

MILLING PERFORMANCE REPORT

CUSTOMER:	DATE:	ENGINEER:		
LOCATION:	MATERIAL:	CUSTOMER ENGINEER:		
PART NUMBER:	CONDITION:	OPERATOR:		
OPERATION: Finish Milling	HARDNESS: 150 BHN	REPORT# 6	MACHINE TYPE: Vert. CNC	MACHINE HP: 20

NOTES:

PERFORMANCE / COST DATA	PRESENT	TEST 1	TEST 2	TEST 3
MANUFACTURER	Kennametal	CGC/Gorilla Mill		
MILL CATALOG NUMBER	Special Dia.	Special Gorilla Mill		
END MILL	Solid Carbide	Solid Carbide		
COATING	Al Tin	Al Tin		
CUTTER DIAMETER (INCHES)	0.472	0.472		
CUTTING SPEED (RPM)	6100	6100		
CUTTING SPEED (SFM)	754	754		
NUMBER OF FLUTES PER CUTTER	4	5		
CHIP LOAD PERTOOTH (CLPT)	0.0031	0.0024		
FEED RATE (IPM)	75.64	73.2		
FEED PER REV. (IPR)	0.0124	0.012		
FINISH (R.M.S.)	63	63		
MAX. WIDTH OF CUT(W.O.C.) INCH	0.01	0.01		
MAX DEPTH OF CUT (D.O.C.) INCH	0.02	0.02		
LENGTH OF CUT IN INCHES	7.85	7.85		
CUTTING TIME PER PIECE / MIN.	0.104	0.107		
PARTS PER TOOL	275	1400		
TOOL LIFE PER MINUTE	29	150		
TOOLS TESTED	1	1		
PARTS PER TOOL	275	1400		
REASON FOR CHANGING TOOL	Finish	Finish		
TYPE OF COOLANT	Semi. Syn.	Semi. Syn.		
TIME PER CUTTER CHANGE / MIN.	5	5		
CHANGE COST PER PIECE	\$0.02	\$0.00		
TOOL COST (PURCHASE QTY.)	\$46.30	\$51.16		
COST PER PART	\$0.67	\$0.18		
MACHINE HOURLY COST (BURDEN)	\$50.00	\$50.00		
MACHINE COST PER MINUTE	\$0.83	\$0.83		
MACHINE COST PER PIECE	\$0.09	\$0.09		
TOTAL COST PER PIECE	\$0.78	\$0.28		
EST. ANNUAL PRODUCTION	1,380,000	1,380,000		
EST. ANNUAL COST	\$1,069,624.59	\$379,579.36		
EST. ANNUAL SAVINGS		\$690,045.23		