DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA



UVA WELLASSA UNIVERSITY

SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF LABORATORY EQUIPMENT FOR THE DEPARTMENT OF ENGINEERING TECHNOLOGY, FACULTY OF TECHNOLOGICAL STUDIES

UWU/G/NCB/20/02

NATIONAL COMPETITIVE BIDDING

Bid Opening On	05 th October 2020 - 2.30 p.m.
Bid Validity up to	91 days from 05 th October 2020

Uva Wellassa University, Passara Road, Badulla, Sri Lanka.

CONTENTS

Content	Page Nos.
Invitation for Bids	03
Section I: Instructions to Bidders (ITB)	04
Section VI: Conditions of Contract (CC)	04
Section VIII: Contract Forms	04
Contract Agreement	05 - 06
Performance Security	07
Section II: Bidding Data Sheet (BDS)	08 - 09
Section III: Evaluation and Qualification Criteria	10 - 11
Section IV: Bidding Forms	12
Form of Bid	13
Price Schedule	14
Bid security form	15
Manufacturer Authorization	16
Section V: Schedule of Requirements	17
List of goods and delivery schedule	17
Technical specification	17 - 22
Section VII: Contract Data	23
Check List	24

INVITATION FOR BIDS UVA WELLASSA UNIVERSITY



SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF LABORATORY EQUIPMENT FOR THE DEPARTMENT OF ENGINEERING TECHNOLOGY, FACULTY OF TECHNOLOGICAL STUDIES

UWU/G/NCB/20/02

The Chairman, Department Procurement Committee, on behalf of the Uva Wellassa University, invites sealed bids from eligible and qualified bidders for **Supply, Delivery, Installation and Commissioning of Laboratory Equipment for the Department of Engineering Technology, Faculty of Technological Studies** Bidding will be conducted through the National Competitive Bidding (NCB) procedure.

- 1. Bidder should have at least three years of experience in the relevant field in Sri Lanka.
- 2. Interested eligible bidders may obtain further information from the Deputy Bursar / Supplies, Uva Wellassa University, Passara Road, Badulla, (Tel. No: 055-2226475, Fax No: 055-2226633), and inspect the bidding documents at the Supplies Division of the University between 9.00 am to 3.00 pm from 14th September 2020 to 05th October 2020 and up to 12.30 p.m. on 05th October 2020.
- 3. A complete set of bidding documents in English may be purchased by interested bidders on submission of a written application to the Deputy Bursar/ Supplies, Uva Wellassa University, Passara Road, Badulla and upon payment of a non-refundable fee of LKR 7,300.00 in cash at the Shroff Counter of the University. The bidder can also download the biding documents from the University website www.uwu.ac.lk. Those who are obtaining bidding documents from the University website should submit the complete documents along with a Bank Draft drawn in favour of the "Vice Chancellor, Uva Wellassa University" for LKR 7,300.00 as non-refundable fee or the payments could be made to any branch of Bank of Ceylon, to the Uva Wellassa University, Account No: 3114820, and the original of the cash receipt/deposit slip to be attached with the bidding documents. The documents may be purchased until 12.30 p.m. on 05th October 2020.
- 4. Bids must be delivered to Chairman, Department Procurement Committee, Uva Wellassa University, Passara Road, Badulla, on or before 2.30 p.m. on 05th October 2020 Please indicate the "SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF LABORATORY EQUIPMENT FOR THE DEPARTMENT OF ENGINEERING TECHNOLOGY, FACULTY OF TECHNOLOGICAL STUDIES UWU/G/NCB/20/02" on the top left hand corner of the envelope.
- 5. All bids must be accompanied by a Bid Security addressed to the Chairman, Department Procurement Committee, Uva Wellassa University, valid for 120 days from the date of the bid opening. The Value of the Bid Security shall be LKR 405,000.00. Pre Bid meeting will be held at 1. 00 p.m. 21st September 2020, In the Board Room of Uva Wellassa University.
- 6. The bids shall be deposited in the 'Tender Box' available in the Registrar's Office of the University, or sent under Registered Cover to be received before the deadline to the address given in Clause No.5.
- 7. Late bids will be rejected. Bids will be opened immediately after the closing of bids, in the presence of the bidders or their authorized representatives who choose to attend the bid opening at the board room of the Uva Wellassa University.

