

CONSTELLATION TECHNOLOGY CORPORATION

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 An Equal Opportunity Employer



Analytical Services Laboratory

Test Report - 990145 - PRELIMINARY # 2

Company:	<u>Tri-Cycle International</u>	Contact:	<u>Frank Masvada</u>
Address:	<u>6014 Waters Ave.</u>	City/State/Zip:	<u>Tampa, FL 33634</u>
Sample description and ID:	<u>Cobalt Segments</u>		
Date Received	<u>9-28-99</u>	Date Analyzed	<u>9-29/30-99</u> Date Reported <u>10-8-99</u>
Test Method	<u>Tensile Testing</u>	Analyst <u>Jackson</u>	

Discussion

Samples of cobalt segments for cutting tools, without the diamonds, were received to determine the effects of thermal cycling. The samples were separated into three lots of five each. Two lots, marked A & B, were subjected to thermal cycling by Advanced Deep Cryogenics.

Results

Untreated				
	Dimensions (inches)		Load (lbs)	Tensile (psi)
1	0.2502	0.2601	6,013	92,400
2	0.2503	0.2522	5,920	101,600
3	0.2503	0.2522	5,920	93,800
4	0.2491	0.2594	5,800	89,800
5	0.2522	0.2516	6,470	102,000
Average				95,900

Treatment A				
	Dimensions (inches)		Load (lbs)	Tensile (psi)
1	0.2537	0.2524	6,700	104,600
2	0.2475	0.2506	6,450	104,000
3	0.2502	0.2515	6,620	105,200
4	0.2520	0.2520	6,420	101,100
5	0.2496	0.2517	6,650	105,900
Average				104,200