# TURPIN SALES & MARKETING, INC.

#### **INDUSTRY NEWS**



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### **INDUSTRY NEWS**

## **Milling Test Report**

The proof is in the numbers. Palbit tooling significantly out-performed tooling manufactured by a competitor. This example is one of the many ways Pilot Precision Products can help you achieve superior precision, quality, consistency, and performance in all of your tooling operations.

	CURRENT	TEST 1	TEST 2
Manufacturer:	COMPETITOR	PALBIT	PALBIT
Ref. Insert:	XDPT090408 ERD41	XNKU 06T310-MP	XNKU 06T310-MP
Grade:	SC6525	PHP920	PHS740
Cost per Insert:	\$13.04	\$11.78	\$11.78
Tool Change Time (TCT) [min]:	5	5	5
Number of Tooth (Z effective):	6.0	8.0	8.0
Number Of Edges per Insert:	4	4	4
Machine Cost/Hour:	\$125.00	\$125.00	\$125.00
Number of parts/edge:	200	235	280
Number of Parts/Insert:	133.33	117.50	140.00
Effective time of cut /part (theoret.) [min]:	0.19	0.07	0.07
Machine Cost/Part:	\$.39	\$.15	\$.15
Tool Change Time Cost/Part:	\$.05	\$.04	\$.04
Insert Cost/Part:	\$.10	\$.10	\$.08
Machining Cost/Part:	\$.54	\$.29	\$.27
Number Of Parts/Year:	37,000	37,000	37,000
Machining Cost/Year:	\$20,034.15	\$10,749.46	\$9,889.72
Annual Insert´s Usage:	\$277.50	\$314.89	\$264.29
Workpiece Material Density [lb/in³]:	0.2940	0.2940	0.2940
Tool life/edge (measured) [min]:	37.0	19.6	19.6
Tool life/Insert [min]:	24.7	9.8	9.8
Material Removed Between Tool Changes [lb]:	24.31	34.5	34.5
Metal Removal Rate [lb/hour]:	14.99	11.29	11.29
Machine Cost/lb:	\$3.17	\$1.18	\$1.18
Tool Change Cost/lb:	\$.43	\$.30	\$.30
Insert Cost/lb:	\$.80	\$68	\$.68
Machining Cost/lb:	\$4.40	\$2.17	\$2.17
Machining Cost/ton:	\$8,808.89	\$4,330.78	\$4,330.78
Insert's Usage/ton:	123.42	115.78	115.78
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Cost/Year   Cost/ton:	\$20,034.15	\$10,749.46	\$9,889.72
Savings:	N/A	\$9,284.69	\$10,144.43

#### **Comments:**

To cost calculation we are considering the following conditions

- Machine Cost Per Hour = \$125
- Tool Change Time (TCT) = 5 min.
- Number of Parts Per Year = 37,000
- Workpiece Material Density (Steel) = 0,2529 [lb/in<sup>3</sup>]











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