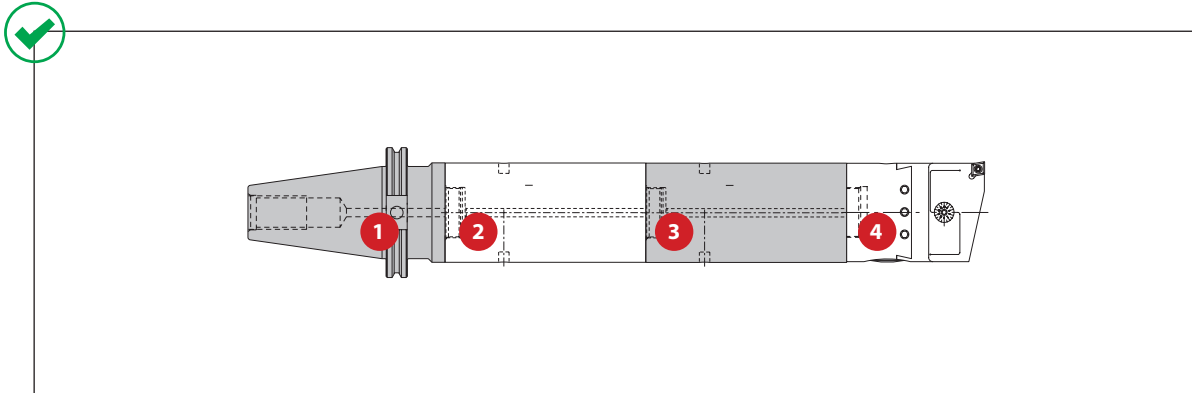


## Calculating Tool Assembly Weight

To calculate, see graphics below:



**Step 1: Find weight for each component**

**Example:**

Boring Range		4 Boring Head		Weight	Insert Form	Order Number
$D_1$	Thread Connection	$L_1$	$D_2$			
i	1.050 - 1.320	7/8 - 20	2.690	1.000	0.50 (lbs)	CC..215... CB1000CC
	1.050 - 1.320	7/8 - 20	2.690	1.000	0.50 (lbs)	TC..215... CB1000TC
	1.300 - 1.600	7/8 - 20	2.900	1.250	0.80 (lbs)	CC..215... CB1250CC
	1.300 - 1.600	7/8 - 20	2.900	1.250	0.80 (lbs)	TC..215... CB1250TC
	1.585 - 2.700	7/8 - 20	3.200	1.500	1.30 (lbs)	CC..325... CB1500CC
	1.585 - 2.700	7/8 - 20	3.200	1.500	1.30 (lbs)	TC..325... CB1500TC
	2.060 - 3.320	7/8 - 20	3.590	2.000	2.40 (lbs)	CC..325... CB2000CC
	2.060 - 3.320	7/8 - 20	3.590	2.000	2.40 (lbs)	TC..325... CB2000TC
	3.065 - 5.065	1 1/2 - 18	4.100	3.000	5.80 (lbs)	CC..325... CB3000CC
3.065 - 5.065	1 1/2 - 18	4.100	3.000	5.80 (lbs)	TC..325... CB3000TC	
m	27.00 - 33.00	7/8 - 20	68.35	25	0.23 (kg)	CC..0602... CB025MCC
	27.00 - 33.00	7/8 - 20	68.35	25	0.23 (kg)	TC..1102... CB025MTC
	33.00 - 41.00	7/8 - 20	73.65	32	0.36 (kg)	CC..0602... CB032MCC
	33.00 - 41.00	7/8 - 20	73.65	32	0.36 (kg)	TC..1102... CB032MTC
	41.00 - 68.00	7/8 - 20	81.25	38	0.59 (kg)	CC..09T3... CB038MCC
	41.00 - 68.00	7/8 - 20	81.25	38	0.59 (kg)	TC..16T3... CB038MTC
	53.00 - 84.00	7/8 - 20	91.30	50	1.09 (kg)	CC..09T3... CB050MCC
	53.00 - 84.00	7/8 - 20	91.30	50	1.09 (kg)	TC..16T3... CB050MTC
	78.00 - 128.00	1 1/2 - 18	104.25	76	2.36 (kg)	CC..09T3... CB076MCC
	78.00 - 128.00	1 1/2 - 18	104.25	76	2.36 (kg)	TC..16T3... CB076MTC

Imperial (in) = 0.00005" adjustment on diameter  
Metric (mm) = 0.001mm adjustment on diameter

**Step 2: Calculate total assembly weight**

$$\begin{array}{r}
 1 \quad 8.03 \text{ lbs} \\
 2 \quad 11.50 \text{ lbs} \\
 3 \quad 11.50 \text{ lbs} \\
 + 4 \quad 5.80 \text{ lbs} \\
 \hline
 36.83 \text{ lbs}
 \end{array}$$

**Step 3: Consult machine tool builder to ensure tool assembly weight does not exceed machine capabilities.**