

Why Carbide Diameter Changes Weight Fast

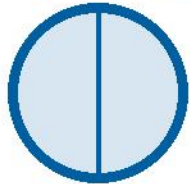
Same grade, same 6 in length: radius squared drives the jump

Example at 14.5 g/cm³, about 0.524 lb/in³

0.500 in diameter rod

Volume: 1.178 in³. Same 6 in length.

0.62 lb

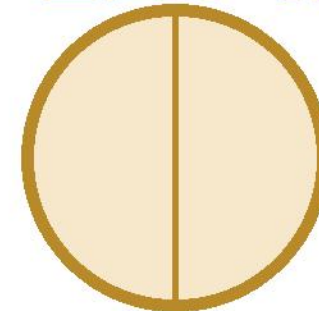


0.500 in

1.000 in diameter rod

Volume: 4.712 in³. Same 6 in length.

2.47 lb



1.000 in

Weight comparison

0.500 in rod



0.62 lb

1.000 in rod



2.47 lb

Doubling diameter creates roughly four times the cross-sectional area and roughly four times the weight.