# Konfigurierbare Platten - Kupfer/Messing

## Kupfer, kaltverfestigt/sauerstofffreies Kupfer/Chrom-Kupfer-/Messingplatten

4-Oberfläche gefräst (gerollt)

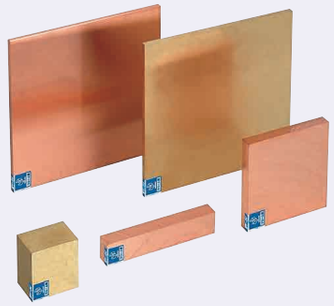
6-Oberfläche gefräst

**■Eigenschaften von kaltverfestigtem Kupfer**
Das am häufigsten verwendete Kupfer mit hervorragender elektrischer und Wärmeleitfähigkeit.

**■Eigenschaften von sauerstofffreiem Kupfer**
Kupfer mit der größten Reinheit, das im Handel erhältlich ist. Dank der Sauerstofffreiheit keine Wasserstoffversprödung.

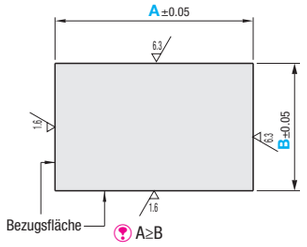
**■Eigenschaften von Cr-Kupfer**
Überragende mechanische Festigkeit und Abriebfestigkeit bei hohen Temperaturen.

**■Eigenschaften von Messingplatten**
Überragende Festigkeit und Duktilität.

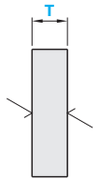


RoHS10

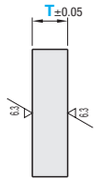
| Teilenummer | Ⓜ Werkstoff |
|---|---|
| CTAP□ | Kupfer, kaltverfestigt JIS H3100 C1100P-1/4 |
| CJAP□ | Sauerstofffreies Kupfer JIS H3100 C1100P-1/2 |
| CCSP□ | Chrom-Kupfer JIS Z3234 Klasse 2 |
| C28P□ | Messingplatte JIS H3100 C2801P-1/4 |




(Gewalzt) C□□PL




(Gefräst) C□□PF




| Teilenummer | | 0.1mm Schritte | | T |
|---|---|---|---|---|
| Ausführung | Oberflächenbearbeitung Ober-/Unterseite | A | B | Frei wählbar/konfigurierbar |
| | | A≥B | | |
| CTAP (Kupfer kaltverfestigt)<br>CJAP (Sauerstofffreies Kupfer)<br>CCSP (Chrom-Kupfer)<br>C28P (Messingplatte) | *L (Gewalzt) | 6~300 | 6~300 | 5, 6, 8, 10, 12, 15, 20, 25, 30 |
| | F (Gefräst) | 16~300 | 6~300 | 3~30 (0.1mm-Schritte) |

* Bei Auswahl von CCSP (Chrom-Kupfer) und L (gewalzt) sind Größen ab T15 gegossen und geknetet.

### ■Präzisionsstandards

(max. Wert)

| Artikel | Oberflächenbearbeitung Ober-/Unterseite | |
|---|---|---|
| | L (Gewalzt) | F (Gefräst) |
| Parallelität (pro 100mm) | - | max. 0.02 |
| Ebenheit (pro 100mm) | 2mm (pro 1000mm) | max. 0.02 |
| Rechtwinkligkeit (pro 100mm) | max. 0.02 | |
| Fasung am Umfang | C0.1 Feine Fase | |

### ■Toleranz Plattendicke

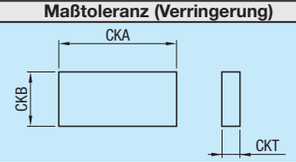
| Oberflächenbearbeitung Ober-/Unterseite | T | | | | | |
|---|---|---|---|---|---|---|
| L (Gewalzt) | 5 | 6, 8 | 10, 12 | 15, 20 | 25 | 30 |
| | ±0.18 | ±0.23 | ±0.28 | ±0.35 | ±0.55 | ±0.66 |
| F (Gefräst) | ±0.05 | | | | | |

**Ordering Example**

| Teilenummer | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Ausführung | Oberflächenbearbeitung Ober-/Unterseite | - | A | - | B | - | T |
| C28P | F | - | 255.3 | - | 221.1 | - | 18.9 |

