



TUNGALOY TEST TOOL EVALUATION REPORT

DATE: 05/23/05

REPORT# :

COMPANY:	Automotive	SALESMAN:	
CONTACT:		PART DESCRIPTION:	
TEL:		WORK MATERIAL:	8620
FAX:		MAT'L HARDNESS:	60Rc

TYPE OF OPERATION	Hard Turn Gear Face	MACHINING OPERATION (SKETCH)
MACHINE TOOL & TYPE	Mori	
RIGIDITY	Good	
COOLANT TYPE		
COOLANT METHOD	Dry	

TOOLING REQUIRED	COMPANY / COMPETITOR	COMP	TUNGALOY	TUNGALOY	TUNGALOY
		CURRENT	FIRST TEST	SECOND TEST	THIRD TEST
	TOOL DESCRIPTION			0	
	HOLDER/BODY TYPE			0	
	INSERT	CNGA 432	CNGA 432	CNGA 432	
	INSERT GRADE	COMP	BX360	BX380	
CUTTING PARAMETERS	WORKPIECE/CUTTER DIAMETER	2.74	2.74	2.74	
	FEED RATE (IPR = f)	0.003	0.003	0.003	
	CUTTING SPEED (RPM=R or SFM=V)	350	500	500	
	H.P. REQUIRED (% or ACTUAL)				
	DEPTH OF CUT (INCHES)	0.007	0.007	0.007	
TOOL PERFORMANCE	CYCLE TIME FOR TOOL (min)	1.010	0.760	0.760	
	PIECES PER EDGE	70	70	70	
	TOOL LIFE (min per edge)	70.700	53.200	53.200	
	EDGES USED PER INSERT	4	2	2	
	PIECES PER INSERT	280	140	140	
	SURFACE FINISH (RMS)				
	REASON FOR INDEXING	burr	burr	burr	
	EST ANNUAL INSERT USAGE (pcs)	1286	2571	2571	
COST EVALUATION	INSERT COST	\$65.00	\$26.50	\$26.50	
	NUMBER OF INSERTS IN TOOL (multi)	4	4	4	
	INSERT COST PER PIECE	\$0.93	\$0.76	\$0.76	
	INSERT INDEX TIME (min)	2.00	2.00	2.00	
	HOURLY MACHINE DEPT. COST	\$60.00	\$60.00	\$60.00	
	TOTAL ANNUAL PIECES	90,000	90,000	90,000	
	MACH TIME + TOOL COST FOR TOOL			\$1.517	
WON or LOST		WON	WON		

COMMENTS:



TUNGALOY AMERICA, INC

COST ANALYSIS AND SAVINGS REPORT

Company: Automotive
Contact: 0

DATE: 23-May-05
TTA Rep: 0

TUNGALOY

HIGH OUTPUT TECHNOLOGY

	Competitor COMP	TUNGALOY HIGH OUTPUT TECHNOLOGY	Insert: CNGA 432 Grade: BX360
Cost of Insert	\$ 65.00	\$ 26.50	
Number of Corners	4	2	
Cost Per Corner	\$ 16.25	\$ 13.25	
Number of Inserts In Tool	4	4	
Cost Per Loaded Tool	\$ 65.00	\$ 53.00	
Number of Parts Per Corner	70	70	
Insert Cost Per Part	\$ 0.929	\$ 0.757	
Number of Parts Run Per Year	90,000	90,000	
Cost of Inserts Used Per Year	\$ 83,571.43	\$ 68,142.86	

Down-Time Cost

Note: If Insert Change is Internal to Cycle Place 0 in Insert(s) Changing Time

	Competitor	TUNGALOY HIGH OUTPUT TECHNOLOGY
Machine Operating Cost per Hour	\$ 60.00	\$ 60.00
Minutes in 1 Hour	60	60
Operating Cost per Minute	\$ 1.00	\$ 1.00
Insert(s) Changing Time (in minutes)	2.00	2.00
Cost per Insert Change	\$ 2.00	\$ 2.00
Number of Insert Changes per Year	1,286	1,286
Cost of Yearly Downtime	\$ 2,571.43	\$ 2,571.43

Cycle Time Savings

	Competitor	TUNGALOY HIGH OUTPUT TECHNOLOGY
Machine Operating Cost per Hour	\$ 60.00	\$ 60.00
Minutes in 1 hour	60	60
Operating Cost per Minute	\$ 1.00	\$ 1.00
Cycle Time for Tool (in Minutes)	1.0100	0.7600
Operating Cost per Part	\$ 1.01	\$ 0.76
Number of Parts Ran per Year	90,000	90,000
Cost of Cycle Time per Year	\$ 90,900.00	\$ 68,400.00
Estimated Annual Cost	\$ 177,042.86	\$ 139,114.29

