HeroX Smart Bearing Challenge

Judging Criteria and Score Card Packet

Wireless and Data Acquisition Score Card

Criteria	0	+1	+2	+4	Score
Compatibility with Existing Protocol: WiFi, 802.11, Zigbee, Bluetooth, etc.	None mentioned	Compatible with 1 existing protocol	Compatible with 2 to 3 different types of existing protocol	Compatible with a wide range of protocols	
Wireless Reliability.	No evidence on actual working conditions	Overview of actual shop/manufacturing conditions and what effects they have on wireless connectivity.	N/A	N/A	
Range of Wireless System	Not mentioned	Range is specified.	N/A	N/A	
Wireless Hardware	Not mentioned	The type of hardware used is listed.	Brief overview of how to use the hardware is included.	Detailed wiring diagram and relevant pseudo code for configuring the wireless device.	
Cost of Wireless Hardware	Not Mentioned	A cost estimate is provided.	A BOM of wireless is provided along with cost of the components.	N/A	
Data Acquisition	Not Mentioned	Type of data is provided (i.e .txt, .log, .html. etc)	N/A	N/A	
Total Score (Max: 13)					

Bearing Technology Score Card

Criteria	-1	+1	+2	+4	Score
Types of data collected from the wheel	Only temperature data is collected	1-2	3-4	>4	
Base Knowledge Competency: Demonstrates knowledge of topic by...	the use of false assumptions and inappropriate solutions	using correct assumptions and suggesting appropriate solutions	using the correct assumptions, suggesting appropriate solutions, and how to realize the idea.	using the correct assumptions, suggesting appropriate solutions, how to realize the idea, proper technical risk assessment, and feasibility study of the idea	
Background and supporting research	Contains neither research nor sources to support theory	Few sources or have questionable sources	Contains sufficient research to support theory	Includes overwhelming amount of research and supporting information to justify claim	
Illustrations	No diagrams or picture to illustrate ideas and concepts	Only a few diagrams or pictures to illustrate ideas and concepts	Numerous diagrams and pictures to illustrate ideas and concepts	Numerous high quality illustrations to illustrate ideas and concepts	
Completeness of Idea	Idea only	Idea with brief overview on how to bring it to fruition.	Process plan are in place such that the idea can be implemented in less than 1 year.	Idea can be implemented within 6 months	
Testing, lab data, and experimentation	N/A	N/A	N/A	Laboratory data is provided to support concept.	
Total Score (Max: 24)					