



Procurement and Contracting Services

**Request for Bids from interested and qualified
Vendors to provide the University of Arizona
Customized Electronic Linear Actuator
Mechanisms.**

ADDENDUM #1

**Please mark all bid submission
Envelopes with the following information**

**Sealed RFB # S262201
Due on April 8, 2022, no later than 2:00 PM, MST**

The following questions were received prior to the close of the Technical Question period on April 4, 2022, at 12:00 PM MST:

1. Since this is to be ITAR registered, is the registration going to be handled by the university as an assembly? Or are the vendors to register the sub assembly. There is a cost involved in the registration process. If the vendors register sub-assemblies, then the full assembly must still be registered, so the cost occurs twice.

Answer: For the prototype units, no ITAR is required. Though it is still TBD for production units, assume it will be handled by the university for (production) proposal purposes.

2. The travel requirement and resolution are listed; however, a speed is not defined. Does this mean it is not critical or specified?

Answer: The speed is a function of the driver, so it is not specified. The desired speed is less than 3 minutes for full travel.

3. In the ACME screw definition, a size/pitch is not specified. Will a 3/8-20 screw be acceptable?

Answer: Any combination of motor step, gearbox, leadscrew is acceptable as long as a complete step meets the resolution requirement, ignoring backlash, and the force required.

4. Do the vacuum rated units require any vacuum bake out or outgassing requirement?

Answer: Vacuum bake out is not required for prototype units but should be planned for production units. For proposal purposes, assume prototype and production units to be delivered to a Very Clean – Sensitive level.

5. Do the vacuum rated units have any cleanliness requirements (clean room/class 10,000)?

Answer: There are no cleanroom requirements for the prototype units. For production units, class 10,000 traceability is required.

6. We do not see any requirement for specific acceptance test procedure or environmental testing. Is it accurate to assume a simple performance verification is all that is required?

Answer: Vendor to propose a pre-ship acceptance procedure for the prototype and production units.

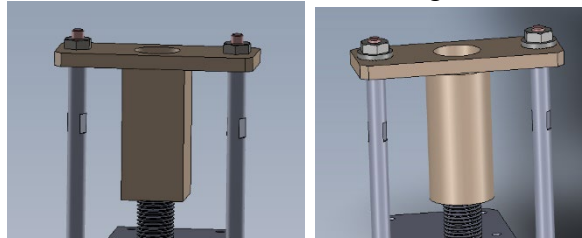
7. How do you want to attach the load to the actuator?
- We can extend the threads on the guides or add features to the Tee Nut. What is desired.

Answer: The T-nut will have a central boss and two bolt holes that will be attached from the rear.

8. Cost versus weight issues:
- While it appears logical to focus on component cost, there is a cost per pound to put the components into orbit. Since we have no information about the launch costs, we can't make cost-based decision in the unit design.

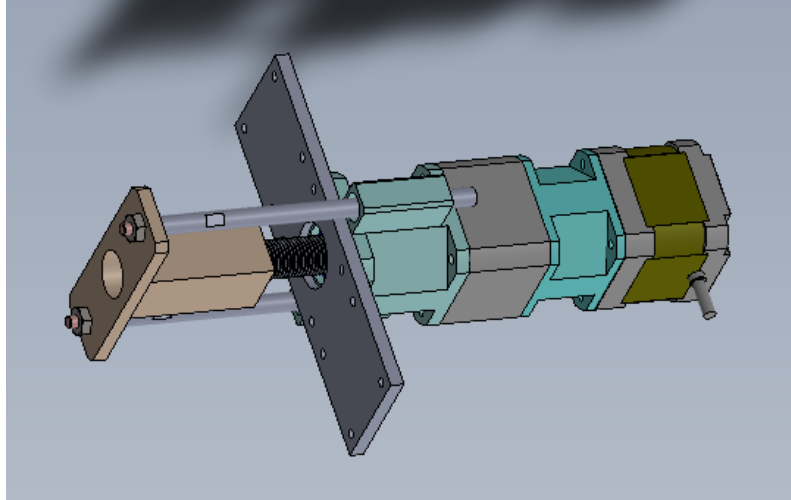
Answer: There is no definition in the RFB that this component will be launched/ in orbit. There are no launch costs to consider.

- The T nut assembly as shown is made from a metal plate. It is less expensive to make the nut portion square, however if the extra cost of making the nut round is incurred, the weight of that part is reduced approximately 25%. In addition, the length of the assembly is a bit shorter if the nut is round because the corners interfere with the mounting, this adds more weight. There may be other weight reduction options; Is there a launch cost per pound that can be used to determine if weight reductions result in cost savings?



Answer: The very long rods shown will probably not meet the resolution requirement. Backlash can be ignored because the actuator system design has a preload, but the windup of the rods when the acme screw turns cannot be ignored.

9. The plate that is shown is our guess at the mounting configuration, it is not part of the assembly. Do we need to adjust anything?



Answer: The flange of the gearbox as shown is a good mounting scheme. It needs to be accessible from below.

End of addendum, all else remains the same.