



## COLD HEADING / FORMING



Standard O.D. x I.D. x Height Blanks

O.D.	I.D. MIN	I.D. MAX	HEIGHT
8.3mm	0.7mm	1.0mm	≤ 30mm
10.3mm	0.7mm	3mm	≤ 40mm
10.8mm	0.7mm	3mm	≤ 45mm
12.3mm	0.7mm	4.1mm	≤ 45mm
12.8mm	0.7mm	4.1mm	≤ 45mm
13.3mm	1.0mm	4.6mm	≤ 45mm
15.3mm	0.7mm	6.6mm	≤ 50mm
15.8mm	0.7mm	6.6mm	≤ 50mm
16.3mm	1.0mm	3.5mm	≤ 50mm
18.3mm	1.0mm	9.3mm	≤ 60mm
20.3mm	1.0mm	8.6mm	≤ 70mm
22.3mm	1.0mm	6.9mm	≤ 70mm
25.3mm	1.0mm	12.0mm	≤ 80mm
30.3mm	0.7mm	15.4mm	≤ 90mm
35.3mm	3.0mm	19.9mm	≤ 100mm
40.3mm	2.5mm	23.4mm	≤ 100mm
45.5mm	5.0mm	23.9mm	≤ 100mm
50.9mm	4.3mm	25.0mm	≤ 100mm
55.8mm	3.9mm	15.6mm	≤ 100mm
60.8mm	15.6mm	24.6mm	≤ 50mm

CMI offers tungsten carbide cold heading and forming dies in both standard and custom configurations. Our dies can be provided from an "as-sintered" blank to a fully finished part, including a hexagonal internal geometry to match your fastener requirements.

CMI's extensive range of tungsten carbide material grades enables our customers to fully optimize the performance of their product for a specific application.

With the widest combination of sizes, grades and finish conditions available, CMI customers never have to compromise on set-up time, material costs or tooling performance.

### CX123

2-3 Micron / WC 87.5% / Co 12.5% / 89.0 HRA  
Standard Grade - Applications:  
Standard Screw and Nut Forming

### CX141

2-3 Micron / WC 85.0% / Co 15.0% / 88.0 HRA  
Medium Grade - Applications:  
Medium Pressure / Impact  
Screw and Nut Forming

### CX151

3-6 Micron / WC 85.0% / Co 15.0% / 86.5 HRA  
Heavy Grade - Applications:  
Stainless Fastener Forming  
≤2.1mm Diameter

### CX201

2-6 Micron / WC 80.0% / Co 20.0% / 85.0 HRA  
Heavy Grade - Applications:  
Stainless Fastener Forming  
>2.1mm Diameter

### CX202

2-6 Micron / WC 89.0% / Co 21.0% / 84.5 HRA  
Heavy Grade - Applications:  
Heavy Dies, Large Diameter

### CX203

3-6 Micron / WC 80.0% / Co 20.0% / 84.0 HRA  
Heavy Grade - Applications:  
Heavy Dies,  
Six Sided Nut Forming

### CX22C

6-9 Micron / WC 78.0% / Co 22.0% / 82.5 HRA  
Heavy Grade - Applications:  
Heavy Dies,  
Large Six Sided Nut Forming

### CX25C

6-9 Micron / WC 75.0% / Co 25.0% / 81.0 HRA  
Heavy Grade - Applications:  
Heavy Impact, Large Fastener  
Heavy Forging

All CMI Material Grades are produced using 100% virgin raw materials & sinter-HIP technology for maximum reliability and performance

**CMI**

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