

Laser marker operational procedure

Q switched, Nd:YVO₄ 1.06 μm, mean power 10 W, pulse duration 10ns

This laser is not to be used on your own. You have to be a registered laser user to use this equipment and be trained to use this laser. This laser is a Class IV laser with the safety visor and protective doors closed and is a Class IV otherwise. Always operate the laser with the correct safety eyewear on.

1. Start the EHT (extreme high tension) power.
2. Wait until the status screen shows ready.
3. Remove the cap from the lens.
4. On the control box, turn key to start position, and check the red laser beam for alignment.
5. Start the computer and select laser editor (Smartists 4) program.
6. Switch on fume extractor.
7. Edit drawing file and test the specimen drawing with the red beam.
8. Alter Z axis until red laser has minimum diameter i.e. the laser beam in good focus on the specimen.
9. Shut protective doors and place visor down
10. Safety goggles or face mask suitable for the wavelength should be worn at all times.
11. Switch key to on position on the control box and press enable switch/ indicator.
12. Start program to start the marking.
13. Do not open the visor or protective doors when the laser marker is on. Eye damage could result
14. After marking or when the program has stopped disable the laser by using the enable switch/ indicator in the control box.
15. Switch the key to the off position and switch off the laser marker and the PC.