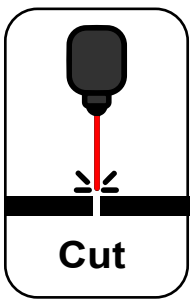
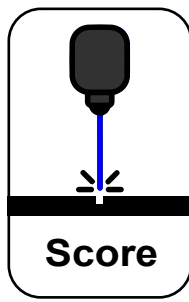


# The Makerspace Laser Cutting & Engraving Guide

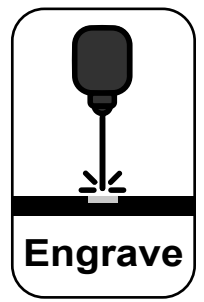
## Laser Processes



Laser Cutting is a process that uses a thin laser beam to cut through a flat sheet of material. Typically sheet material is left with a burnt edge as a result of the cutting process. Laser cutting is a fast process, and good for prototyping. Common materials used are plywood, paper, cardboard and fabric.



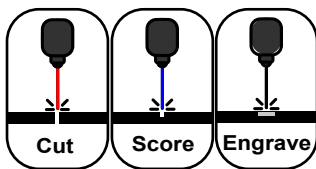
Laser Scoring or Marking is a process that uses a thin laser beam to only cut part way through a flat sheet of material. This process is very similar to a cutting process however it is much weaker, only effecting the top surface of the material. This process is commonly used to add text or outline images to models.



Laser Engraving is a process where a laser burns and vaporizes the top surface of the material. This typically leaves a burnt effect on the surface of the material. Commonly used to engrave detailed images onto a sheet material. This process is very slow but can create amazing results. Commonly used for creating images, stamps and wood block prints.

## Trotec Speedy 400

### Machine Capabilities



**Max Material Size:**  
900mm x 600mm



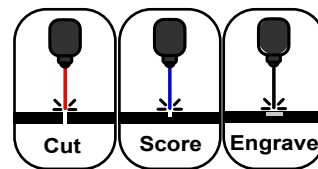
### Material Capabilities

	Cut	Max Thickness	Engrave	Score
Plywood	✓	7 mm	✓	✓
Acrylic	✓	6 mm	✓	✓
Paper	✓	*	✓	✓
Cardboard	✓	*	✓	✓
Fabric	✓	*	✓ *	*
Leather	✓	*	✓ *	*
Wood	x		✓ *	✓
Stone	x		✓ *	x
Glass	x		✓ *	x

\* These materials require testing to create the correct laser settings.

## Trotec Speedy 100

### Machine Capabilities



**Max Material Size:**  
600mm x 300mm



### Material Capabilities

	Cut	Max Thickness	Engrave	Score
Plywood	✓	4.5 mm	✓	✓
Acrylic	✓	3 mm	✓	✓
Paper	✓	*	✓	✓
Cardboard	✓	*	✓	✓
Fabric	✓	*	✓ *	*
Leather	✓	*	✓ *	*
Wood	x		✓ *	✓
Stone	x		✓ *	x
Glass	x		✓ *	x

\* These materials require testing to create the correct laser settings.