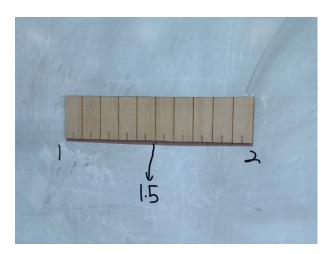
Magnetic Number Bars

Introduction



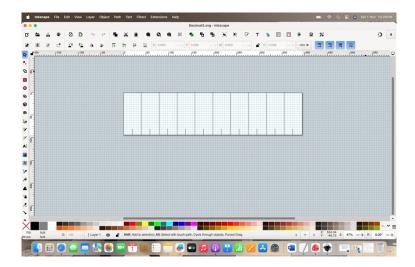
This magnetic bar can be used on the whiteboard. Numbers can be written below or above the vertical engraved lines. Each magnetic bar is divided into 10 parts. Each part can represent one-tenth of a whole if it is used for decimals. It can represent one-hundredth of a part if it is used between 3.7 and 3.8 or one-thousandth of a part between 4.56 and 4.57. Apart from decimals, it can be used for fractions and numbers.

Process of making the magnetic number bars

1. Design the number bar using Inkscape (Refer to attached file, Decimal3.svg)

Open the file using any vector graphic or design software such as:

- Inkscape
- Adobe Illustrator
- CorelDraw



2. As I am using Lionsforge laser cutter, I have to generate the code online and assign the engrave path. The screenshot below shows the laser code for cutting the plywood 3mm. It may serve as a reference if using other laser cutters. Please bear in mind that if using other materials, the code will be different.

| | | | | By LIONSFOR | KGE | | | | |
|------------|-------------------------|-------------------|----------------------|----------------------|-------------------|---------------------|-------------------|------------------------|--|
| | Bidirectional Rastering | G21 M5 | | Code: | Laser On Cmd: | Laser Off Cmd: | Cutting Power (0- | Cutting Power (0-255): | |
| lip Y-axis | | | | BXY ; laser off | M106 | M107 | 255 | 0 | |
| ngrave Pov | wer (0-255): Rast | er Power (0-255): | Raster Rate (mm/r | nin): Overscan (mm): | Feed Rate G1 | (mm/min): Travel Ra | te G0 (mm/min): | | |
| 40 | 0 50 | | 0 4000 | 0 5 | 0 450 | ≎ 3000 | 0 | | |
| | | Basswoo | d 3mm | 0 | | | | | |
| | | | asswood 3mm - Soft w | | | | | | |
| | | Loaded: Ba | asswood 3mm - Soft w | | | | | | |
| Gener | rate G-code Filen | Loaded: Ba | asswood 3mm - Soft w | ood, | Overlay G-code Pa | ths Auto Center | svg | | |

3. The screenshot below shows the cutting part (red lines) and engraved parts (orange lines which are assigned)



- 4. After generating and downloading the code, the file is saved as .gcode and sent for cutting.
- 5. I paste the magnetic strips behind so that I can use on the whiteboard.