

SINGLE SOURCE CERTIFICATION

Authority is requested to make the following purchase under the provision of USF System Regulation USF4.02010(IV)(A)(2)(b) as a non-competitive purchase available from only one source. By submitting this form, department acknowledges that existing [exemptions](#) will not apply to this purchase. Single source requests exceeding \$75,000 must be signed by a Procurement Director and posted publicly for (3) business days.

DATE: 1/26/23

ITEM(S): Custom M-RS2000 Doubled Symmetric H Table Top System, standard isolators with automatic leveling : S-2000A-623.5 & S-2000A-423.5

PRICE: \$ 76,930.60 FUND #: 10009

SUPPLIER ID: 0000012714 REQUISITION#: _____

SUPPLIER NAME: Newport Corporation

FEDERAL GRANT: Y N

In your words, describe the equipment, commodity, or contractual service. Explain how these specifications are essential to the accomplishment of your work:

RS 2000 optical table justification:

- The RS series optical tables, like the RS2000 purchased here, use tuned mass dampers (vibration absorbers) within the table. Newport Corp. has developed proprietary processes to quantify and specify the frequency and magnitude of mass dampers needed to achieve desired performance/research.

S2000 Stabilizer Vibration Isolators:

- Unlike single damping orifices, the S2000 stabilizer employs thousands of tiny orifices, resulting in greater damping efficiency overall.

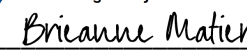
Attached document contains more information.

In your own words, describe the reason(s) the item is not subject to competition from other sources and how the stated specification(s) restrict the requisition to only one supplier. Description may include unique features/compatibility/specifications/availability/delivery time frame etc. (Note: Price is not a valid reason).

Newport Corp. has been a leader in the production of optical tables for about 40 years and is well established in the laser spectroscopy community. Moreover, the Newport Corp RS optical table series are highly regarded in the laser spectroscopy community. The RS systems incorporate tuned vibration absorbers that effectively eliminate the fundamental resonant table modes and their harmonics resulting in a more stable table platform and thus the highest available performance. Single design broadband dampers, as offered by other manufacturers, are less effective in reducing the amplitude of resonance modes. This is particularly true for the lower frequency resonances found on large tables, such as those purchased here, where broadband techniques are not very effective. With respect to the vibrational isolators, the other suppliers use a lower cost, single chamber isolation design which is less effective in reducing the amplitude at resonance and generally leads to higher resonant frequencies.

In your own words, describe the due diligence conducted to validate this supplier as Single Source. Description SHOULD list all other suppliers with item(s)/service(s) with similar functions, your efforts to identify other suppliers, and why these suppliers would not qualify to submit a competitive quote.

attempted to obtain quotes from other providers, however no other products available with the specific characteristics needed for research. Alternatives by Dr.Slavov were searched however the RS 2000 optical table and the S2000 Stabilizer Vibration Isolators are Newport products.

DocuSigned by:
 2/3/2023 START 2/3/2023 END 2/8/2023
 Approved By (Procurement) DATE PUBLIC POSTING DATES
 Authority: USF4.02010(IV)(A)(2)(b) Last Modified: 05/10/2021

RS 2000 optical table justification

- The RS series optical tables, like the RS2000 purchased here, use tuned mass dampers (vibration absorbers) within the table. Newport Corp. has developed proprietary processes to quantify and specify the frequency and magnitude of mass dampers needed to achieve desired performance. These allow tuning the damping frequency to the specific modes that exhibit the most bending, depending on the size of the table. Tuned damping has been proven in technical investigations to be the most effective method of eliminating structural resonances. The tune mass dampers selectively cancel vibration modes to minimize the dynamic deflection coefficient and make the table behave more like an ideal rigid structure. This minimizes motion on the tabletop and provides superior performance compared to other damping techniques, including broadband damper designs.
- The RS tables has some other unique structural features like the trussed honeycomb core design, which maximizes stiffness and flatness while minimizing deflection. This contributes to a more rigid core and better table performance.
- Composite side panels provide higher sound and vibration damping performance than steel side panels.
- The RS tables offer ½" borders that allow mounting of components to within ½" of the table edge. This provides about 10% more usable area on the tabletop as compared to same size tables from some of the other manufacturers.
- Repairable, non-corrosive composite sealed hole tiles provide broadband damping and protect the inside of tables from the environment. Newport's sealed hole tiles can not be dislodged from the top skin and are repairable if accidentally damaged by a long screw.
- Safety: the RS tables feature exclusive SafeLock™ system, which provides mounting clips to secure table to the isolator supports improving overall system safety.
- Standard flatness is +/- 0.004 in.

S2000 Stabilizer Vibration Isolators

- Unlike single damping orifices, the S2000 stabilizer employs thousands of tiny orifices, resulting in greater damping efficiency overall. This is combined with a hybrid chamber design to minimize air volume between piston motion and damper airflow. The Stabilizer protects applications by providing the lowest possible natural frequency with minimal amplification.
- Newport's Trifilar pendulum design is a zero-friction design enabling isolation to much lower vibration levels as well as high accuracy table repositioning after disturbances.
- Precision auto re-leveling valves make sure that the isolators are re-leveled precisely after disturbances.
- S2000 isolators do not require tie-bars to keep isolators upright and stable. This results in better isolation performance by eliminating structural resonances found in tie-bar systems. This is also advantageous to adapt to uneven floors without requiring shims or spacers.
- S2000 isolators include an integrated, mechanical height adjustment system to allow improved table leveling, height control and compensation for non-level floors. Shims or spacers are not required to level a table sitting on S-2000 isolators.

- Self-centering pistons, which automatically center the piston at the top and bottom of its vertical stroke, guaranteeing unrestricted movement for optimal performance.
- SafeLock™ mounting brackets eliminate the need to precisely align isolators and table holes when attaching the isolator to the table.

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