Rayjet 300 150W Laser Cutter

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Tool Type: “laser Cutter”	
Location: “Innovations Workshop”	

Supervisor	Tool Lead
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Description: “Laser cutter and engraver”
Manufacturer: “Trotec”

About

One of two laser cutters, the Rayjet is located in the Innovations Workshop along with its stand alone fume extractor. Both laser cutters utilize CorelDraw as a 2D sketch manager which is then imported into Trotec's specific cutting software. CorelDraw can be used to create the 2D sketch, however importing a DXF file or PDF into CorelDraw from Solidworks or other CAD packages is preferred due the CAD packages integrated features and functions.

Detailed Specifications

Working area: 726 x 432 mm
Max height of work piece: 149 - 200 mm depending on installed lens (see operations manual page 7)

Safety Concerns

Looking directly into the laser can cause retinal damage. Confirm that the fume collection system is running whenever the laser is cutting or engraving. See list of approved materials for laser cutting, some require nitrogen gas if flammable, or could release chlorine gas if cut. NO NOT CUT NON APPROVED MATERIALS INCLUDING METALS. Laser lenses must be cleaned within ONE WEEK of time of

use. If lenses has not been cleaned, clean before use to avoid damaging lenses.

Operating Procedures

1. Turn on laser cutter and fume extractor
2. Use focusing tool to set bed height based on workpiece, move laser to desired starting position
3. Launch CorelDraw and import 2D sketch as PDF or DXF. Take the time to check scale using built in page rulers
4. Set lines to be cut as RED and patterns to be engraved as BLACK. (must use true RGB red and black)
5. Select Print → Print settings
6. Within Print settings select desired laser recipe based on material and thickness, verify one click print is turned off, print order is set to inner features first, and import dimensions from CorelDraw is selected
7. Click Print
8. Navigate to Trotec software
9. Check Scale, do a dry run without laser power if necessary
10. Send job to laser cutter

Reference Documentation

Laser cutting data

rayjet-300_8024_operationmanual_en.pdf

rayjet_8015_software-manual_en.pdf

exhaust_system_information.pdf

Training Documentation

trotec_laser_training_r0.6.docx

rayjet_laser_cutter_notes.pdf

workshop_wizard_project_information_form_-_updated_laser_cutter_sop.pdf

trotec_and_rayjet_training_sign_in.pdf

trotec_rayjet_sop.pdf

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