Chairman

Department Procurement Committee
Uva Wellassa University
Passara Road
Badulla
13.09.2020

Tel/ Fax No: 055-2226475, 055-2226633

Deputy Bursar (Stores & Supplies)
Uva Wellassa University
Passara Road, Badulla.

Section I.

Instructions to Bidders (ITB)

This Bidding Document is based on the standard bidding document for National Competitive Bidding (NPA/Goods/SBD 01). Section I will not be provided with this bidding document. Bidders are instructed to refer the Section I of the standard bidding document (NPA/Goods/SBD 01). The document is available at the website of NPA, www.npa.gov.lk

Section VI.

Conditions of Contract

This Bidding Document is based on the standard bidding document for National Competitive Bidding (NPA/Goods/SBD 01). Section VI will not be provided with this bidding document. Bidders are instructed to refer the Section VI of the standard bidding document (NPA/Goods/SBD 01). The document is available at the website of NPA, www.npa.gov.lk

Section VIII. Contract Forms

Table of Forms

1.	Contract Agreement	4-5
2.	Performance Security	6

Contract Agreement

THIS CONTRACT AGREEMENT is made

the [insert: number] day of [insert: month], [insert: year].

BETWEEN

- (1) [Insert complete name of Purchaser], a [insert description of type of legal entity, for example, an agency of the Ministry of or corporation and having its principal place of business at [insert address of Purchaser] (hereinafter called "the Purchaser"), and
- (2) [Insert name of Supplier], a corporation incorporated under the laws of [insert: country of Supplier] and having its principal place of business at [insert: address of Supplier] (hereinafter called "the Supplier").

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., [insert brief description of Goods and Services] and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of [insert Contract Price in words and figures, expressed in the Contract currency (ies)] (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
- 2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:
- (a) This Contract Agreement
- (b) Contract Data
- (c) Conditions of Contract
- (d) Technical Requirements (including Schedule of Requirements and Technical Specifications)
- (e) The Supplier's Bid and original Price Schedules
- (f) The Purchaser's Notification of Award
- (g) [Add here any other document(s)]
- 3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.
- 4. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Democratic Socialist Republic of Sri Lanka on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: [insert signature]

in the capacity of [insert title or other appropriate designation]

in the presence of [insert identification of official witness]

For and on behalf of the Supplier

Signed: [insert signature of authorized representative(s) of the Supplier]

in the capacity of [insert title or other appropriate designation]

in the presence of [insert identification of official witness]

Performance Security

[The issuing agency, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated] [Issuing Agency's Name, and Address of Issuing Branch or Office] * Beneficiary: [Name and Address of Employer]
Date:
PERFORMANCE GUARANTEE No.:
We have been informed that [Name of Supplier] (hereinafter called "the Supplier") has entered into Contract No [Reference number of the contract] dated with you, for the Supply of [name of contract and brief description] (hereinafter called "the Contract").
Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required. At the request of the Supplier, we [name of Agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of
[Amount in figures] () [amount in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein. This guarantee shall expire, no later than the day of, 20 [Insert date, 28 days beyond the scheduled completion date including the warranty period] and any demand for payment under it must be received by us at this office on or before that date.
[Signature(s)]

Deputy Bursar (Stores & Supplies)
Uva Wellassa University
Paceara Radulla

Section II. Bidding Data Sheet (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

[Instructions for completing the Bid Data Sheet are provided, as needed, in the relevant ITB Clauses.]

