BILL OF MATERIALS

1] Holding Unit-

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| Sl.No. | Part Name | Material with which the part is made up of | Description about part | Quantity required | Fabrication process if needed |
| 1. | Cylindrical base | Acrylic sheet | R=26cm  T=1cm | 1 | Laser cutting |
| 2. | Cylindrical holder | Acrylic sheet | R=26cm  T=0.5cm | 1 | Laser cutting |
| 3. | Rectangular base | Foam sheet | (40cm\*39cm) | 1 | Cutting |
| 4. | Cylindrical rod | Nylon rod | R=2cm  T=35cm | 1 | Cutting, milling |
| 5. | Bearing | Stainless steel |  | 1 | - |
| 6. | Screw(i) | Metal | R=0.4cm  L=2.2cm | 8 | - |
| 7. | Half sized cylindrical rod | Nylon rod | R=1.5cm  T=14cm | 4 | Cutting |
| 8. | L channels(i) | Aluminium | L=42cm  T=0.3cm | 4 | Cutting, bending |
| 9. | L channels(ii) | Aluminium | L=40cm  T=0.3cm | 4 | Cutting, bending |
| 10. | L channels(iii) | Aluminium | L=38.4cm  T=0.3cm | 2 | Cutting, bending |
| 11. | Half sized L channels | Aluminium | L=19cm  T=0.3cm | 2 | Cutting |
| 12. | Metal strips | Aluminium | (39cm\*2cm)  T=0.3cm | 2 | Cutting, drilling |
| 13. | Half sized metal strips | Aluminium | (10cm\*2cm)  T=0.3cm | 2 | Cutting, drilling |
| 14. | Screw(ii) | Metal | R=0.6cm  L=1cm | 32 | - |

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| Sl.No. | Part Name | Material with which the part is made up of | Description about part | Quantity required | Fabrication process if required |
| 15. | C holder | Aluminium sheet | (10cm\*5cm\*4cm) | 1 | Cutting, bending |
| 16. | Spur gear | Thermosetting plastic |  | 2 | - |
| 17. | Worm gear | Thermosetting plastic |  | 1 | - |
| 18. | DC Motor(iv) | Metal | - | 1 | - |
| 19. | Screw(iii) | Metal | R=1cm  L=2.3cm | 1 | - |
| 20. | Positioner | Nylon rod | R=1.5cm  L=5cm | 2 | Cutting |
| 21. | Screw(v) | Metal | R=0.7cm  L=5cm | 2 | - |
| 22. | Gripper | Acrylic sheet |  | 6 | Laser cutting |
| 23. | U clamp | Stainless sheet | - | 1 | - |
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2] Capping Unit-

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| Sl.No. | Part Name | Material with which the part is made up of | Description about part | Quantity required | Fabrication process if needed |
| 1. | DC Motor(i) | Metal | - | 1 | - |
| 2. | DC Motor(ii) | Metal | - | 1 | - |
| 3. | DC Motor(iii) | Metal | - | 1 | - |
| 4. | Bush | Nylon rod | R=1cm  L=3cm | 1 | Cutting, milling |
| 5. | Threaded Iron rod | Stainless steel | R=0.5cm  L=7.5cm | 1 | Cutting |
| 6. | Sheet metal | Stainless steel | (20cm\*5cm)  T=0.2cm | 1 | Cutting, bending |
| 7. | Strap(i) | Foam sheet |  | 1 | Cutting, drilling |
| 8. | Half sized Sliding rod | Stainless steel | R=1cm  L=7cm | 4 | - |
| 9. | Sheet metal U clamps | Stainless steel | - | 2 | Bending |
| 10. | C clamps | Stainless steel | - | 2 | Bending |
| 11. | Nuts | Metal | 0.3cm | 4 | - |
| 12. | Capper | Metal |  | 1 | - |
| 13. | Screw(ii) | Metal | R=0.6cm  L=1cm | 24 | - |
| 14. | Screw(iii) | Metal | R=1cm  L=2.3cm | 2 | - |
| 15. | Holding Platform(i) | Foam sheet | (38cm\*26cm)  T=0.5cm | 1 | Cutting, drilling |
| 16. | Holding Platform(ii) | Foam sheet | (24cm\*14cm)  T=0.5cm | 1 | Cutting,  drilling |
| 17. | Strap(ii) | Foam sheet | (27cm\*9cm)  T=0.5cm | 2 | Cutting, drilling |
| 18. | L clamps | Stainless steel | (2cm\*1cm)  T=0.3cm | 8 | - |
| 19. | Screw(iv) | Metal | R=0.7cm  L=1.2cm | 2 | - |

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| Sl.No. | Part Name | Material with which the part is made up of | Description  about part | Quantity required | Fabrication process if needed |
| 20. | Stepper motor | Metal | R=2.5cm | 1 | - |
| 21. | Capping Platform(i) | Foam sheet | (19cm\*38cm)  T=0.5cm | 1 | Cutting |
| 22. | Capping platform(ii) | Acrylic sheet | (12cm\*5cm)  T=0.5cm | 1 | Laser cutting |
| 23. | Cylindrical tube | PVC pipe/ Acrylic sheet | R=4cm  T=0.25cm | 1 | Cutting/ Heat bending |
| 24. | Cap slider | Acrylic sheet |  | 1 | Laser cutting,  Heat bending |
| 25. | Sliding base | Foam sheet | 9.5cm\*12.25cm | 1 | Cutting, bending, drilling |
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