### **Fiber Laser Cutter**

| About                   | Fiber laser cutters are very useful for cutting and engraving flat sheet metals and metal tubing. Light from laser diodes is sent into optic cable where a specific wavelength is generated and amplified, the resulting laser beam is guided into the material.  |  |  |  |
|-------------------------|---|--|--|--|
|                         | Laser beam kerf is approximately 0.005 in (0.127 mm), but varies based on material, thickness, cut geometry, and environmental factors.   |  |  |  |
| Categ<br>ory            | 2D Fabrication  |  |  |  |
| Locat<br>ion            | Back Room   |  |  |  |
| Bran<br>d<br>/Mod<br>el | FabLight FL4500   |  |  |  |
| Status                  | AVAILABLE   |  |  |  |
| Mater<br>ials           | <ul> <li>Steel, 0.25 in. (6 mm) max thickness</li> <li>Stainless Steel, 0.188 in (4.8 mm) max thickness</li> <li>Aluminum, 0.188 in (4.8 mm) max thickness</li> <li>Copper and alloys, 0.065 in (1.65 mm) max thickness</li> <li>Titanium, unknown max thickness</li> <li>Molybdenum, unknown max thickness</li> <li>Graphite, unknown max thickness</li> </ul> |  |  |  |



# **Standard Operating Procedure**



You must login to your uAlberta Google apps account to access these files.

# **Sheet Cutting**

### **Tube Cutting**

# **Training**

Sign up for training here: Training Registration Calendar

| Training                         | Туре                            | Time Estimate | Prerequisites | Checklist/Document |
|----------------------------------|---------------------------------|---------------|---------------|--------------------|
| FLC - Training 1- Sheet Training | LC - Training 1- Sheet Training |               | None          |                    |
|                                  | ON-MACHINE                      |               |               |                    |

### **Documentation**



Google Apps Sign-in Required

You must login to your uAlberta Google apps account to access these files.

| Safety Data Sheets     | None                      |
|------------------------|---------------------------|
| Hazard Assessments     |                           |
| Application Resources  | Fab Light Knowledgebase   |
|                        | Fab Light Youtube Channel |
| Manufacturer's Manuals |                           |