact marking
* Permanent marking
* Fast and versatile
* Suitable for high volume and high variety

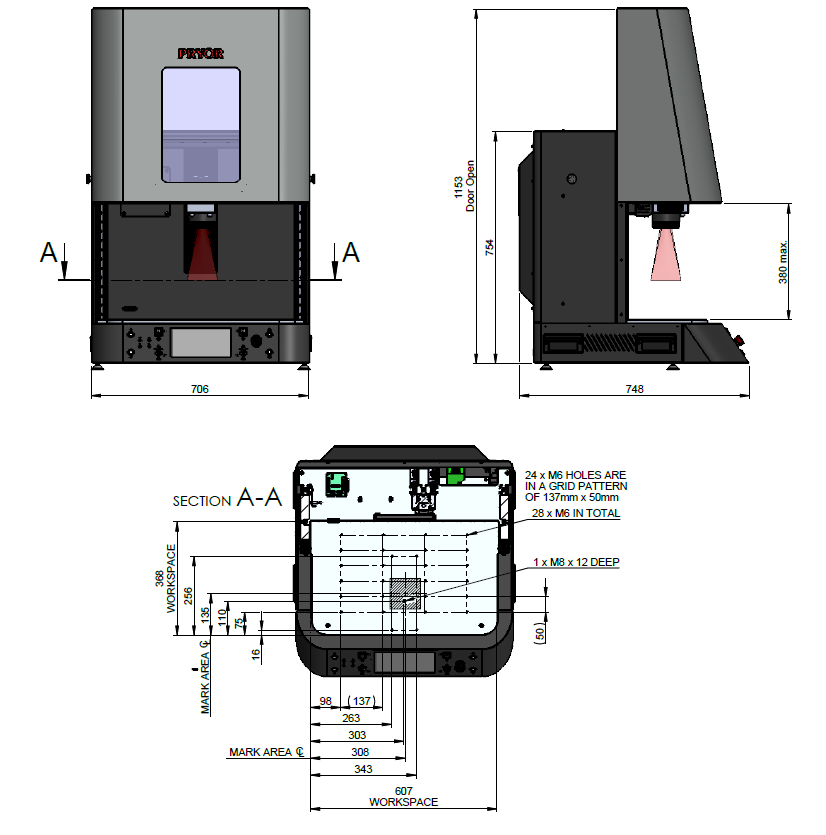
## Features

* Automatic Vertical Opening Door
* Large internal working envelope
* Automatic Z axis for focussing/defocusing on target component
* Large laser safe viewing window
* Integrated touch screen controls, using our innovative 4000 controller interface
* Optional PC interface using Traceable-IT software for advanced programming and programme creation
* Exceptional reliability. Fit and forget performance with diode life exceeding 50,000 hrs
* Maintenance free marking with no consumable costs.
* High quality marking on a wide range of materials including metals / alloys and hard plastics.
* Low running costs, fibre lasers consume less than 200watts of power, making these lasers the most efficient on the market. (1.06 micron wavelength)
* Wide operating temperatures between 0 and 42°C
* Industry leading Traceable-IT software
* Available in a range of class 1 enclosures
* Also available as an integration package. The compact size and robust construction make the YF lasers the perfect solution for automated part marking tasks.
* Intelligent laser controller can operate in a basic standalone mode or using the built in TCP/IP connectivity can connect to a local or remote PC for advanced operation using the Traceable-IT graphical interface.
* Visible ‘Pilot’ beam shows the marking location for fast, accurate setup.
* Secondary (converging) ‘focus finder’ visible beam shows when the laser is focused.
* Robust, easy to use control panel features high quality start/stop/focus finder push buttons with built in emergency stop and key-switch safety interlock control.

## Design



## Dimensions



## Laser Specifications

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| **Specification** | |
| Model | Pryor Surgical Instrument Solution |
| Power | 20W |
| Laser Type | Fibre Laser |
| Marking Area | 100mm x 100mm |
| Pulse Energy | 1mJ |
| Average Power | 20W |
| Msquared | 1.6 |
| Polarization | Random |
| Power Tunibility | 5 – 100% |
| Pulse Duration @ 20KHz | 100ns |
| Repetition Rate | 20 KHz to 200KHz |
| Long Term Power Stability | 1-3% |
| Operating Temperature | 0 to 42°C | |
| Cooling | Active Air Cooling | |
| Fibre Optic | 2 Meter Pigtail With 8mm Collimator/Isolator | |
| Power | Less Than 200W - 110 or 220 VAC | |
| Machine Weight | 78Kg | |
| Product Warranty | 2 years as standard | |



**No installation, commissioning or training is included in the above breakdown, as this is assumed to be conducted by Mecagrav staff.**