ITB Clause	A. General
Reference	
ITB 1.1	The Purchaser is: Uva Wellassa University
ITB 1.1	The name and identification number of the Contract are: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF
	LABORATORY EQUIPMENT FOR THE DEPARTMENT OF ENGINEERING
	TECHNOLOGY, FACULTY OF TECHNOLOGICAL STUDIES - UWU/G/NCB/20/02
ITB 1.2	The bidder should have at least three years of experience in the relevant industry in Sri Lanka and should submit documents to prove experience in the industry.
ITB 2.1	The source of funding is: GOSL
ITB 4.4	Foreign bidders are allowed to participate in bidding: Not allowed
	B. Contents of Bidding Documents
ITB 7.1	For Clarification of bid purposes only, the Purchaser's address is:
	Attention: Deputy Bursar/Stores & Supplies
	Address: Uva Wellassa University, Passara Road, Badulla.
	Telephone: 055-2226475
	Electronic mail: supply@uwu.ac.lk
	C. Preparation of Bids
ITB 11.1 (e)	The Bidder shall submit the following additional documents: A complete company profile of the bidders including, but not limited to, the following: • Business Registration Certificate
	VAT Registration Certificate
	 List of client who use the Products and their contract details Past 3 years relevant experience in the relevant Industry in Sri Lanka
	 Fast 5 years relevant experience in the relevant industry in Sit Lanka Manufacturer's Authorization.
	• Certificate of Registration under Public Contract Act.
	• Financial statements
ITB 15.1	The bidder shall quote the local expenditure in Sri Lankan Rupees .
ITB 18.1 (b)	After sales service is: Required
ITB 19.1	The bid shall be valid for: 90 days from 05 th October 2020
ITB 20.1	Bid shall include a Bid Security in any of following ways (a) A Bank guarantee issued by a reputed bank operated in Sri Lanka. (b) Cash deposit at the Shroff Counter of the University (c) Cash deposit from any branch of Bank of Ceylon, to the Uva Wellassa University, Account No: 3114820, and the cash receipt/deposit slip to be attached with the
	bidding documents.

ITB 20.2	The amount of the Bid Security shall be: LKR 405,000.00
	Beneficiary: Vice Chancellor, Uva Wellassa University.
	The validity period of the bid security shall be 120 days from the closing date of the Bid
	D. Submission and Opening of Bids
ITB 22.2 (c)	The inner and outer envelopes shall bear the following identification marks:
	SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF
	LABORATORY EQUIPMENT FOR THE DEPARTMENT OF ENGINEERING
ITB 23.1	TECHNOLOGY, FACULTY OF TECHNOLOGICAL STUDIES - UWU/G/NCB/20/02 For bid submission purposes, the Purchaser's address is:
11B 23.1	For the submission purposes, the Purchaser's address is.
	Attention: Deputy Bursar/Stores & Supplies
	Address: Uva Wellassa University, Passara Road, Badulla.
	The deadline for the submission of bids is
	Date: 05 th October 2020
	Time: 2.30 p.m.
ITB 26.1	The bid opening shall take place at:
112 2011	The era optiming sharr take pract and
	Address: Board Room,
	Uva Wellassa University,
	Passara Road, Badulla.
	Date: 05 th October 2020
	Time: 3.00 p.m.
	E. Evaluation and Comparison of Bids
ITB 34.1	Domestic preference shall not be a bid evaluation factor.
ITB 35.3(d)	The adjustments shall be determined using the following criteria, from amongst those set out
11 D 33.3(u)	in Section III, Evaluation and Qualification Criteria:
	(a) Deviation in Delivery schedule:
	Option 2 _Please refer - CC 26.1
	(b) Deviation in payment schedule: Not applicable
	(c) The cost of major replacement components, mandatory spare parts, and service:
	Applicable
ITB 35.4	The following factors and methodology will be used for evaluation: The Certificate from a
	Chartered Electrical Engineer should be produced after the installation
ITB 35.5	Bidders shall be allowed to quote for one or more lots. [refer to Section III Evaluation and
	Qualification Criteria]Purchaser will evaluate the bid item by item basis.



Section III.

