

MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2024-380
Item to be Scouted	Gear Drive Wheel
Days to be scouted	15
Response Due By	12/19/2024
Description	<p>A robotics company seeks a second supplier for Gear Drive Wheels for a trailer unloading robot. The full assembly must be composed of motor, gearbox and physical wheel, integrated together. Brake hall and encoder to be integrated to the design.</p> <p>The company can provide much more detail after signing an NDA.</p>
Notify Requester Immediately	No
State item to be used in	Montana

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	2nd Supplier
Describe the manufacturing processes (elaborate to provide as much detail as possible)	<p>Mechanical Assembly</p> <p>Gear drive wheel that is composed of motor, gearbox and physical wheel, integrated together. Brake hall and encoder to be integrated to the design.</p>
Provide dimensions / size / tolerances / performance specifications for the item	<p>300mm (l) x 254mm (diameter) x 250mm (depth)</p> <p>Power input for gear drive is 40V DC</p> <p>Max speed: 0.25 m/s</p> <p>The gear drive wheel has to be able to handle static weight of 1800lbs and should be able to handle shock and impact loads going over cracks and bumps. Testing could include driving the robot over 1.5 inch bump strips more than 10,000 times. Going up and down 10 degree ramps. Robot weight is 4200 lbs +/- 10%. There are 2 drive wheels in the front and a swivel caster in the rear.</p> <p>The company can provide much more detail after signing an NDA.</p>
List required materials needed to make the product, including materials of product components	Ideally an off the shelf gear drive wheel that works for our application, or one with very minimal customization.
Are there applicable certification requirements?	No
Are there applicable regulations?	No
Are there any other standards, requirements, etc.?	No
NAICS 1	333612 Speed changers, industrial high-speed drives, and gear manufacturing
NAICS 2	
Additional Technical Comments	

Section 4: Business Information

Estimated potential business volume	100 first year, 200 2nd year (2 wheels per system)
Estimated target price / unit cost information (if unavailable explain)	< \$1,000/unit
When is it needed by?	Approximately end of January 2025.
Describe packaging requirements	Packaging should be designed for safe transportation by truck and air
Where will this item be shipped?	TBA

Additional Comments

Is there other information you would like to include?	
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