

Request for Quotation
NTSB-PUR-14-0257
Rockwell Hardness Tester

- (1) Action Code. Request for Quotation
- (2) Date: Wednesday, 13 August
- (3) Year. 2014
- (4) Contracting Office Zip Code. 20594
- (5) Classification Code: 423490 Scientific laboratory equipment merchant wholesalers
- (6) Contracting Office Address. . National Transportation Safety Board (NTSB) Office of Administration, Acquisition & Lease Management Division, AD-20, 490 L'Enfant Plaza, SW Washington, DC 20594
- (7) Subject: Rockwell Hardness Tester
- (8) Proposed Solicitation Number. NTSB-PUR-14-0257
- (9) Closing Response Date. 27 August 2014 at 2:30PM EST (DST), Questions with regard to this solicitation shall be submitted on or before 18 August 2014 at 9:00AM.
- (10) Contact Point or Contracting Officer. Ms. Kathleen A. Kern; Mr. Bryan Moy
- (11) Place of Contract Performance. National Transportation Safety Board (NTSB) 490 L'Enfant Plaza, SW Washington, DC 20594
- (12) Set-aside Status: 100% small business set aside.

(i) This is a combined synopsis/solicitation for commercial items prepared in accordance with the format in [Subpart 12.6](#), as supplemented with additional information included in this notice. This announcement constitutes the only solicitation; proposals are being requested and a written solicitation will not be issued.

(ii) The solicitation numbered NTSB-PUR-14-0257 is issued as a request for quotation (RFQ).

(iii) The solicitation document and incorporated provisions and clauses are those in effect through Federal Acquisition Circular FAC 05-76 July 25, 2014.

(iv) Set-aside Status. 100% small business, the associated NAICS code 423490 Scientific laboratory equipment merchant wholesalers. Manufacturing and small business size standard is 100 employees.

(v) Line Items:

CLIN	Description	Qty	Unit of Issue
0001	Rockwell Hardness Tester Description: See background	1	each
0002	Installation, Certification and Training Description: See Background	1	lot

(vi) Description of requirements for the items to be acquired.

1) NTSB Background/ NTSB Mission

The National Transportation Safety Board (NTSB) is an independent Federal agency charged by Congress with investigating every civil aviation accident in the United States and significant

accidents in the other modes of transportation -- railroad, highway, marine and pipeline -- and issuing safety recommendations aimed at preventing future accidents.

Materials Laboratory, Office of Research and Engineering

The Material Laboratory is a division of the Office of Research and Engineering tasked with the study and analysis of material failures from transportation accidents. In doing so, the laboratory must perform many activities on and with the accident components including but not limited to, documenting, examining, viewing and testing both destructively and non-destructively. To perform these duties the lab must have and maintain various pieces of specialized testing equipment.

2) Equipment Introduction

Hardness testing has been used in the materials science and engineering discipline for many years to inspect the hardness of materials at a macroscopic scale as a quasi-nondestructive method to evaluate mechanical properties rapidly. There are a variety of Rockwell hardness scales, each used based on quantity of hardness, material type, and material thickness. Typical hardness testers, such as the two currently used by the NTSB Materials Lab, operate by manually impressing a minor load onto the sample and allowing the machine to indent at a higher constant load to calculate hardness, based on the load and indenter type. While reliable within a certain percentage of error, the current semi-manual methods of hardness measurements used by the NTSB incorporate a certain degree of variability. In addition, the configuration of both hardness indenters require significant sample preparation to section a small enough representative sample and surface grinding/polishing to perform indents. This sample preparation is often time-consuming for the operator.

The characterization industry has improved the quality and quantity of hardness testing equipment. Today's testers are able to use closed-loop load cells to apply to correct loads for a given hardness scale in accordance with ASTM E18 and similar standards. Modern testers used motorized indenter heads rather than manual stage movements to increase reliability and decrease testing time. From market research performed by the NTSB Materials Lab, modern hardness testers were able to indent large and awkward sized specimens reliably, as well as perform more precise measurements, in accordance with the latest ASTM E18 revisions. This would increase the turnaround time for failure investigations, conform NTSB Materials Lab testing to modern testing standards, and allow more specimens to be investigated with less sample preparation, such as large rail and pipeline samples.

3) Deliverables Objectives and Requirements to Vendor

The objective of this procurement is to increase the capability of the NTSB Materials Lab to perform failure analysis of accident investigations by reducing turnaround time and increasing number of characterization methods available for use. The NTSB Materials Lab requires a Rockwell hardness tester with the following capabilities:

- Supply a hardness tester that can perform and interpret hardness measurements on a specimen, applying all loading using an electronic load cell with a motorized indenter head.*

- *The offeror is responsible for providing the installation, calibration, certification and training for the equipment. Training on the use of the equipment shall be provided for up to nine (9) NTSB employees.*
- *Supply equipment to perform hardness measurements in the following Rockwell scales: A, B, C, D, E, F, G, H, K, L, M, P, R, S, and V.*
- *Supply equipment to perform superficial hardness measurements in the following Rockwell scales: N, T, W, X, Y using total test forces of 15, 30, and 45 kgf (N).*
- *Apply total force loads from 15 to 150 kgf (N).*
- *Conform to ASTM E18.*
- *Perform conversions of hardness measurements to other scales per ASTM E140.*
- *Supply the following indenters: diamond (for Rockwell A, C, D, N scales, independently or universally), 1/16 in ball, 1/8 in ball, 1/4 in ball, 1/2 in ball.*
- *Perform hardness measurements using tungsten and stainless steel: 1/16 in balls to perform HRBW and HRBS Rockwell B scales.*
- *If an external computer is needed to run the tester, the computer with monitors and interface peripherals (e.g. keyboard, mouse) must be capable of running software to control the tester that can be accessed by all NTSB Materials Lab (RE-30) personnel, be internet capable and compatible with the NTSB network.*
- *Provide a dust cover or similar to help preserve and maintain equipment when not in use. It should be noted that the above equipment does not need and likely should not be able to perform the full range of Brinell hardness (HB) indenting.*

