

<b>Team #:</b>	P17665	<b>Team Name:</b>	Rotating Dynamometer	<b>Key</b>							
<b>Date:</b>	12/6/16 7:20	<b>Document Owner:</b>	Joe Amoia	1 = High Importance	"Critical"						
<b>Revision #:</b>	3			2 = Medium Importance	"Important"						
				3 = Minimal Importance	"Acceptable"						
<b>ER #</b>	<b>Importance</b>	<b>Source (CR #)</b>	<b>Function</b>	<b>Engineering Requirement</b>	<b>Unit of Measure</b>	<b>Symbol</b>	<b>Minimum Value</b>	<b>Nominal Value</b>	<b>Ideal Value</b>	<b>Completion Progress</b>	<b>Validation</b>
ER 1	1	1.1, 2.2	Machining	Maximum measurable cutting force	Newtons	N	400	500	>500	50%	Test Plan/Simulation
ER 2	1	1.1, 2.2	Machining	Maximum withstandable RPM	Rev. per Minute	rpm	1800	2000	>2000	75%	Test Plan/Simulation
ER 3	2	1.3	Data Measurement	Sampling Rate per Channel	Hertz	Hz	333	1600	> 1600	65%	Test Plan
ER 4	2	2.1, 2.4, 3.3, 3.4	Set-up	Time to attach to machine	Seconds	s	90	60	<30	75%	Test Plan
ER 6	2	1.3, 3.3, 3.4	Data Processing	Time for user to process data	Minutes	min	45	30	15	50%	Test Plan/Simulation
ER 7	2	1.2, 1.3, 3.3, 3.4	Data Processing	Delay from data capture to viewing	Seconds	s	360	180	0 (Real-time)	75%	Test Plan/Simulation
ER 8	2	2.3	Machining	Lifespan	Hours	hr	250	300	450	50%	Test Plan
ER 9	3	1.2	Data Transmission	Wireless data transmission range	Feet	ft	50	100	200	50%	Test Plan
ER 10	3	3.1	Data Measurement	Measurement Accuracy	% Error	%	15%	10%	5%	50%	Test Plan