Evaluation and Qualification Criteria

1. Evaluation Criteria (ITB 35.3 (d))

The Purchaser's evaluation of a bid may take into account, in addition to the Bid Price quoted in accordance with ITB Clause 14, one or more of the following factors as specified in ITB Sub-Clause 35.3(d) and in BDS referring to ITB 35.3(d), using the following criteria and methodologies.

(a) Delivery schedule

Option 2

The goods covered under this invitation are required to be delivered within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as nonresponsive. Within this acceptable range, an adjustment per week, as specified in the Bid Data Sheet, will be added for evaluation purposes only, to the bid price of bids offering deliveries later than the earliest delivery period specified in the Section V, Schedule of Requirements

- (a) Deviation in payment schedule. Not applicable
- (c) Cost of major replacement components, mandatory spare parts, and service:

The required spare parts for the goods covered under this invitation shall be available for at least five years of period and after sales service (Free service & Pay service).

- (d) Specific additional criteria: None
- 2. Evaluation Criteria (ITB 35.4):

Applicable

3. Multiple Contracts (ITB 35.5)

The Purchaser shall award multiple contracts to the Bidder that offers the lowest evaluated combination of bids (one contract per bid) and meets the post-qualification criteria (this Section III, Sub-Section ITB 37.2 Post-Qualification Requirements)

The Purchaser shall:

- (a) Evaluate only lots or contracts that include items per lot and quantity per item
- (b) Take into account: The lowest-evaluated bid for each lot
- 3. Post qualification Requirements (ITB 37.2)

After determining the lowest-evaluated bid in accordance with ITB Sub-Clause 36.1, the Purchaser shall carry out the post qualification of the Bidder in accordance with ITB Clause 37, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications.

Deputy Bursar (Sabres & Supplies)
Uva Wellassa University
Passara Road Badulla.

Qualification Criteria:

- (a) Bid may be submitted by any reputed supplier of Laboratory Equipment, registered business in Sri Lanka or any accredited local agent who takes fullest responsibility for the whole bid. The local agent shall submit evidence of status, obligations, power of attorney and any other documentary evidence that he is duly authorized and eligible to bid on behalf of the manufacturer.
- (b) The bidders should also have previous experience of at least three years in relevant industry in the supply and also technical and financial capability necessary to perform the contract.
- (c) Draft service agreement for three year period (after the warranty period) should be submitted.
- (d) Bids will be rejected as non- responsive if documentary evidence in proof of above has not been provided.
- (e) If an Agent submits bids on behalf of more than one supplier, unless each such bid is accompanied by a separate Bid Form for each bid, and a bid security when required for each bid, and authorization from the respective Manufacturer, and valid vendor certificate, all such bids will be rejected as non- responsive.
- (f) Bidders should possess the Certificate of Business Registration issued by a Governmental Authority/ Registrar of Companies/ Provincial Registrar of Business in the relevant category.
- (g) Bidders shall register the Contract under Public Contract Act and submit the certificate of registration (ITB 11.1(e)).
- (h) Bidders offering goods under their own brand names should provide along with their bids a current certification/s of quality; Bid not complying with this requirement may be treated as non responsive.
- (i) Having a service center in Badulla or Uva Province will be considered as an added qualification.

4. Domestic Preference (ITB 34.1) – Not applicable

Deputy Bursar (Stores & Supplies)
Uva Wellassa University
Passara Boad, Badulia,

Section IV. Bidding Forms

Table of Forms

Bid Submission Form/ form of bid	13
Price Schedule	14
Form of bid security/Bid Security (Guarantee)	15
Manufacturer's Authorization	16