**Alterations**

| Teilenummer | | A | | B | | T | -(CKA, CKB···usw.) |
|---|---|---|---|---|---|---|---|
| C28PF | - | 255.3 | - | 221.1 | - | 18.9 | - CKT |

| | Maßtoleranz (Verringerung) |
|---|---|
| Optionen |   |
| Opt.-Nr. | CKA, CKB, CKT |
| Spez. | Verbessert die Maßtoleranz.<br>±0.05→±0.025<br>Bestellnr.<br>CKA für Maß A<br>CKB für Maß B<br>CKT für Maß T<br>Nur zum Fräsen geeignet. |

| | Opt.-Nr. |
|---|---|
| A (Länge) | CKA |
| B (Breite) | CKB |
| T (Plattendicke) | CKT |

(Bsp.) Für CTAPL-220.3-100-10

| Maß A | X | Fläche Stückpreis | = | Preis |
|---|---|---|---|---|

### ■CTAPL (Kupfer, kaltverfestigt 4-Oberflächenbearbeitung und gewalzt)

| A \ B \ T | | 5 | 6 | 8 | 10 | 12 | 15 | 20 | 25 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 ~ 50 | 6~10 | | | | | | - | - | - | - |
| 50.1~ 100 | | | | | | | - | - | - | - |
| 100.1~ 150 | | | | | | | - | - | - | - |
| 150.1~ 200 | | | | | | | - | - | - | - |
| 200.1~ 250 | | | | | | | - | - | - | - |
| 250.1~ 300 | | | | | | | - | - | - | - |
| 10.1~ 50 | 10.1~15 | | | | | | | | - | - |
| 50.1~ 100 | | | | | | | | | - | - |
| 100.1~ 150 | | | | | | | | | - | - |
| 150.1~ 200 | | | | | | | | | - | - |
| 200.1~ 250 | | | | | | | | | - | - |
| 250.1~ 300 | | | | | | | | | - | - |
| 15.1~ 50 | 15.1~20 | | | | | | | | | |
| 50.1~ 100 | | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 20.1~ 100 | 20.1~30 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 30.1~ 100 | 30.1~40 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 40.1~ 100 | 40.1~60 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 60.1~ 100 | 60.1~80 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 80.1~ 150 | 80.1~100 | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 100.1~ 150 | 100.1~146 | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 146.1~ 250 | 146.1~200 | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 200.1~ 300 | 200.1~250 | | | | | | | | | |
| 250.1~ 300 | 250.1~300 | | | | | | | | | |

### ■CJAPL (Sauerstofffreies Kupfer 4-Oberflächenbearbeitung und gewalzt)

| A \ B \ T | | 5 | 6 | 8 | 10 | 12 | 15 | 20 | 25 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 ~ 50 | 6~10 | | | | | | - | - | - | - |
| 50.1~ 100 | | | | | | | - | - | - | - |
| 100.1~ 150 | | | | | | | - | - | - | - |
| 150.1~ 200 | | | | | | | - | - | - | - |
| 200.1~ 250 | | | | | | | - | - | - | - |
| 250.1~ 300 | | | | | | | - | - | - | - |
| 10.1~ 50 | 10.1~15 | | | | | | | | - | - |
| 50.1~ 100 | | | | | | | | | - | - |
| 100.1~ 150 | | | | | | | | | - | - |
| 150.1~ 200 | | | | | | | | | - | - |
| 200.1~ 250 | | | | | | | | | - | - |
| 250.1~ 300 | | | | | | | | | - | - |
| 15.1~ 50 | 15.1~20 | | | | | | | | | |
| 50.1~ 100 | | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 20.1~ 100 | 20.1~30 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 30.1~ 100 | 30.1~40 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 40.1~ 100 | 40.1~60 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 60.1~ 100 | 60.1~80 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 80.1~ 150 | 80.1~100 | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 100.1~ 150 | 100.1~146 | | | | | | | | | |
| 150.1~ 200 | | | | | | | | | | |
| 200.1~ 250 | | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 146.1~ 250 | 146.1~200 | | | | | | | | | |
| 250.1~ 300 | | | | | | | | | | |
| 200.1~ 300 | 200.1~250 | | | | | | | | | |
| 250.1~ 300 | 250.1~300 | | | | | | | | | |

