

Quotation for Clark CRX-3e, (15, 30, 45, 60, 100 & 150Kgf, C, B, A Scales) (Regular& Superficial Scale Tester).

Dear Your Name here;

This quote is for our Clark model CRX-3e as discussed. Our CRX-3 is a conventional tester with quick change scales, <u>loads are directly verified by the OEM to comply with NADCAP requirements</u>, automatic or manual cycle initiation to reduce operator influence, well suited for the shop floor. Sun-Tec is a 17025 certified company.



Key Features: ASTM E18 & ISO 17025 compliant

- ✓ **Simple** to use
- ✓ **Rugged** time proven design
- Best in Class repeatability
- ✓ Exceptional Value
- **Manual & Automatic test cycle**
- ✓ Conversion of test value to other ASTM scales
- Cylindrical correction according to ASTM E18
- ✓ Superior trouble free construction

DIY CONFIGURATION 1 TESTER WITH STANDARD ACCESSORIES							
Component	Catalog No	log No Description					
Tester	CRX-3e	 Clark Model CRX-3e tests all Superficial and Regular Rockwell Scales in accordance with ASTM E18; 8.5" (213mm) vertical test capacity, with standard accessories listed: See Attachment for details. Operating Manual & 4 Leveling feet Certificate of calibration & Power Cord Tester shipped certified to ASTM standards. 	\$11,000.00				
Test Blocks		HRC 63 Test block with Cert., HRB 80 Test block with Cert, HR30N Test block with Cert, HR30T Test block with Cert	INCLUDED				
Indenter		N diamond indenter NIST compliant	INCLUDED				
Indenter		C diamond indenter NIST compliant	INCLUDED				
indenter		1/16 Carbide ball indenter w/ 4 extra carbide balls	INCLUDED				
Anvil		2 1/2"Flat & 1 1/2" V-Shape	INCLUDED				
DIY Pricing Sub Total							
CLICK HERE TO ORDER THIS TESTER CONFIGURATION							

Note: Documentation for Direct Verification of loads INCLUDED.

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<u>LE_19_01182</u>



Quotation

10/30/2019

OPTIONAL CONFIGURATION 2 INCLUDING ON SITE INSTALLATION AND TRAINING

Install/ Training	Optional Training	Clark Hardness System Installation Training and Certification on site <u>(up to 4 scales included), user</u> <u>must specify which scales when setting up visit**</u>	\$1,490.00
Crx3 Tester		CRX-3e Tester as described above	\$11,000.00
CLICK HERE TO C	\$12,490.00		

* OEM install is defined as an individual or organization that is factory trained and certified, performing indirect verification in accordance to the requirements of ASTM E-18

All Purchase Orders should be made payable to:

Sun-Tec

46590 Ryan Court

Novi Michigan 48377

Please send PO's to: Email: Nantonik@sunteccorp.com or Fax: 248-669-1199

DELIVERY
TERMS3-4 weeks upon receipt of order, subject to prior orders.
Net 10 days from Date of Shipment, subject to credit approval. We also accept Visa, MasterCard and AMEX.DELIVERY:
FREIGHT:Ex-WorksPrepay and Add

OPTIONAL ACCESSORES, ADD AS NEEDED TO TESTER PO

Master HRC Calibration	5001	With "C" Diamond Indenter and 3 Hardness	\$575
Kit		Standards (NIST Level)	φ575
Master HRB Calibration Kit	8001B	With 1/16" Indenter with carbide ball and 3 "B" Hardness Standards	\$475
Master HR30N Calibration Kit	5002	With "N" Diamond Indenter and 3 30N Hardness Standards	\$575
Master HR30T Calibration Kit	8002T	With 1/16" Ball Indenter and 3 30T Hardness Standards	\$475
Anvil	WLE-900007156	3/8 in Pedestal Spot Anvil, 1" in Stem The 3/8 in pedestal spot anvil	\$ 321.
Anvil	WLE-900007195	1 in Shallow V Anvil The shallow V anvil is used with cylindrical shaped rods or tubing up to 1/4 in (6.3 mm) in diameter.	\$ 375
Anvil	WLE-900007730	Testing Table The 8 in (203.2 mm) diameter testing table is the most popular work support for large test specimens. When the table, which screws into the elevating screw, is being used, the vertical capacity of the tester is reduced by about 1 in.	\$ 655
Indenter	2010	Spare "N" Diamond Indenter	\$230
Indenter	4100	Spare "C" Diamond Indenter NIST Level	\$220

A master calibration kit is recommended to permit indirect verification according to ASTM E18.