FORM OF BID UVA WELLASSA UNIVERSITY UWU/G/NCB/20/02

To: Chairman
Procurement Committee
Uva Wellassa University
Passara road,
Badulla

We, the undersigned, declare that:

	rticulars and Bills of Quar ommissioning of Labor ulty of Technological Str amounting	ntities, I/We the u eatory Equipment udies Contract No to	ndersigned, offer to Supply t for the Department of o: UWU/G/NCB/20/02 said LKR
and cents			
I/We undertake to Supply, Deli the Department of Engineering in the tender documents, if our te	g Technology, Faculty of	_	
I / We agree to abide by the receiving of Bids or any exbe accepted at any time before the	xtended period and it	shall remain bin	
Unless and until a formal A your written acceptance thereof,			
I / We understand that, you receive.	are not bound to ac	cept the lowest	or any tender, you may
This day of	sign Bids Freehold Owner or	for and Power of	Attorney Holder) of
Signature			
Duly authorized for signed on be			
Address	(Name of the	,	
Date			

Price Schedule

Supply, Delivery, Installation and Commissioning of Laboratory Equipment for the Department of Engineering Technology, Faculty of Technological Studies Contract No: UWU/G/NCB/20/02

* If you are liable for NBT; you are required to mention Unit price with NBT

Use separate price schedule for options

(LKR)

No	Items	QTY	Unit Price (excluding VAT)	VAT 15%	Total Price including VAT
01	Non Destructive Testing (NDT) Unit	01			
1.1	Eddy Current Testing Ma	chine			
1.2	Magnetic Particle Testing Machine				
1.4	Ultrasonic Testing Machine	e			
1.5	Thermal / Infrared Testing Machine				
1.7	X ray Testing Machine				
 Main	Price with VAT (in Words): Itenance charges (as a percent Registration No:	tage) aft	er the warranty period (
Signa	ature				
Duly	authorized for signed on beh	alf of	(Name of the Bidd		
Addr	ress	•••••			
Date					

FORM OF BID SECURITY

[insert issuing agency's name, and address of issuing branch or office]
Beneficiary: Vice Chancellor, Uva Wellassa University, Passara road, Badulla
Date:[insert (by issuing agency) date]
BID GUARANTEE No.: [insert (by issuing agency) number]
We have been informed that [name of the Bidder] (hereinafter called "the Bidder") has submitted to you its bid dated [date] (hereinafter called "the Bid") for the execution of [insert name of Contract] under Contract No
Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.
At the request of the Bidder, we [insert name of issuing agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [insert amount in figures] [insert amount in words] upon receipt by us of your first demand
in writing accompanied by a written statement stating that the bidder is in breach of its obligation(s) under the bid conditions, because the bidder:
(a) Has withdrawn its bid during the period of bid validity specified; or
(b) Does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
(c) Having been notified of the acceptance of its bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.
This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) the successful bidder furnishing the performance security, otherwise it will remain in force up to (insert date)
Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.
[Signature of authorized representative(s)]

Deputy Bursar (Stores & Supplie Uva Wellassa University Passara Road, Baduila.

MANUFACTURER'S AUTHORIZATION

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]

Date: [insert date (as day, month and year) of Bid Submission]

No.: [insert number of bidding process]

To: [insert complete name of Purchaser]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 27 of the Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on ______, ____ [insert date of signing]

Deputy Bursan (Stores & Supplies) Uva Wellassa University Passara Road, Badulla.

Section V Schedule of Requirements

1. List of Goods and Delivery Schedule

[The Purchaser shall fill in this table, with the exception of the column "Bidder's offered Delivery date" to be filled by the Bidder]

No			Final	Delivery Date 1			
No	Description of Goods	Qty	Destination as specified in BDS	Earliest Delivery Date	Latest Delivery Date	Bidder's offered Delivery date	
1	As Listed in the Price Schedule		Uva Wellassa University	Within 4 Weeks of the Order	Within 4 Weeks of the Order		

^{*} Destination of delivery: - Main Stores, Uva Wellassa University, Passara Road, Badulla

2. Technical Specifications

The bidder shall follow the following technical requirement and other requirement

General Conditions - For equipment, Bidders should provide following details:

Country of origin catalogues, Mother company registration letter, possible date of supply, Mother company warranty period, After sales and service facility, Service agreement cost and free service period, Approximate value for main spare parts, Installation & operational manual/s, installation and demonstration should provide free of charge if this product is purchased, Local agent should have necessary tools to carry out complete service and repair.



