

High Precision Tester for Automotive and Stationary Batteries

Ford Motor Company

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Technology

Ford Motor Company, Arbin Instruments & Sandia National Lab will develop a commercially viable battery testers with measurement precision ten times more precise than state of the art. These testers will be validated using Automotive and Stationary application batteries and relevant duty cycles

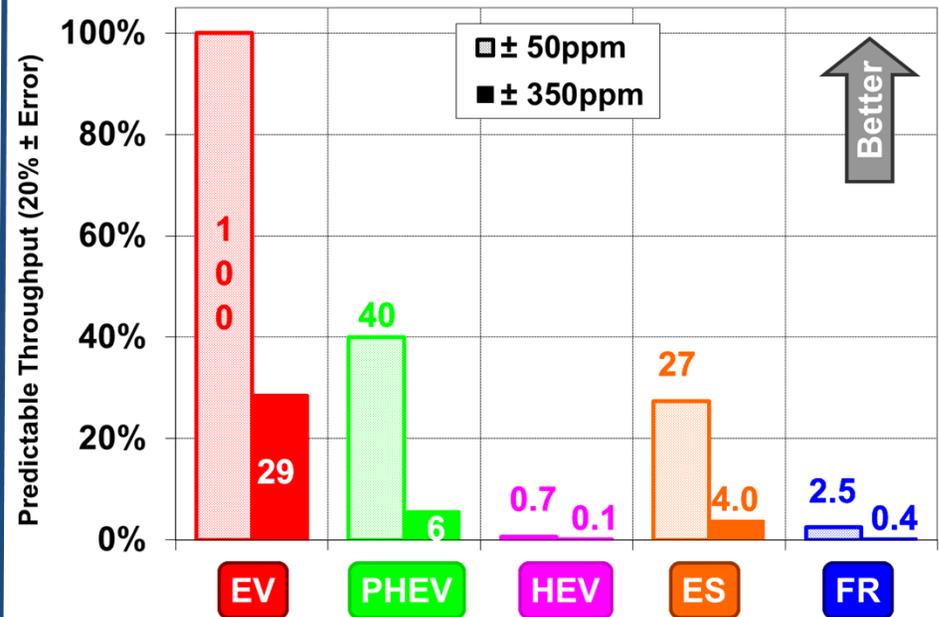
Advantage

The High Precision Tester will have the ability to predict remaining lifecycle energy throughput to within $\pm 10\%$ accuracy. This will allow for significant reduction of the testing time required to validate new battery materials and designs.

Performance Targets

Variable		Tester Precision	
		Present	Target
Columbic Efficiency	ppm	349	50
Voltage	ppm	200	25
Current	ppm	200	50

Impact of Improved Precision on Energy Throughput Prediction



Automotive	EV	Electric Vehicle
	PHEV	Plug-in Hybrid Electric Vehicle
	HEV	Hybrid Electric Vehicle
Stationary	ES	Energy Shifting
	FR	Frequency Regulation



Please contact regarding: r&d collaboration