

BBI-CH-250

Temperature-Controlled Chuck

The BBI-CH-250 is a precision temperature-controlled chuck capable of reaching 250°C from ambient in under 60 minutes, with $\pm 1^\circ\text{C}$ set-point accuracy maintained via closed-loop PID control. The 15 mm thick substrate — available in copper or aluminium — features a 20 μm electroless nickel coating and delivers uniform heating across a 200 \times 200 mm² working surface. Temperature measurement is handled by an embedded 3-wire PT1000 sensor, with control provided through an included electronics box fitted with an touchscreen display.

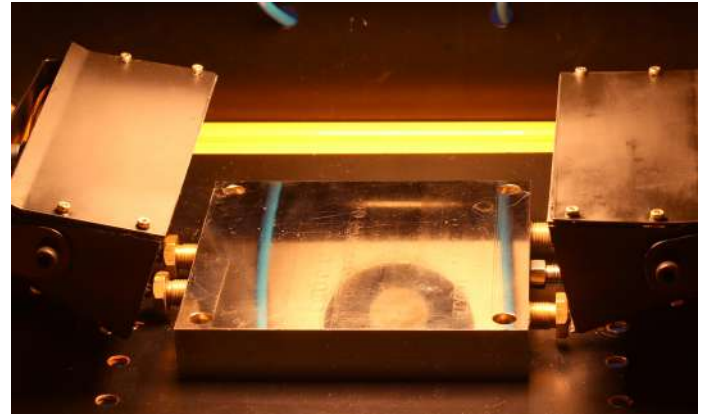
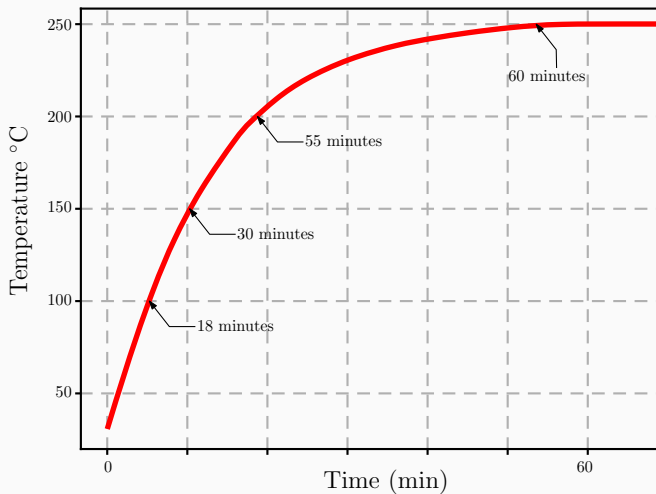


Fig. Nickel plated Copper Chuck

0°C to 250°C Temperature Sweep Data



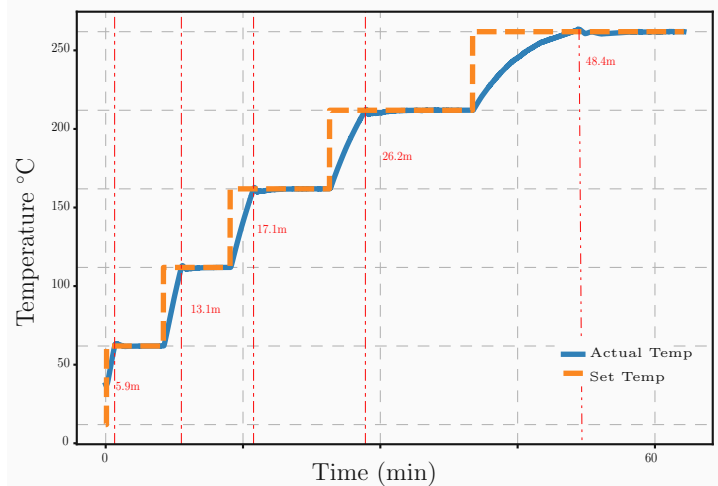
| Physical Property | Value | Unit |
|----------------------|-------------|-------------------|
| <i>Physical</i> | | |
| Dimensions (L×W) | 200 × 200 | mm |
| Thickness | 15 | mm |
| Ni Plating Thickness | 20 | μm |
| Density (Cu / Al) | 8.94 / 2.70 | g/cm ³ |
| Weight | ~20 | kg |

| Property | Value | Unit |
|-------------------------|---------|------|
| <i>Thermal</i> | | |
| Max. Temperature | 250 | °C |
| Accuracy | ± 1 | °C |
| Max. Temp. Heat-up Time | <60 | min |

| Electrical Property | Value | Unit |
|---------------------|-------|------|
| <i>Electrical</i> | | |
| Voltage* | 24–26 | VDC |
| Max. Current | 10 | A |
| Max. Power | 260 | W |

| Parameter | Specification |
|----------------------------|------------------------------|
| <i>General Information</i> | |
| Base Material | Cu or Al* |
| Surface Finish | Ni Plating, 20 μm |
| Temperature Sensor | PT1000, 3-Wire |
| Control | LED Touchscreen Box |
| <i>Features</i> | |
| Control Mode | PID, $\pm 1^\circ\text{C}$ |
| Ramp Rate | 250 °C in <60 min |
| Interface | LED Touchscreen |

0°C to 250°C Temperature Step Data



* Chuck Material Copper/Aluminum Available

* Voltage Source AC/DC Available

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