

$d1$	+0.000" -0.011" (+0.000 -0.25mm)
$d2$	h6
ball radius	+0.0000" -0.0005" (+0.0000 -0.127mm)

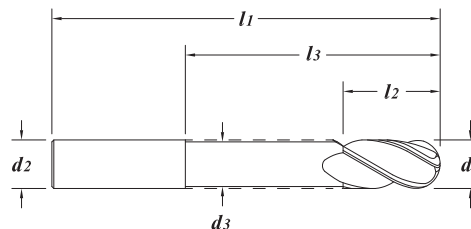


Recommended for aluminum

**HSAL End Mill - Ball End**

**ALUMASTAR Coating**

- Solid submicron grain carbide end mill - center cutting
- Engineered for High Efficiency Milling
- Specific coating engineered to repel aluminum
- Engineered to run at 750-2500 SFM (225-750 M/Min.)
- For high speed machining of aluminum
- High velocity - high metal removal rate (for spindles 10,000 RPM and above)
- Need to use properly balanced holders
- Holds perpendicularity
- Honed edge on radius for improved finish
- Flats can be added within 48 hours



MATERIAL HARDNESS (Rc)

70

35

0

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$l3$ Reach Length	$d3$ Neck Diameter	1-11	12-24	25-49	50-100	
	Decimal	Metric										
42522	.1575	4.000	6.0	50	12	-	-	31.57	30.20	28.82	27.45	
42582	.1875	3/16"	4.763	3/16"	2"	9/16"	-	23.40	22.39	21.37	20.35	
42642	.1969	5.000	6.0	65	16	-	-	32.57	31.15	29.74	28.32	
42702	.2362	6.000	6.0	65	19	-	-	31.52	30.15	28.78	27.41	
42762	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	-	29.95	28.64	27.34	26.04	
42764	.2500	1/4"	6.350	1/4"	4"	3/8"	1-1/8"	.235"	51.89	49.63	47.38	45.12
42842	.2756	7.000	8.0	65	19	-	-	45.84	43.85	41.85	39.86	
42902	.3125	5/16"	7.938	5/16"	2-1/2"	3/4"	-	39.64	37.92	36.19	34.47	
42962	.3150	8.000	8.0	65	19	-	-	41.70	39.89	38.07	36.26	
43022	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	-	46.18	44.18	42.17	40.16	
43023	.3750	3/8"	9.525	3/8"	4"	1/2"	1-1/8"	.355"	78.88	75.45	72.02	68.59
43102	.3937	10.000	10.0	70	24	-	-	70.84	67.76	64.68	61.60	
43182	.4724	12.000	12.0	75	32	-	-	87.62	83.81	80.00	76.19	
43242	.5000	1/2"	12.700	1/2"	3"	1-1/4"	-	83.24	79.62	76.00	72.38	
43243	.5000	1/2"	12.700	1/2"	4"	5/8"	2-1/4"	.475"	106.98	102.33	97.68	93.03
43322	.6250	5/8"	15.875	5/8"	4"	1-5/8"	-	143.99	137.73	131.47	125.21	
43382	.6299	16.000	16.0	100	40	-	-	151.58	144.99	138.40	131.81	
43442	.7500	3/4"	19.050	3/4"	4"	1-5/8"	-	186.88	178.75	170.63	162.50	
43444	.7500	3/4"	19.050	3/4"	5"	1"	3-1/16"	.715"	256.35	245.20	234.06	222.91
43482	.7874	20.000	20.0	100	32	-	-	262.32	250.91	239.51	228.10	
43542	.9843	25.000	25.0	100	38	-	-	303.53	290.33	277.14	263.94	
43602	1.000	1"	25.400	1"	4"	1-5/8"	-	318.70	304.84	290.99	277.13	