The model CRX-3e is designed to help you **reduce and even eliminate variations** in your Rockwell testing by reducing the operator influence on the test. The **Automatic test cycle** allows the operator to place the part on the appropriate anvil, elevate the part to his starting location to run the test. The indenter is advanced to apply the minor load in accordance with all applicable ASTM E18 specifications. The CRX-3e incorporates either manual or automated cycles to start the test cycle when the minor load is reached. The load is applied, the tester controls the loading dwell time and the major load is removed automatically to **minimize the operator influence on the readings** by performing the same consistent test cycle operator to operator.

Superior repeatability and reproducibility is designed into the tester. Direct verification documentation is available upon request.

<u>Sun-Tec's commitment</u> is to maintain the absolute highest quality of Products & Services with <u>unequaled traceability</u> of our test blocks and indenters, using standards traceable to not only US recognized governing bodies but also with correlation to European and Japanese artifacts assuring SunTec customers <u>unquestioned test results</u> when using the Clark testing machines & Sun-Tec test blocks and indenters. We challenge any other OEM to match our equipment and attention to maintaining this traceability over 4 generations of our family owned and operated company.

Thank you for the opportunity to offer our products for your hardness testing applications. Reference This Quotation # shown on this document

Sincerely

Phil Lockhart Technical Applications & Sales Ph 860-558-9865 Fax 860-404-8903 E-mail Phil@thegagestore.com







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Quotation

TERMS AND CONDITIONS

All quotations are furnished for information and shall not constitute a binding agreement until the order has been accepted and confirmed. All orders accepted by Sun-Tec Corporation are subject to the terms and conditions contained in our acknowledgement form. All orders are subject to review of final destination. Sun-Tec prefers to have a purchase order before work is performed. Sun-Tec may withhold certification until full payment is received.

Payment / Title Retention

Net 10 days from the invoice date, subject to approved credit. Payment for all out of country orders must be prepaid prior to shipment. All payments are net cash with no discount permitted upon receipt of invoice unless explicitly stated on invoice. Purchaser's delay in installation shall not extend the payment due date. Beneficial and legal title shall remain with Sun-Tec Corporation until payment in full is made by the purchaser. The above mentioned product will be registered with the State under the Uniform Commercial Code. Title retention of said product shall remain Sun-Tec Corporation's property until such time the full amount of the purchase price has been paid to Sun-Tec Corporation.

Shipment F.O.B. Novi, MI (prepay & add). Any and all freight charges are the responsibility of the purchaser. Delivery Date indicated on quotation or order acknowledgement is an estimate and not guaranteed. Warranty The following applies to products purchased from Sun-Tec Corporation:

Equipment and products manufactured by Sun-Tec Corporation are warranted to be free from defects in material and workmanship for a period of two years from date of shipment, unless otherwise stated in writing by Sun-Tec Corporation. This obligation does not necessarily include labor or travel expenses to repair or replace defective part(s). Nor does it cover: calibration as found at customer's facility, failure due to accident, abuse, neglect, or misuse. New equipment warranties are NOT transferable.

Equipment or products distributed by Sun-Tec Corporation will be covered by the original manufacture warranty. Sales of used equipment are sold "AS IS" with no warranty unless explicitly stated in the quotation.

A special note concerning the need for indirect verification in accordance with ASTM E 18:

ASTM _ E 18 Requirement for field indirect verification is as follows:

A1.1.3 Indirect verification is a process for periodically verifying the performance of the testing machine by means of standardized test blocks and indenters.

A1.2.1 The testing machine shall be verified at specific instances and at periodic intervals as specified in Table A1.1, and when circumstances occur that may affect the performance of the testing machine.

Indirect verification: Recommended every 12 months, or more often if needed. Shall be no longer than every 18 months. When a testing machine is installed or moved, **[only a partial indirect verification is performed by following the procedure given in A1.4.7** for verifying the as-found condition]. This does not apply to machines that are designed to be moved or that move prior to each test, when it has been previously demonstrated that such a move will not affect the hardness result.

A1.4.7.1 It is recommended that the as-found condition of the testing machine be assessed as part of an indirect verification. This is important for documenting the historical performance of the machine in the scales used since the last indirect verification. This procedure should be conducted prior to any cleaning, maintenance, adjustments, or repairs.

A1.2.5 Indirect verification of the testing machine shall be performed at the location where it will be used. NOTE A1.1—It is recommended that the calibration agency that is used to conduct the verifications of Rockwell hardness testing machines be accredited to the requirements of ISO 17025 (or an equivalent) by an accrediting body recognized by the International Laboratory Accreditation Cooperation (ILAC) as operating to the requirements of ISO/IEC 17011.

Comment: This is a recommendation only, not a requirement, and the calibration agency may be the users' own 17025 qualified individuals or a n agency used to calibrate a variety of other measuring devices as well. In certain cases the user may require that the OEM or their certified agents perform the indirect calibration in accordance to the OEM's requirements.