



## ACHB ENTERPRISE

### Machine Equipment List

| <u>CNC Turning and Milling Center</u>  | <u>Capability (mm)</u>           | <u>Back Spindle</u>   | <u>Bar Feeder</u>    | <u>Tolerance (mm)</u> | <u>Quantity</u> |
|--|----------------------------------|-----------------------|----------------------|-----------------------|-----------------|
| DMG MORI 5-Axis Dual Spindles          | 430 mm                           | Yes                   | No                   | +/- 0.002             | 1               |
| <u>Swiss CNC (Turning and Milling)</u> | <u>Capability (mm)</u>           | <u>Back Spindle</u>   | <u>Bar Feeder</u>    | <u>Tolerance (mm)</u> | <u>Quantity</u> |
| Star 4-Axis Mill Turn                  | 16 mm thru spindle               | No                    | Yes                  | +/- 0.003             | 2               |
| Star 6-Axis Mill Turn                  | 16 mm thru spindle               | No                    | Yes                  | +/- 0.003             | 2               |
| Star 6-Axis Mill Turn                  | 20 mm thru spindle               | Yes                   | Yes                  | +/- 0.002             | 5               |
| Star 8-Axis Mill Turn                  | 32 mm thru spindle               | Yes                   | Yes                  | +/- 0.002             | 3               |
| Star 8-Axis Mill Turn                  | 38 mm thru spindle               | Yes                   | Yes                  | +/- 0.002             | 1               |
| <u>CNC Lathe</u>                       | <u>Capability (mm)</u>           | <u>Back Spindle</u>   | <u>Bar Feeder</u>    | <u>Tolerance (mm)</u> | <u>Quantity</u> |
| JINN FA 6-Axis Turning                 | 42 mm thru spindle               | Yes                   | Yes                  | +/- 0.003             | 1               |
| JINN FA 4-Axis Turning                 | 42 mm thru spindle / up 150mm    | No                    | No                   | +/- 0.005             | 2               |
| Mazak                                  | 50 mm thru spindle               | Yes                   | Yes                  | +/- 0.003             | 1               |
| Mori-Seiki                             | 65 mm thru spindle / up to 250mm | Yes                   | No                   | +/- 0.002             | 1               |
| Victor Taichung                        | 42 mm thru spindle / up 150mm    | No                    | No                   | +/- 0.0025            | 3               |
| Victor Taichung                        | 42 mm thru spindle / up 150mm    | No                    | Robotic Auto Feeder  | +/- 0.0025            | 1               |
| <u>Milling Center</u>                  | <u>Table Size (mm)</u>           | <u>Dual Pallet</u>    | <u>Spindle (rpm)</u> | <u>Tolerance (mm)</u> | <u>Quantity</u> |
| DMG MORI Horizontal Milling 4 axis     | 400mm x 400mm                    | Yes                   | 20000                | +/- 0.002             | 1               |
| YCM Vertical Milling Center 4-axis     | 600mm x 1000mm                   | Yes                   | 15000                | +/- 0.004             | 8               |
| YCM Vertical Milling Center 4-axis     | 400mm x 400mm                    | Yes                   | 15000                | +/- 0.005             | 4               |
| <u>Centerless Grinding</u>             | <u>Capability (mm)</u>           | <u>Tolerance (mm)</u> | <u>Quantity</u>      |                       |                 |
| PLAMARY NC Centerless Grinder          | OD: up to 200mm / ID: 3mm - 50mm | +/- 0.001             | 2                    |                       |                 |
| JAGURA Centerless Grinder              | OD: 60mm                         | +/- 0.001             | 1                    |                       |                 |
| <u>Cylindrical Grinding</u>            | <u>Capability (mm)</u>           | <u>Tolerance (mm)</u> | <u>Quantity</u>      |                       |                 |
| PLAMARY CNC Cylindrical Grinder        | OD: up to 200mm                  | +/- 0.001             | 3                    |                       |                 |
| <u>Surface Grinding</u>                | <u>Capability (mm)</u>           | <u>Tolerance (mm)</u> | <u>Quantity</u>      |                       |                 |
| SEEDTEC NC Surface Grinder             | 300 x 600                        | +/- 0.001             | 2                    |                       |                 |
| <u>NC Jig Grinding</u>                 | <u>Capability (mm)</u>           | <u>Tolerance (mm)</u> | <u>Quantity</u>      |                       |                 |
| SEEDTEC Jig Grinder                    | 150 x 150 x 450                  | +/- 0.001             | 2                    |                       |                 |
| <u>Special Grinding</u>                | <u>Quantity</u>                  |                       |                      |                       |                 |
| Kennametal Extrudehoning               | 1                                |                       |                      |                       |                 |
| Sanding Grinder                        | 1                                |                       |                      |                       |                 |
| Vibratory Grinder (Tumbler)            | 1                                |                       |                      |                       |                 |
| Magnetic Grinder                       | 2                                |                       |                      |                       |                 |
| <u>Thread Rolling</u>                  | <u>Quantity</u>                  |                       |                      |                       |                 |
| Thread Rolling Machining               | 1                                |                       |                      |                       |                 |
| <u>Clean Room Facility</u>             |                                  |                       |                      |                       |                 |
| Cleaning Tank                          | 6                                |                       |                      |                       |                 |
| ESD Room                               | 1                                |                       |                      |                       |                 |
| HEPA Baking Oven                       | 1                                |                       |                      |                       |                 |

### Inspection Equipment List

| <u>Equipment</u>                   | <u>Brand</u> | <u>Quantity</u> | <u>Capability (mm)</u>         |
|------------------------------------|--------------|-----------------|--------------------------------|
| ID/OD Caliper                      | Mitutoyo     | 10              |                                |
| Blade Caliper                      | Mitutoyo     | 5               |                                |
| Point Caliper                      | Mitutoyo     | 3               |                                |
| ID/OD Micrometer                   | Mitutoyo     | 22              |                                |
| Micrometer                         | Mitutoyo     | 41              |                                |
| Smart Scope / MicroScope           | METROLOGY    | 5               |                                |
| 2.5D Vision Measuring Machine      | ChienWei     | 4               | X : 100mm Y : 70mm             |
| Electronic Height Gages            | METROLOGY    | 3               |                                |
| Surface Roughness Tester           | Mitutoyo     | 2               |                                |
| 3D CMM                             | Chienwei     | 1               | X : 500mm Y : 400mm Z : 300mm  |
| 3D CMM                             | Mitutoyo     | 1               | X : 900mm Y : 1000mm Z : 600mm |
| 2D CMM                             | Chienwei     | 2               | X: 250mm Y: 150mm              |
| 2D CMM                             | Chienwei     | 1               | X : 100mm Y : 100 mm           |
| CNC Vision Measuring System        | Chienwei     | 1               | X : 300mm Y : 300mm Z : 200mm  |
| CNC Vision Measuring System        | Mitutoyo     | 1               | X : 250mm Y : 200mm Z : 100mm  |
| Rockwell Hardness Tester           | Mitutoyo     | 2               |                                |
| Roundness/Cylindricity Measurement |              |                 |                                |
| Roundtest                          | Mitutoyo     | 1               | Ø1-280mm                       |