TOTAL SAVINGS PER YEAR

Cost of Inserts	\$ 15,428.57
Cost of Down Time	\$ -
Cost of Cycle Time	\$ 22,500.00

Total Savings \$37,928.57

WINNER



TUNGALOY AMERICA, INC

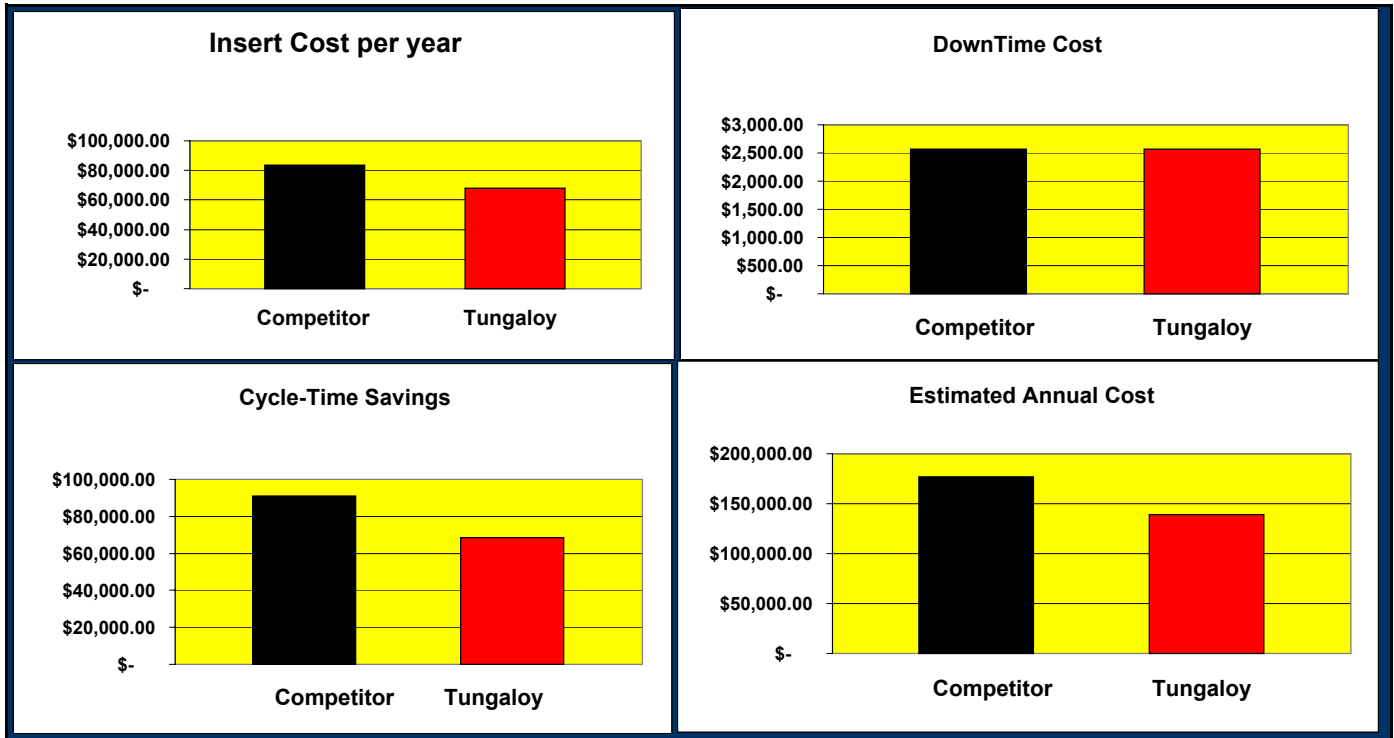
COST ANALYSIS AND SAVINGS REPORT

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HIGH OUTPUT TECHNOLOGY





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TUNGALOY

HIGH OUTPUT TECHNOLOGY

	Competitor COMP	TUNGALOY HIGH OUTPUT TECHNOLOGY	Insert: CNGA 432 Grade: BX380
Cost of Insert	\$ 65.00	\$ 26.50	
Number of Corners	4	2	
Cost Per Corner	\$ 16.25	\$ 13.25	
Number of Inserts In Tool	4	4	
Cost Per Loaded Tool	\$ 65.00	\$ 53.00	
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