3. Technical Specifications

Annexure 1

Detail		Yes(Y)/ No(N)	Bidders' Response
01.NDT Unit			
01.1 Eddy Current Testing	Machine	1	
Application	Detection of surface breaking and near surface planar defects by sing eddy current		
Frequency	10 Hz–10 MHz		
Gain/noise	0~99dB continuously adjustable, stepping: 0.1dB		
Evaluation mode	The evaluation mode uses both phase analysis and amplitude analysis of vector traced to the complex plane display. Evaluation may be by comparison of this display with reference data previously stored.		
Signal display	As a minimum, the signal display shall be a complex plane display with the facility to freeze data on the screen until reset by the operator. The trace shall be clearly visible under all lighting conditions during the testing.		
Phase control	The phase control shall be able to give complete rotation in steps of no more than 10° each.		
Detection thickness (45# steel)	10 - 30mm		
Maximum lift off	10 mm		
data acquisition	Up to 50 000 samples/s		
smartmux eca channels	64, 128, 256		
ect probe inputs	8		
iris turbine speed	Up to 100 RPS		
typical battery autonomy	5-8 Hours		
Probes	SUPPORTED INSPECTION TECHNOLOGIES have to be ECT, ECA, TECA, RFT, NFT, NFA, MFL, IRIS		
Accessories (Calibration block)	Metal Block A calibration block have EDM (Electric Discharge Machined) notches of 0.5, 1.0 and 2.0 mm depth. Tolerance of notch depth shall be \pm 0.1 mm. width of notch shall be \leq 0.2 mm. Non-metallic sheets Non-metallic flexible strips of a known thickness to simulate the coating or actual coatings on the calibration block shall be used. non-metallic flexible strips be multiples of 0.5 mm thickness.		
Operating Temperature	(5°C) - (+45°C)		
Computer Data Acquisition System	Required		
Manufacturer	ISO9001 certified		
Warranty	2 year or more / State the additional cost up to 5 years		

Application	Detection of surface imperfections in	
	ferromagnetic forgings, castings and welds	
	including the heat affecting zones using the continuous wet or dry method.	
Magnetizing current	AC+AC、AC+DC (single phase half-wave	
Wagnetizing current	rectification) , DC (single phase half-wave	
	rectification) +DC (single phase half-wave	
	rectification)	
Max. magnetizing current	AC2500A, DC1500A (single phase half-wave	
	rectification)	
Magnetizing time	$0.1 \sim 3.0 \text{sec}$ (set by timer)	
Magnetizing method	Axial current method + Coil method	
Power supply	AC 3phase, 200/220V, 50/60Hz, Approx.150A	
Black-Light	Super-Light	
Cycle Output:	5000 Amp FWDC	
	24,000 Ampere Turn Coil FWDC	
	4000 Amp AC	
	7500 Ampere Turn Coil AC	
Three selectable mode	Up to 4000 amp AC	
Three selectable mode	2500 amp HWDC	
Distance between all storder	5000 amp FWDC	
Distance between electrodes	< 600mm	
Floor Space required	36" X 86" - 36" X 60"	
Weight:	500-700 kg	
Tank Capacity:	75-100 Lts	
Detecting media	Dry powder or liquid form and the magnetic	
	particles shall be either	
	fluorescent . The detecting media shall be traceable to a batch certificate or data sheet	
	documenting compliance with a national or	
	international standard.	
Others	Auto-Demag cycle	
	Pneumatic head and tail stock	
	Coil Diameters 16" or 20"	
	Hood and Fan included	
Operating Temperature	(5°C) - (+45°C)	
Accessories	Calibration blocks are needed	
Manufacturer	ISO9001 certified	
Warranty	02 years or more	
· · · · · · · · · · · · · · · · · · ·	State the additional cost up to 5 years	
01.4 Ultrasonic Testing Mac		<u> </u>
Application	Detection of inside crack/ defect of object by using	
Channels	ultra sound waves Four Channels	
Master Mode		
	ARM A8 1GHz	
Operating System	Windows compatible OS – interface with user trendy	
Sampling Mode	Synchronous Sampling	
Display Mode	10.4 inch industrial bright LCD screen 1024*768	
Lispiny mout	10.1 men maastrai origin Led scienti 1024 700	<u> </u>

