

**TOLERANCES**

$d_1$	+0.000" -0.001" (+.000 -0.025mm)
$d_2$	h6
ball radius	+0.0000" -0.0005" (+.0000 -0.127mm)



**NEW ITEMS**

**Series 142B**

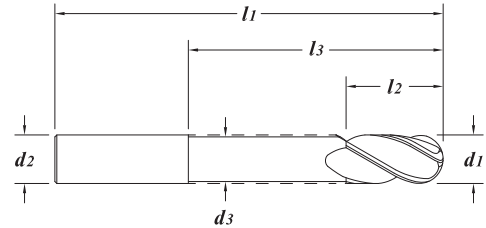
**HIGH PERFORMANCE  
END MILLS**

Recommended for aluminum

**HSAL End Mill - Ball End**

**ALUMASTAR Coating**

- Solid submicron grain carbide end mill - center cutting
- 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



EDP#	$d_1$ † Diameter		$d_2$ Shank Diameter	$l_1$ Overall Length	$l_2$ Flute Length	$l_3$ Reach Length	$d_3$ Neck Diameter	1-11	12-24	25-49	50-100	
	Decimal	Metric										
42522	.1575	4.000	6.0	50	12	-	-	30.35	29.03	27.71	26.39	
42582	.1875	3/16"	4.763	3/16"	2"	9/16"	-	22.51	21.53	20.55	19.57	
42642	.1969		5.000	6.0	65	16	-	31.31	29.95	28.59	27.23	
42702	.2362		6.000	6.0	65	19	-	30.31	29.00	27.68	26.36	
42762	.2500	1/4"	6.350	1/4"	2-1/2"	3/4"	-	28.80	27.54	26.29	25.04	
<b>NEW</b> 42764	.2500	1/4"	6.350	1/4"	4"	3/8"	1-1/8"	.235"	49.89	47.72	45.55	43.38
42842	.2756		7.000	8.0	65	19	-	44.08	42.16	40.25	38.33	
42902	.3125	5/16"	7.938	5/16"	2-1/2"	3/4"	-	38.11	36.45	34.80	33.14	
42962	.3150		8.000	8.0	65	19	-	40.10	38.36	36.61	34.87	
43022	.3750	3/8"	9.525	3/8"	2-1/2"	7/8"	-	44.41	42.48	40.55	38.62	
<b>NEW</b> 43023	.3750	3/8"	9.525	3/8"	4"	1/2"	1-1/8"	.355"	75.84	72.54	69.24	65.95
43102	.3937		10.000	10.0	70	24	-	68.11	65.15	62.19	59.23	
43182	.4724		12.000	12.0	75	32	-	84.25	80.59	76.92	73.26	
43242	.5000	1/2"	12.700	1/2"	3"	1-1/4"	-	80.04	76.56	73.08	69.60	
<b>NEW</b> 43243	.5000	1/2"	12.700	1/2"	4"	5/8"	2-1/4"	.475"	102.87	98.40	93.92	89.45
43322	.6250	5/8"	15.875	5/8"	4"	1-5/8"	-	138.45	132.43	126.41	120.39	
43382	.6299		16.000	16.0	100	40	-	145.75	139.41	133.08	126.74	
43442	.7500	3/4"	19.050	3/4"	4"	1-5/8"	-	179.69	171.88	164.06	156.25	
<b>NEW</b> 43444	.7500	3/4"	19.050	3/4"	5"	1"	3-1/16"	.715"	246.49	235.77	225.06	214.34
43482	.7874		20.000	20.0	100	32	-	252.23	241.26	230.30	219.33	
43542	.9843		25.000	25.0	100	38	-	291.86	279.17	266.48	253.79	
43602	1.000	1"	25.400	1"	4"	1-5/8"	-	306.44	293.12	279.79	266.47	

**MATERIAL HARDNESS (RC)**  
70  
35  
0