



Machine	Haas	
Horse Power	20	
Taper	Cat 40	
Material	Titanium - AMS4928	
	Current	Tested Product

**1. Cutting Costs**

Cutter / Insert Designation:	XXXX	ADGT 10T3PER-G77 WSM35
Price Per Insert:	\$14.00	\$16.00
Number of Inserts Per Tool:	3	4
Cutting Edges Per Insert:	2	2
Cost Per Cutting Edge:	\$7.00	\$8.00
Number of Parts Per Index:	3	7
Insert Cost Per Piece	\$7.000	\$4.571
Annual Production - Pieces	1,000	1,000
Insert Cost Per Year:	\$7,000.00	\$4,571.43
<b>Insert Cost Savings / Annual:</b>		<b>\$2,428.57</b>

**2. Machine Costs**

Hourly Rate - Machine:	\$50.00	\$50.00
Current Supplier:		Creston
Tool Diameter - Decimal:	1.00	1.00
Number of Teeth - Pockets:	3	4
Surface Feet Per Minute:	118	158
RPM:	451	604
Chip Load - Per Tooth-Pocket / Revolution:	.0033	.0045
Feed Rate:	4.46	10.87
Cutting Length:	4.00	4.00
Number of Passes - Components:	10	10
Total Cutting Time (Minuntes):	8.96	3.68
Machining Cost / Component:	\$7.47	\$3.07
Annual Production / Pieces:	1,000	1,000
Machining Cost / Annual:	\$7,465.64	\$3,065.98
<b>Machining Cost Savings / Annual:</b>		<b>\$4,399.66</b>

Current	Tested Product
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**3. Tool Changing Costs**

Tool Changing Time (Minutes):	5	5
Cost Per Tool Change:	\$4.17	\$4.17
Tool Changes - Annual:	333	143
Tool Changing Cost / Annual:	\$1,388.89	\$595.24
<b>Tool Changing Cost Savings / Annual:</b>		<b>\$793.65</b>

**4. Tool Presetting Costs**

Hourly Rate - Presetter:	\$0.00	\$0.00
Total Tool Presetting Time (Minutes):	0	0
Tool Presetting Cost:	\$0.00	\$0.00
Tool Presettings / Annual:	333	143
Costs Annual:	\$0.00	\$0.00
<b>Tool Presetting Cost Savings / Annual:</b>		<b>\$0.00</b>

**5. Additional Free Machine Capacity**

Tool Changes / Annual:	333	143
Machining Time /Annual ( Minutes)	8959	3679
Tool Changing Time / Annual (Minutes):	1667	714
Machine Capacity (Minutes): (168 Hrs Wk.)	10625	4393
<b>Machine Time Gained / Min - Annual</b>		<b>\$ 5,193.31</b>

**Cost Comparison Total**

	Current	Tested Product	Savings
1	\$7,000.00	\$4,571.43	\$2,428.57
2	\$7,465.64	\$3,065.98	\$4,399.66
3	\$1,388.89	\$595.24	\$793.65
4	\$0.00	\$0.00	\$0.00
<b>SUM</b>	<b>\$15,854.53</b>	<b>\$8,232.65</b>	<b>\$7,621.88</b>