Operating Mode	Imports of industrial resistive touch screen		
Storage Mode	(16GB)Electrical Hard Disk		
Depth Measurement Mode	Two-way Counting and Real-Time Repetition Measurement		
Intervals of Sampling	0.03μs ~1024μs		
Phonatory Time	0.03μs		
Measurement Accuracy			
Phonatory Time	2×106μs		
Measurement Range			
Record Length	0.5~4k		
Transmit Voltage(V)	50/250/500/1000 Adjustable		
Dynamic Range of Gain	85-95 dB		
Control Accuracy of Gain	0.4±0.01 dB		
Test Profile	Six sections		
Transmit Pulse Width	20μs		
Broadband	2~500kHz		
Receiver Sensitivity	≤10μV		
Inter-channel Cross-talk	<-60dB		
Data-Transmission Mode	USB2.0 High-speed interfaces and USB Transmission		
Power-Supply Mode	Built-in Lithium Battery(Working Hours≥8 Hours)		
Operating Temperature	(-10°C) - (+45°C)		
Main Machine Dimensions	325×243×56mm		
Main Machine Weight	3.5kg-5.0 kg		
Others	Intelligent Search, Real-time Control of Sampling in all Channels, Parameters of Dynamic sound, Automatic Interpretation, Cryptographic		
Counting Device	Measurement, Repetition Measurement. 4 Slots		
Direction Direction	Two-way Counting		
Resolution Ratio	0.3±0.05 cm		
Space between Measuring Point	5cm~100cm, Optional		
Max Hoisting Speed	Six sections, up to 60 Meters per minute		
Accessories	Calibration blocks are needed		
Warranty	2 year or more / State the additional cost up to 5 years		
Computer Data Acquisition System	Required		
Manufacturer	ISO9001 certified		
Warranty	2 year or more / State the additional cost up to 5 years		
01.5 Thermal/Infrared Testi		, ,	
	T :	1	
Application	Analyze and display a thermal field(temperature) distribution on the object surface by using Infrared waves		
Application Working temperature			
	distribution on the object surface by using Infrared waves		

