


# Trotec Speedy 100

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<b>Tool Type:</b> "Laser Cutter"	
<b>Location:</b> "Microfluidics lab"	
Supervisor	Tool Lead
David Bothman	Jeran Bruce & Vedad Bassari
(805) 893-4125	(424) 610-6312 & (818) 942-5523
bothman@cnsi.ucsb.edu	jrbruce@ucsb.edu & vedad@ucsb.edu
<b>Description:</b> "Laser Cutter"	
<b>Manufacturer:</b> "Trotec"	

## About

One of two laser cutters, the Trotec is located in the Innovations Workshop above its 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.

## Training Documentation

[Laser Cutter Training SOP](#)

## Detailed Specifications

Work Area: 910 x 305 mm  
 Max Workpiece Height: 125 mm  
 Laser Power: 10-60 Watts

## Safety Concerns

This laser engraving system contains a class 4 carbon dioxide (CO<sub>2</sub>) laser that emits intensive and invisible laser radiation. Without safety precautions the direct radiation or even diffuse reflected radiation is dangerous!

- Always wear safety glasses when using the machine.
  - Always work with the machine cover closed.
  - NEVER leave the laser machine alone when running a job. If you do need to leave,
  - The machine door must be left open while you are away.
  - Do not store any flammable materials in the inside of the device or in the immediate vicinity of the device.
  - Remove leftovers of previously produced materials before running a job.
  - A fire extinguisher/fire blanket must always be handy as the laser beam can ignite flammable materials.
  - Metals, particularly un-coated aluminum, copper in particular, silver and gold, cannot be processed with the laser and lead to high reflections of the laser beam. If needed, metals can be coated with a paint/tape which chemically bonds to the surface when engraved.
  - Before processing materials the user must verify whether harmful materials can be generated and whether the filter equipment of the exhaust system is suitable for the harmful materials.
  - PVC (polyvinyl chloride) must under no circumstances be processed with the laser.
  - Looking directly into the laser can cause retinal damage.
  - Confirm that the fume collection system is running whenever the laser is cutting or engraving.
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## Reference Documentation

[Marking Tape/Paint](#)

[Atmos Compact Operation Manual](#)

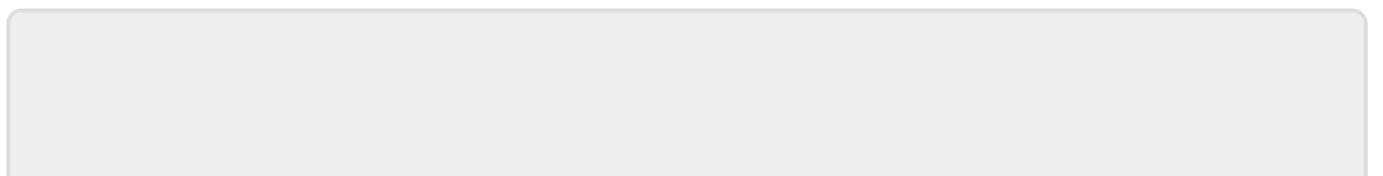
[Service Manual](#)

[Plastic Processing Guide](#)

[Job Control Software Manual](#)

[Bonding Acrylic with Methylene Chloride](#)

[Laser cutting data](#)



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