

# MEPNN Supplier Scouting Opportunity Synopsis

## Section 1: General Information

Scouting Number	2025-042
Item to be Scouted	Hoist Gear Motor
Days to be scouted	30
Response Due By	03/14/2025
Description	<p>Gear Motor CYLCO AND HELICAL BEVEL GEAR REDUCER WITH INTEGRAL MOTOR AND BRAKE.</p> <ul style="list-style-type: none"><li>- Gear Reducer TWO STAGE HELICAL GEAR REDUCER</li><li>-</li></ul>
Notify Requester Immediately	
State item to be used in	Washington

## 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)	Electrical / Mechanical assembly. Including but not limited to machining, heat treatment, and finishing.
Provide dimensions / size / tolerances / performance specifications for the item	<p>Suggested Component SUMITOMO MODEL LHYMS10-5C165KB-EPG3-B-67 SUMITOMO MODEL PHD906 OP2-LRK-6.3</p> <p>Gear Motor CYLCO AND HELICAL BEVEL GEAR REDUCER WITH INTEGRAL MOTOR AND BRAKE.</p> <p>- DUTY CYCLE:</p> <ul style="list-style-type: none"><li>- HOURS OF OPERATION PER DAY: 3-1 0 HR</li><li>- NUMBER OF STARTS AND STOPS PER HOUR: 60 PER HR</li><li>- START AND STOP LOAD FACTOR:I (LOAD FACTOR&lt;.3)</li><li>- PRIME MOVER: AC-MOTOR INVERTER OPERATED</li><li>- GEAR REDUCTION: 67.2:1</li><li>- MOTOR RATED SPEED: 1750 RPM</li><li>- MOTOR RATED POWER: 10 HP</li><li>- MOTOR TYPE: TEFC</li><li>- BRAKE RATED TORQUE: 5 9 FT-LBS</li><li>- DESIGN SERVICE FACTOR: 1.68</li><li>- GEAR MOTOR OPTIONS REQUIRED:</li><li>- LEVER TYPE BRAKE RELEASE</li></ul> <p>Gear Reducer TWO STAGE HELICAL GEAR REDUCER</p> <p>- DUTY CYCLE:</p> <ul style="list-style-type: none"><li>- HOURS OF OPERATION PER DAY: INTERMITTENT 3 HR</li><li>- PRIME MOVER: AC-MOTOR INVERTER OPERATED</li><li>- GEAR REDUCTION: 6.188:1</li><li>- INPUT SPEED: 26 RPM</li><li>- RATED POWER: 14 HP</li><li>- DESIGN SERVICE FACTOR: 1.5</li></ul>
List required materials needed to make the product, including materials of product components	Steel, Electrical, Engineering
Are there applicable certification requirements?	No

Are there applicable regulations?	No
Are there any other standards, requirements, etc.?	No
NAICS 1	237310 Highway, Street, and Bridge Construction
NAICS 2	811310 Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance
Additional Technical Comments	<p>Provide special mounting bracket to adapt gear motor to input shaft of the gear reducer. Mounting bracket shall clock gear motor to reduce as shown in the drawings. The specified part number incorporates mounting feature.</p> <p>Gear reducer shall provide mounting interface for the output mounting bracket from gear motor. the specified part number incorporates mounting feature.</p>

## Section 4: Business Information

Estimated potential business volume	one-time purchase to a single unit
Estimated target price / unit cost information (if unavailable explain)	\$40,000
When is it needed by?	Within 6 months of approved shop drawings (attached)
Describe packaging requirements	Palletized
Where will this item be shipped?	Bainbridge Island Washington

## Additional Comments

Is there other information you would like to include?	<p>Washington, State of / Transportation, Washington Department of / Washington State Ferries Terminal Engineering</p> <p>I. THE GEAR MOTOR AND REDUCER PACKAGE. INCLUDING MOTOR MOUNTING BRACKET. SHALL BE DELIVERED AS A COMPLETE UNIT BY ONE GEAR REDUCER MANUFACTURER. DESIGN DETAILS SHOWN WITHIN THIS DRAWING PACKAGE HAVE BEEN DEVELOPED BASED ON THE SUGGESTED GEAR REDUCER PRODUCTS LISTED ABOVE. THE CONTRACTOR MAY PROPOSE OTHER GEAR REDUCER PACKAGES BUT MUST REVISE ANY DESIGN DETAILS SHOWN TO MATCH THEIR PROPOSED DESIGN.</p>
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DRUM FRAME  
BASEPLATE

1  
M02.035

1/2-13 UNC, 2" LONG STUD  
1/2" LOCK WASHER  
1/2" WASHER  
8 PLCS

SEE ITEM NUMBER 1

CL DRUM

2'-11 3/4"

CL DRUM

CL REDUCER

EDGE OF PILECAP,  
SHORE SIDE NOT SHOWN

DRUM GUARD, NOT SHOWN

1  
M02.024

1  
M01.003

11  
M02.020

### HOIST UNIT ASSEMBLY - PLAN

SCALE 3/4" = 1'-0"

1  
M02.025

DRUM SHAFT

SEE ITEM NUMBER 2

SPHERICAL ROLLER BEARING, 4 BOLT  
PILLOW BLOCK SHAFT DIA. 4 15/16",  
SKF P4BE 415-SRB-SRE OR APPROVED EQUIVALENT

1 1/8-7 UNC x 6" LONG F3125 BOLT  
1 1/8" WASHER, 2X  
1 1/8" LOCK WASHER  
HEX NUT, 1 1/8-7 UNC,  
4 PLCS

HHCS 3/4-10 UNC x 1 3/4" LONG  
3/4" LOCK WASHER  
3/4" WASHER  
4 PLCS

Ø1" ASTM F1554 GR. 105 ANCHOR  
ROD WITH MIN EMBED OF 5". DRILL  
AND EPOXY WITH HILTI RE 500-V3  
OR APPROVED EQUAL ANCHOR BOLTS,  
HEX NUTS AND WASHERS SHALL BE  
HOT DIP GALVANIZED. 10 PLCS,  
SEE M02.036 FOR ANCHOR BOLT  
DRILLING DETAILS.

