

RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: 2nd

Wisconsin Department of Transportation
DT1241 2009

Research, Development and Technology Transfer	
Program: (Choose One) <input type="checkbox"/> Policy Research <input checked="" type="checkbox"/> Pooled Fund TPF # 5(092) Clear Roads <input type="checkbox"/> Wisconsin Highway Research Program <input type="checkbox"/> Other	
Project Title: Development of Standardized Test Procedures for Carbide Insert Snowplow Blade Wear	
Administrative Contact/Phone #: Colleen Bos/ (608) 577-4805	WisDOT Project ID(s): 0092-08-31
WisDOT Technical Contact/Phone #: Michael Sproul/ (608) 266-8680	Other Project ID: Clear Roads 07-01
Project Investigator/Phone # (agency & contact): Cam Kruse Braun Intertec (952) 995-2230	Approved Starting Date: 10/22/2007
WisDOT Comments:	Original End Date: 7/1/2009
	Current End Date: 7/1/2009
Sponsor: Wisconsin Department of Transportation	Number of Extensions: 0

Schedule Status:

- ☐ On schedule ☐ Ahead of schedule
☒ On revised schedule ☐ Behind schedule (Please explain below)

Total Project Budget	Expenditures Current Quarter	Total Expenditures	% Funds Expended	% Work Completed
\$74,965.00	\$561.50	\$38,097.04	52%	50%

Project Description:

Carbide inserts of snowplow blades fail through wear (abrasion) and through durability (fracture). This research project will (Task 1) identify test procedures that have potential to predict the wear and durability performance of the carbide inserts. The most promising test procedures will be developed in the laboratory (Tasks 2 and 3) and compared to the performance of identical sample carbide inserts measured in field tests of actual snowplowing (Task 4). The results of the laboratory and field tests will be analyzed to determine the effectiveness of the tests at predicting performance of the carbide inserts (Task 5). The final deliverable is a report that documents the testing and provides recommendations for use of the test procedures and for additional studies, if needed.

Progress This Quarter: (Includes project committee meetings, work plan status, contract status, significant progress, etc.)

Little progress was possible this quarter due to the lack of the samples of blades for testing. However, the blades did arrive the last week of the quarter. In a phone discussion with Mr. Bernhard he indicated that the Saskatchewan Ministry of Transportation has been studying their blade performance and found significant failures due to fracturing. That is similar to the observations by Mr. Larry Kirchner of our team who noted fracturing in used blades we obtained from Hennepin County, MN.

Anticipated Work Next Quarter:

We expect to complete the Task 2 Development of Laboratory Test Procedures and begin the laboratory testing of Task 3. We will prepare for the field testing of Task 4, to be conducted by the Utah DOT. At the completion of the evaluation of Task 2 we will provide our evaluation and recommendations for the tests to be compared to field testing. We will ask the TAC panel to provide feedback on our analysis and recommendations. We will be pursuing fracturing as a possible cause of poor performance in Task 2.

Circumstances Affecting Progress and/or Budget:

Lack of blades for testing has delayed progress by approximately one year. Now that we have the blades we hope to proceed on the original schedule but one year later.

We request a no-cost, one-year extension on the contract. The end date would then be July1, 2010.

Gantt Chart:

See following page.