

This is a quick starting guide for new laser users.



It is recommended to perform your own testing of the speed and power settings for each material you use as **Speed, Power and mA data below are estimates only, and results may vary for each laser tube manufacturer and system power configurations.**

You can use these starting values and then fine tune your settings for each type of material on your machine, until you achieve the best results. It is also important to note what lens you are using when performing your tests.

| CUT | | 50-60W | | | 70-80W | | | 90-100W | | | 110 - 150W | | |
|--------------|----------------|----------------|-----------|-------------|----------------|-----------|-------------|----------------|-----------|-------------|----------------|-----------|-------------|
| Material | Thickness (mm) | Speed (mm/sec) | Power (%) | Estimate mA | Speed (mm/sec) | Power (%) | Estimate mA | Speed (mm/sec) | Power (%) | Estimate mA | Speed (mm/sec) | Power (%) | Estimate mA |
| Acrylic | 3 | 12 | 65 | 20 | 14 | 45 | 18 | 15 | 25 | 12 | 15 | 20 | 10 |
| | 5 | 8 | 65 | 20 | 8 | 45 | 18 | 11 | 25 | 12 | 9 | 20 | 10 |
| | 8 | 4 | 65 | 20 | 5 | 45 | 18 | 6 | 25 | 12 | 6 | 20 | 10 |
| MDF | 3 | 10 | 70 | 22 | 15 | 60 | 24 | 30 | 45 | 22 | 35 | 40 | 18 |
| | 6 | 4 | 70 | 22 | 6 | 60 | 24 | 12 | 65 | 26 | 18 | 55 | 22 |
| Plywood | 3 | 10 | 70 | 22 | 15 | 60 | 24 | 30 | 55 | 25 | 35 | 40 | 18 |
| | 7 | 4 | 70 | 22 | 6 | 60 | 24 | 12 | 55 | 25 | 18 | 55 | 22 |
| Leather | Single | 50 | 50 | 15 | 55 | 25 | 10 | 70 | 15 | 8 | 100 | 20 | 10 |
| Paper / Card | Single | 100 | 30 | 10 | 150 | 19 | 8 | 200 | 15 | 8 | 250 | 20 | 10 |

| ENGRAVE | | 50-60W | | 70-80W | | 90-100W | | 110-150W | |
|----------------|--|----------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|
| Material | | Speed (mm/sec) | Power (%) | Speed (mm/sec) | Power (%) | Speed (mm/sec) | Power (%) | Speed (mm/sec) | Power (%) |
| Acrylic | | 100 | 22 | 400 | 25 | 600 | 22 | 600 | 20 |
| MDF | | 100 | 22 | 400 | 25 | 600 | 22 | 600 | 20 |
| Plywood | | 100 | 22 | 400 | 25 | 600 | 22 | 600 | 20 |
| Leather | | 200 | 20 | 250 | 20 | 300 | 15 | 300 | 12 |
| Glass (Raster) | | 250 | 70 | 300 | 50 | 350 | 15 | 400 | 12 |

| Material | Thickness (mm) | _____ Watts | | | Lens Focal Length |
|----------------|----------------|----------------|---------|----|-------------------|
| | | Speed (mm/sec) | Power % | mA | |
| CUT | | | | | |
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| ENGRAVE | | | | | |
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