1" GROUT PAD

2  
M02.023

PRESSER FOOT

1  
M02.023

DRUM FRAME

2  
M02.036

SEE

FOR TYPICAL PILECAP  
ANCHORING DETAILS

1 3/8-6 UNC x 4 3/4" LONG F3125 BOLT  
1 3/8" WASHER, 2X  
1 3/8" LOCK WASHER  
HEX NUT, 1 3/8-6 UNC  
4 PLCS

HHCS 1-8 UNC x 2.5" LONG  
1" LOCKWASHER  
1" BEVELED WASHER  
12 PLCS

#### NOTES:

1. SHIM AS REQUIRED PRIOR TO DRUM INSTALLATION  
ON SHAFT TO PROVIDE PROPER SHAFT ALIGNMENT  
PER GEAR REDUCER MANUFACTURER'S REQUIREMENTS.

#### BOM - HOIST GEAR MOTOR PACKAGE

ITEM NO.	DESCRIPTION	SPECIFICATION	SUGGESTED COMPONENT
1	GEAR MOTOR	CYLCO AND HELICAL BEVEL GEAR REDUCER WITH INTEGRAL MOTOR AND BRAKE. - DUTY CYCLE: - HOURS OF OPERATION PER DAY: 3-10 HR - NUMBER OF STARTS AND STOPS PER HOUR: 60 PER HR - START AND STOP LOAD FACTOR: 1 (LOAD FACTOR < .3) - PRIME MOVER: AC-MOTOR INVERTER OPERATED - GEAR REDUCTION: 67.2:1 - MOTOR RATED SPEED: 1750 RPM - MOTOR RATED POWER: 10 HP - MOTOR TYPE: TEFC - BRAKE RATED TORQUE: 59 FT-LBS - DESIGN SERVICE FACTOR: 1.68 - GEAR MOTOR OPTIONS REQUIRED: - LEVER TYPE BRAKE RELEASE  PROVIDE SPECIAL MOUNTING BRACKET TO ADAPT GEAR MOTOR TO INPUT SHAFT OF THE GEAR REDUCER. MOUNTING BRACKET SHALL CLOCK GEAR MOTOR TO REDUCER AS SHOWN IN THE DRAWINGS. THE SPECIFIED PART NUMBER INCORPORATES MOUNTING FEATURE.	SUMITOMO MODEL LHYMS10-5C165KB-EPG3-B-67
2	GEAR REDUCER	TWO STAGE HELICAL GEAR REDUCER - DUTY CYCLE: - HOURS OF OPERATION PER DAY: INTERMITTENT 3 HR - PRIME MOVER: AC-MOTOR INVERTER OPERATED - GEAR REDUCTION: 6.188:1 - INPUT SPEED: 26 RPM - RATED POWER: 14 HP - DESIGN SERVICE FACTOR: 1.5  GEAR REDUCER SHALL PROVIDE MOUNTING INTERFACE FOR THE OUTPUT MOUNTING BRACKET FROM GEAR MOTOR. THE SPECIFIED PART NUMBER INCORPORATES MOUNTING FEATURE.	SUMITOMO MODEL PHD9060P2-LRK-6.3

1. THE GEAR MOTOR AND REDUCER PACKAGE, INCLUDING MOTOR MOUNTING BRACKET, SHALL BE DELIVERED AS A COMPLETE UNIT BY ONE GEAR REDUCER MANUFACTURER. DESIGN DETAILS SHOWN WITHIN THIS DRAWING PACKAGE HAVE BEEN DEVELOPED BASED ON THE SUGGESTED GEAR REDUCER PRODUCTS LISTED ABOVE. THE CONTRACTOR MAY PROPOSE OTHER GEAR REDUCER PACKAGES BUT MUST REVISE ANY DESIGN DETAILS SHOWN TO MATCH THEIR PROPOSED DESIGN.

kpff

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SUBMITTAL DATE:	09/17/2021	DESIGNED BY:	J. FELTON	09/17/2021
ENTERED BY:	R. BAGANZ	09/17/2021	CHECKED BY:	D. HARTFORD
09/17/2021	PROJ MNGR:	C. MAYOR	DGN ENGR MNGR:	A. WILLIAMSON
ASST SECRETARY:	P. RUBSTELLO	REVISION	DATE	BY

FED.AID  
PROJ.NO.  
2015(086)

REGION NO. STATE  
10 WASH

JOB NUMBER  
15W021

CONTRACT NO.  
00\*\*\*\*

SEE C103.000  
DATE

DAN W. HARTFORD  
STATE OF WASHINGTON  
REGISTERED  
PROFESSIONAL ENGINEER  
32717

Washington State  
Department of Transportation  
WASHINGTON STATE FERRIES

SR305  
BAINBRIDGE FERRY TERMINAL  
OHL WALKWAY REPLACEMENT & CAB REHAB

OHL HOIST UNIT ASSEMBLY

M02.021
SHEET
330
OF
542
SHEETS