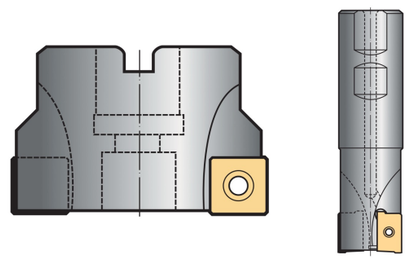
Tool Performance Report

Indexable Milling



Customer

Company:	
Contact:	
QTS Employee:	
Date:	

Machine

Machine Description:	Mazak VTC-200C						
Spindle:	✓	CV40		CV50		Other:	
Condition:		Good	✓	Medium		Poor	

Material

Type:	✓ Steel	Stainless Steel	Hi Temp Alloy	Aluminum
Material No.:	4330 HT			
Condition:	✓ Clean	Heavy Scale	Flame Cut	Casting
Hardness:	30	Rockwell		

Workpiece

Description:	Driven					
Drawing #:	RP775102					
Rigidity:		Good	✓	Medium		Bad
Operation:	✓	Rough		Finish		
Dimensions:	Length	4.39	Width		Height	
Comments:						

Tool Data

	Current	Test 1	Test 2	Test 3	Test 4	Test 5
Manufacturer:	ISCAR	KENNAMETAL				
Tool Type:	Shoulder Mill	Shoulder Mill				
Tool P/N:	M490 F90AX D2.00-4-.75-17	M4D200L1506S075L157				
Tool Dia.:	2.00	2.00				
# of Teeth:	4	6				
Insert P/N:	H490 ANKX 1706PNTR-RM	LNPU542SRGE				
Insert Grade:	IC830	KCPK30				
Index Time:	3m	3m		0m	0m	0m
Lead Angle:	90	90				

Machining Data

	Current	Test 1	Test 2	Test 3	Test 4	Test 5
Speed (SFM):	540	1071				
RPM:	1031	2046				
Feed Per Tooth:	0.0073	0.0045				
IPM:	30	55				
Cutting Width:	1.0	1.75				
Cutting Depth:	0.130	0.1				
MRR cu in/min:	3.9	9.7				

Machining Results

	Current	Test 1	Test 2	Test 3	Test 4	Test 5
Part count:	5.5	6.5				
Cycle Time:	25m 0s	16m 0s	0m 0s	0m 0s	0m 0s	0m 0s
Surface Finish:	125	125				
Spindle Load:	36%	28%				
Failure Mode:	Chipping/Fracturing	Flank wear				
Criteria for end of tool life:		Normal insert wear				

Comments

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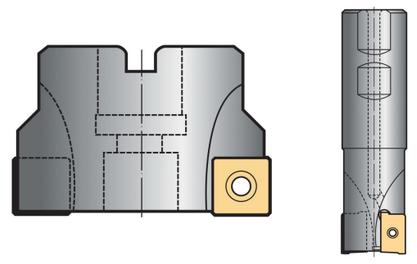

Tool Costing

	Current	Test 1	Test 2	Test 3	Test 4	Test 5
Manufacturer:	ISCAR	KENNAMETAL	0			
Cutter P/N:	M490 F90AX D2.00-4-.75-17	M4D200L1506S075L157	0			
Cutter Price:	$0.00	$0.00	$0.00			
Parts Per Cutter:	5000	5000				
Insert P/N:	H490 ANKX 1706PNTR-RM	LNPU542SRGE				
Insert Grade:	IC830	KCPK30	$0.00			
Insert Price Ea:	$20.00	$14.00	$0.00			
Number of Inserts:	4	6	0	0	0	0
Cutting Edges Per Insert:	4	4				
Parts Per Index:	5.5	6.5	0	0	0	0
Annual Part Production:	5000	5000	5000			
Tooling Cost Per Part:	$3.64	$3.23				
Tooling Cost Annually:	$18181.82	$16153.85				

Machining Cost

	Current	Test 1	Test 2	Test 3	Test 4	Test 5
Machine Description:	Mazak VTC-200C	Mazak VTC-200C	Mazak VTC-200C	Mazak VTC-200C	Mazak VTC-200C	Mazak VTC-200C
Hourly Rate:	$125.00	$125.00	$125.00	$125.00	$125.00	$125.00
Cycle Time:	25m 0s	16m 0s	0m 0s	0m 0s	0m 0s	0m 0s
Index Time:	3m	3m	0	0m	0m	0m
Machining Cost Per Part:	$52.10	$33.35				

Total Machining Time

	Current	Test 1	Test 2	Test 3	Test 4	Test 5
Total Time Per Part:	25m 33s	16m 27s 692ms				
Total Annual Time:	2128h 47m	1371h 48m				
Total Time Savings:	0h 0m	-757h 0m				

Total Cost

	Current	Test 1	Test 2	Test 3	Test 4	Test 5
Total Cost Per Part:	$55.73	$36.58				
Total Annual Cost:	$278660.98	$182883.01				
Total Savings:	**$0.00**	**$95777.97**				