

MATERIAL	Hardness: ≤ 28 Rc (≤ 271 HBn)													
	SFM	Chip Load (IPT) by Ball Diameter (2 x Radius)												
		.015	.031	.047	.062	.078	.093	.125	.187	.250	.312	.375	.500	
ALUMINUM ALLOYS														
Casting (2xx, 5xx, 7xx, 8xx)	750	Slotting	.00016	.00034	.00051	.00068	.00085	.00101	.00136	.00204	.00272	.00340	.00408	.00545
Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	1000													
Casting - 3%-5% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	750	Slotting	.00015	.00030	.00046	.00061	.00076	.00091	.00123	.00183	.00245	.00306	.00368	.00490
Casting - 5%-8% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	700													
Casting - 8%-12% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	650													
Casting - 12%-16% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	475													
Wrought - 5%-8% Si (4xxx)	1000													
Wrought - 8%-12% Si (4xxx)	800													
MAGNESIUM ALLOYS	1500	Slotting	.00016	.00034	.00051	.00068	.00085	.00101	.00136	.00204	.00272	.00340	.00408	.00545
ZINC ALLOYS	800													
COPPER ALLOYS														
High Coppers - 90%+ (C1xxxx)	225	Slotting	.00013	.00027	.00041	.00054	.00068	.00081	.00109	.00163	.00218	.00272	.00327	.00436
Brass (Copper Zinc alloys, C2xxxx, C3xxxx, C4xxxx, C6400-C69800)	500													
Phosphor Bronzes (Copper Tin alloys, C5xxxx)	225													
Aluminum Bronzes (Copper Aluminum alloys, C60600-C64200)	500													
Silicon Bronzes (Copper Silicon alloys, C64700-C66100)	500													
Copper Nickels, Nickel Silvers (Copper Nickel alloys, C7xxxx)	225													
Cast Copper Alloys (C83300-C86200, C86400-C87900, C92200-C95800, C97300-C97800, C99400-C99700)	550													



Speeds & Feeds

Product Table: Runner Cutters - For Non-Ferrous Materials
Characteristics: 10° & 15°, 2 Flutes
Series: 7722xx, 7734xx

Product Notes:

After calculating speed and feed, use the table below to determine number of axial passes needed (and their descending breakdown) to achieve the required depth of cut.

Axial DOC	Passes	Percentage breakdown of Descending Axial Passes												
2x DOC	2	70%	30%											
3x DOC	3	50%	30%	20%										
5x DOC	4	46%	25%	18%	11%									
8x DOC	5	46%	25%	16%	8%	5%								
10x DOC	6	43%	22%	16%	10%	6%	3%							
12x DOC	7	39%	22%	16%	10%	7%	4%	2%						
15x DOC	8	32%	21%	16%	12%	9%	6%	3%	1%					
20x DOC	10	27%	19%	15%	12%	9%	7%	5%	3%	2%	1%			

General Notes:

All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions. Chip loads reflect uncoated cutters and may be increased 10%-20% if coated. For ferrous materials with hardness ≤ 28 Rc, chip loads can be increased 10%-20%.

If you require additional information, Harvey Tool has a team of technical experts available to assist you through even the most challenging applications. Please contact us at **800-645-5609** or **Harveytech@harveyperformance.com**.

WARNING: Cutting tools may shatter under improper use. Government regulations require use of safety glasses and