4) Staff/Organizational Responsibilities

The NTSB Materials Lab staff is expected to provide access to the Materials Laboratory for vendor(s) to install, calibrate, and train of staff on the automatic mapping microhardness tester. The staff will accommodate reasonable access to the installation location by clearing areas, providing bench tables, standard tools, etc. as needed. The staff will provide directions and parking for the vendors to the facility at L'Enfant Plaza. Safety equipment such as hardhats, gloves, eye protection, and hearing protection (but not safety shoes) will be provided by NTSB staff.

The contracted non-destructive inspection personnel will provide their own transportation to and from the NTSB facilities at L'Enfant Plaza. The personnel will supply their own specialized installation and calibration equipment, capable of proper installation and operation of the procured equipment. The vendor personnel will be required to provide their own foot protection, which should be ANSI Z41.1 Standard Class #75 compliant, if required.

5) Period of Performance / Delivery Schedule:

Delivery of the tester shall be within six (6) weeks from the date of award of the contract. Installation, certification and training shall be completed within four (4) weeks of the date of tester delivery

*The equipment is to be delivered **FOB Destination** to:
NTSB Materials Laboratory
490 L'Enfant Plaza East, SW*

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Washington, DC 20954

6) Other General Requirements

The vendor must notify and coordinate with the POC at NTSB of their intent to deliver at least five (5) working days in advance of the scheduled delivery.

POINTS OF CONTACT

Technical Point of Contact:

To be provided

Contracting Point of Contact

Ms. Kathleen A. Kern

National Transportation Safety Board

Office of Administration

Acquisition & Lease Management Division, AD-20

Office: (202) 314-6104

FAX: (240) 752-6299

(vii) Date(s) and place(s) of delivery and acceptance and FOB point. See (vi)

(viii) The provision at 52.212-1, Instructions to Offerors -- Commercial, applies to this acquisition.

(ix) The provision at 52.212-2, Evaluation -- Commercial Items applies to this acquisition, and the specific evaluation criteria to be included in paragraph (a) of this provision are:

52.212-2 Evaluation -- Commercial Items (Jan 1999)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

(i) technical capability of the item offered to meet the Government requirement;

(ii) past performance;

(iii) price;

Technical and past performance, when combined, are more important than price.

(b) Options. The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement within the overall total price. The Government may determine that an offer is unacceptable if the option prices are significantly unbalanced. Evaluation of options shall not obligate the Government to exercise the option(s).

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

(End of Provision)

Technical Capability: explain how the product being offered meets the requirement of the required item. Cut sheets will be accepted but a narrative no longer than five (5) pages must explain the attainment of the requirement. Should the offeror's submission be found technically acceptable, the NTSB reserves the right to request a demonstration of the product and further explanation of the services proposed as requested.

Past Performance: provide three (3) references - names, telephone numbers and email addresses in accordance with the past performance attachment (1) - of US government, military, industry, and/or commercial users who will attest to the software's proven track record of successful and productive application by government, military, industry, and commercial users.

Price: please complete the attachment (2).

(x) Offerors are to include a completed copy of the provision at 52.212-3, Offeror Representations and Certifications -- Commercial Items, with its offer.

(xi) The clause at 52.212-4, Contract Terms and Conditions -- Commercial Items, applies to this acquisition.

(xii) The clause at 52.212-5, Contract Terms and Conditions Required To Implement Statutes Or Executive Orders -- Commercial Items, applies to this acquisition and FAR clauses cited in the clause are applicable to the acquisition are:

(4) 52.204-10, Reporting Executive compensation and First-Tier Subcontract Awards (Jul 2013) (Pub. L. 109-282) (31 U.S.C. 6101 note).

(8) 52.209-6, Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (Aug 2013) (31 U.S.C. 6101 note).

(28) 52.222-3, Convict Labor (June 2003) (E.O. 11755).

(29) 52.222-19, Child Labor—Cooperation with Authorities and Remedies (Jan 2014) (E.O. 13126).

(30) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).

(31) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).

(33) 52.222-36, Affirmative Action for Workers with Disabilities (Oct 2010) (29 U.S.C. 793).

(38) 52.223-15, Energy Efficiency in Energy-Consuming Products (Dec 2007) (42 U.S.C. 8259b).

(40) 52.223-18, Encouraging Contractor Policies to Ban Text Messaging while Driving (Aug 2011).

(50) 52.232-33, Payment by Electronic Funds Transfer— System for Award Management (Jul 2013) (31 U.S.C. 3332).

(xiii) At this time no additional contract requirement(s) or terms and conditions have been determined by the contracting officer to be necessary for this acquisition and/or consistent with customary commercial practices.

(xiv) Defense Priorities and Allocations System (DPAS) is not applicable.

(xv) The date, time and place offers are due: 18 August 2014 at 2:30pm EST (DST).

(xvi) The individuals to contact for information regarding the solicitation: Ms. Kathleen A. Kern, kathleen.kern@ntsb.gov, 1-202-314-6104; Mr. Bryan Moy, bryan.moy@ntsb.gov, 202-314-6282.

Questions with regard to this solicitation shall be submitted on or before 18 August 2014 at 2:30PM.

Any amendment(s) to this solicitation will be issued in the same manner as the initial synopsis and solicitation.