

MILLING PERFORMANCE REPORT

CUSTOMER:	DATE:	ENGINEER:		
LOCATION:	MATERIAL:	CUSTOMER ENGINEER:		
PART NUMBER: Ring Plug	CONDITION: OK	OPERATOR: John		
OPERATION: 20	HARDNESS: 22 RC	REPORT# 1	MACHINE TYPE: VMC	MACHINE HP: 15

NOTES:

PERFORMANCE / COST DATA	PRESENT	TEST 1	TEST 2	TEST 3
MANUFACTURER	Hanita	Carbide Grinding		
MILL CATALOG NUMBER	Variable Helix	Gorilla Mill		
INSERT	End Mill	End Mill		
GRADE	TiALN	TiALN		
CUTTER DIAMETER (INCHES)	0.5	0.5		
CUTTING SPEED (RPM)	5500	5500		
CUTTING SPEED (SFM)	721	721		
NUMBER OF INSERTS PER CUTTER	4	4		
CHIP LOAD PER INSERT (CPT)	0.0016	0.0025		
FEED RATE (IPM)	35.2	55		
FEED PER REV. (IPR)	0.0064	0.01		
FINISH (R.M.S.)	125	125		
MAX. WIDTH OF CUT(W.O.C.) INCH	0.1	0.1		
MAX DEPTH OF CUT (D.O.C.) INCH	0.5	0.5		
LENGTH OF CUT IN INCHES	9	9		
CUTTING TIME PER PIECE / MIN.	0.256	0.164		
PIECES PER EDGE	600	1200		
TOOL LIFE PER EDGE / MIN.	153	196	#VALUE!	#VALUE!
CUTTING EDGES PER INSERT	1	1		
PIECES PER INSERT	600	1200		
REASON FOR INDEXING INSERTS	Burr	Burr		
TYPE OF COOLANT	oil base	oil base		
TIME PER CUTTER CHANGE / MIN.	10	10		
CHANGE COST PER PIECE	\$0.02	\$0.01		
INSERT COST (PURCHASE QTY.)	\$45.14	\$36.11		
INSERT COST PER PIECE	\$0.08	\$0.03		
MACHINE HOURLY COST (BURDEN)	\$60.00	\$60.00		
MACHINE COST PER MINUTE	\$1.00	\$1.00		
MACHINE COST PER PIECE	\$0.26	\$0.16		
TOTAL COST PER PIECE	\$0.35	\$0.20		
EST. ANNUAL PRODUCTION	8,500	8,500		
EST. ANNUAL COST	\$2,954.45	\$1,717.52		
EST. ANNUAL SAVINGS		\$1,236.92		