### ■CTAPF (Kupfer, kaltverfestigt 6-Oberflächenbearbeitung und gewalzt)

| A \ B \ T | | 3~3.9 | 4~4.9 | 5~5.9 | 6~7.9 | 8~9.9 | 10~14.9 | 15~19.9 | 20~24.9 | 25~30 |
|---|---|---|---|---|---|---|---|---|---|---|
| 16 ~ 50 | 6~10 | | | | | | - | - | - | - |
| 50.1~ 100 | | | | | | | - | - | - | - |
| 100.1~ 150 | | | | | | | - | - | - | - |
| 16 ~ 50 | 10.1~15 | | | | | | | - | - | - |
| 50.1~ 100 | | | | | | | | - | - | - |
| 100.1~ 150 | | | | | | | | - | - | - |
| 150.1~ 200 | | - | - | - | | | | - | - | - |
| 200.1~ 250 | | - | - | - | | | | - | - | - |
| 250.1~ 300 | | - | - | - | | | | - | - | - |
| 16 ~ 50 | 15.1~20 | | | | | | | | - | - |
| 50.1~ 100 | | | | | | | | | - | - |
| 100.1~ 150 | | | | | | | | | - | - |
| 150.1~ 200 | | - | - | - | | | | | - | - |
| 200.1~ 250 | | - | - | - | | | | | - | - |
| 250.1~ 300 | | - | - | - | | | | | - | - |
| 20.1~ 100 | 20.1~25 | | | | | | | | | - |
| 100.1~ 150 | | | | | | | | | | - |
| 150.1~ 200 | | - | - | - | | | | | | - |
| 200.1~ 250 | | - | - | - | | | | | | - |
| 250.1~ 300 | | - | - | - | | | | | | - |
| 25.1~ 100 | 25.1~40 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 40.1~ 100 | 40.1~60 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 60.1~ 100 | 60.1~80 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 80.1~ 150 | 80.1~100 | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 100.1~ 150 | 100.1~146 | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 146.1~ 250 | 146.1~200 | - | - | - | - | | | | | |
| 250.1~ 300 | | - | - | - | - | | | | | |
| 200.1~ 300 | 200.1~250 | - | - | - | - | | | | | |
| 250.1~ 300 | 250.1~300 | - | - | - | - | | | | | |

### ■CJAPF (Sauerstofffreies Kupfer 6-Oberflächenbearbeitung und gewalzt)

| A \ B \ T | | 3~3.9 | 4~4.9 | 5~5.9 | 6~7.9 | 8~9.9 | 10~14.9 | 15~19.9 | 20~24.9 | 25~30 |
|---|---|---|---|---|---|---|---|---|---|---|
| 16 ~ 50 | 6~10 | | | | | | - | - | - | - |
| 50.1~ 100 | | | | | | | - | - | - | - |
| 100.1~ 150 | | | | | | | - | - | - | - |
| 16 ~ 50 | 10.1~15 | | | | | | | - | - | - |
| 50.1~ 100 | | | | | | | | - | - | - |
| 100.1~ 150 | | | | | | | | - | - | - |
| 150.1~ 200 | | - | - | - | | | | - | - | - |
| 200.1~ 250 | | - | - | - | | | | - | - | - |
| 250.1~ 300 | | - | - | - | | | | - | - | - |
| 16 ~ 50 | 15.1~20 | | | | | | | | - | - |
| 50.1~ 100 | | | | | | | | | - | - |
| 100.1~ 150 | | | | | | | | | - | - |
| 150.1~ 200 | | - | - | - | | | | | - | - |
| 200.1~ 250 | | - | - | - | | | | | - | - |
| 250.1~ 300 | | - | - | - | | | | | - | - |
| 20.1~ 100 | 20.1~25 | | | | | | | | | - |
| 100.1~ 150 | | | | | | | | | | - |
| 150.1~ 200 | | - | - | - | | | | | | - |
| 200.1~ 250 | | - | - | - | | | | | | - |
| 250.1~ 300 | | - | - | - | | | | | | - |
| 25.1~ 100 | 25.1~40 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 40.1~ 100 | 40.1~60 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 60.1~ 100 | 60.1~80 | | | | | | | | | |
| 100.1~ 150 | | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 80.1~ 150 | 80.1~100 | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 100.1~ 150 | 100.1~146 | | | | | | | | | |
| 150.1~ 200 | | - | - | - | | | | | | |
| 200.1~ 250 | | - | - | - | | | | | | |
| 250.1~ 300 | | - | - | - | | | | | | |
| 146.1~ 250 | 146.1~200 | - | - | - | - | | | | | |
| 250.1~ 300 | | - | - | - | - | | | | | |
| 200.1~ 300 | 200.1~250 | - | - | - | - | | | | | |
| 250.1~ 300 | 250.1~300 | - | - | - | - | | | | | |

Siehe Preisliste auf der nächsten Seite für Cr-Kupfer- und Messingplatten.