

Part: Puck
Business: Die Cast Dies
Industry: Automotive

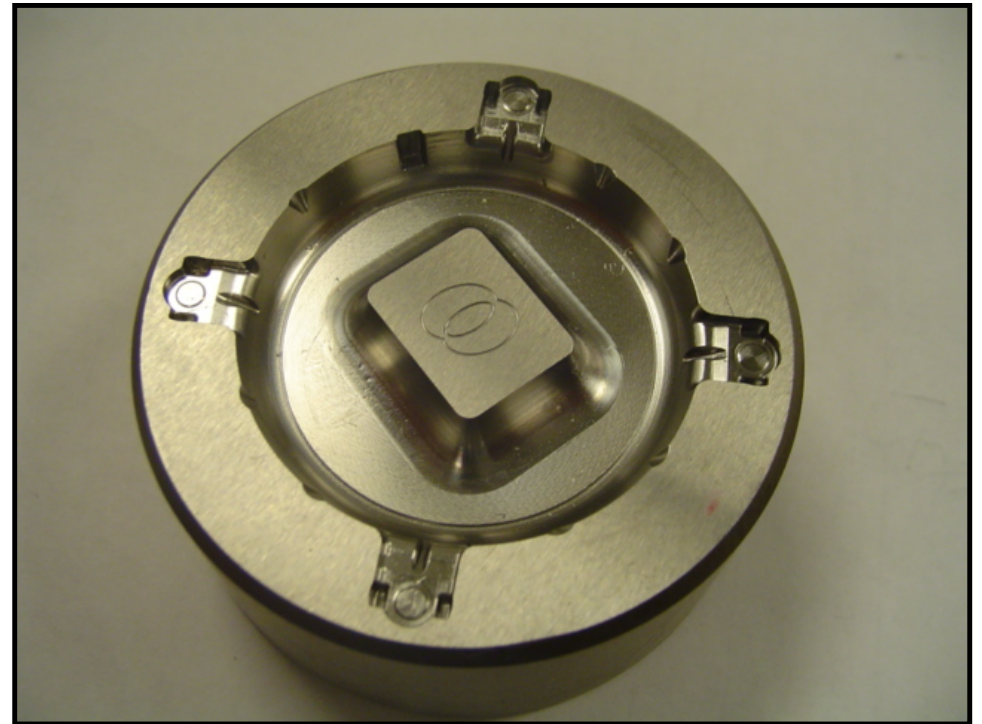
Machine: E33

Cycle Time: 3hrs. 51min. 45 sec.

Material: A2 (60 HRc)

Key Technologies: Hard Milling Approach
Rigid 40k Spindle

Impact: Machining of Graphite and Steel Utilizing One Machine
Rough and Finish from Hard State
Finish Tool = $\varnothing 0.2$ mm Ball ($\varnothing 0.0078$ in)



Test Cut Parameters

Tool Description	RPM	Feed Rate		Step Over		Step Down		Cycle Time(H:M:S)
		inch/min	mm/min	inch	mm	inch	mm	
3mm Ball Nose Endmill	19000	133.85827	3400	0.041339	1.05	0.005906	0.15	0:11:09
1mm Ball Nose Endmill	40000	40.944882	1040	0.01378	0.35	0.001969	0.05	0:06:16
2mm Ball Nose Endmill	32000	62.992126	1600	0.001339	0.034	0.001339	0.034	0:20:47
1mm Ball Nose Endmill	40000	39.370079	1000	0.000787	0.02	0.000787	0.02	0:05:43
0.3mm Ball Nose Endmill	40000	18.897638	480	0.000591	0.015	0.000591	0.015	0:15:10
0.2mm Ball Nose Endmill	40000	15.748032	400	0.000118	0.003	0.000118	0.003	0:13:22
1mm Ball Nose Endmill	40000	40.944882	1040	0.001575	0.04	0.001575	0.04	1:12:36
0.8mm Ball Nose Endmill	40000	47.244094	1200	0.001575	0.04	0.001575	0.04	0:09:55
0.8mm Ball Nose Endmill	40000	39.370079	1000	0.000591	0.015	0.000591	0.015	0:41:47
0.5mm Ball Nose Endmill	40000	31.496063	800	0.000394	0.01	0.000394	0.01	0:35:00
Total Cycle Time:							3:51:45	