Pocusing type	Image schema	Manual/automatic	
coxide/rainbow/feathers red +2° or showing data +2%	Focusing type	Manual	
Temperature measurement accuracy Temperature measurement range Temperature display Yes USB mode Micro SD card/real-time transmission mode Reflective temperature Manually enter correction Alarm temperature Highest temperature/lowest temperature Temperature capture Highest temperature/temperature/lowest average temperature Radiation rate input Can be adjusted by the 0.01 ~ 1.0 Working power supply Video output interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption SF6 insulation gearing Required SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Calibration gas Generator cooling Anode earth, forced air cooling by radiator Calibration blocks are needed Required SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Cacessories Calibration blocks are needed Required SF6 insulation gas Generator tooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Required SF6 insulation gas Generator tooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Required SF6 insulation gas Generator insulation SF6 insulation gas Generator enome / State the additional cost up to 5 years	Pseudo color		
Temperature measurement range			
Temperature measurement range Temperature display Yes Micro SD card/real-time transmission mode Reflective temperature Manually enter Correction Alarm temperature Highest temperature/lowest temperature Highest temperature/lowest average temperature Radiation rate input Can be adjusted by the 0.01 ~ 1.0 Working power supply Built-in lithium battery Video output interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 91.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V ~ 240 V 50/60Hz STD mode: 3.1 kVA LOW mode: 2.4 kVA LOW mode: 2.4 kVA Cenerator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Required System Operating temperature range H15°C to 40°C Manufacturer Warranty 2 year or more / State the additional cost up to 5 years	_	$\pm 2^{\circ}$ or showing data $\pm 2\%$	
Temperature display Yes USB mode Micro SD card/real-time transmission mode Reflective temperature Manually enter correction Alarm temperature Highest temperature/lowest temperature Highest temperature/lowest average temperature Radiation rate input Can be adjusted by the 0.01 ~ 1.0 Working power supply Wideo output interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X- ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption SF6 insulation gas Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Required SY9cars Operating temperature range Highest temperature temperature temperature/lowest temperature temperature temperature temperature and temperature to 5 years	•	2007 27007	
Temperature display USB mode Reflective temperature correction Alarm temperature Highest temperature/lowest temperature Temperature capture Highest temperature/lowest temperature Radiation rate input Working power supply Video output interface Accessories Calibration blocks are needed Computer Data Acquisition System Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage Tube current STD mode 5 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz STD mode: 2.4 kVA Generator insulation System Anuacturer Anuacturer LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Required Manuacturer Aluminum 2 mm + Beryllium 1 mm Power consumption Accessories Calibration blocks are needed Acquired STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Required Warranty 4 years or more / State the additional cost up to 5 years	_	-20°C~250°C	
USB mode Micro SD card/real-time transmission mode Reflective temperature correction Alarm temperature Highest temperature/lowest temperature Temperature capture Highest temperature/lowest average temperature Radiation rate input Can be adjusted by the 0.01 ~ 1.0 Working power supply Built-in lithium battery Video output interface HDMI interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption SF6 insulation gas Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Computer Data Acquisition System Operating temperature range Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years		Vac	
Reflective temperature correction Alarm temperature Temperature capture Highest temperature/lowest temperature Radiation rate input Working power supply Video output interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage To kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Computer Data Acquisition System Operating temperature range Manufacturer Marranty Marranty Marranty Manufacturer Maruanty Manufacturer Highest temperature relemperature range temperature/lowest temperature range temperature ra			
Alarm temperature Alarm temperature Temperature capture Highest temperature/lowest temperature Can be adjusted by the 0.01 ~ 1.0 Working power supply Working power supply Built-in lithium battery Video output interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption SFD mode: 3.1 kVA LOW mode: 2.4 kVA Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Manufacturer ISO9001 certified Warranty Page and the properature ange Manufacturer ISO9001 certified Warranty Pilphon the additional cost up to 5 years			
Alarm temperature Temperature apture Highest temperature/lowest temperature Highest temperature/lowest average temperature temperature Radiation rate input Can be adjusted by the 0.01 ~ 1.0 Working power supply Built-in lithium battery Video output interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X- ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V ~ 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration of SF6 insulation gas Generator Base of the cool of the coo		Manually enter	
Temperature capture		Highest temperature/lowest temperature	
Radiation rate input Can be adjusted by the 0.01 ~ 1.0 Working power supply Built-in lithium battery Video output interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X- ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Required Warranty 2 year or more / State the additional cost up to 5 years			
Working power supply Video output interface Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 1SO9001 certified Warranty 2 year or more / State the additional cost up to 5 years O1.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X- ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Required Warranty 2 year or more / State the additional cost up to 5 years	r		
Video output interface HDMI interface Accessories Calibration blocks are needed Computer Data Acquisition System Required Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Determination of inside and surface crack and dimension of the object (machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Required Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5	Radiation rate input	Can be adjusted by the 0.01 ~ 1.0	
Accessories Calibration blocks are needed Computer Data Acquisition System Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years O1.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Working power supply	Built-in lithium battery	
Computer Data Acquisition System Required	Video output interface	HDMI interface	
System Manufacturer ISO9001 certified	Accessories	Calibration blocks are needed	
Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Computer Data Acquisition	Required	
Warranty 2 year or more / State the additional cost up to 5 years 01.7 X ray Testing Machine Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	System		
Determination of inside and surface crack and dimension of the object (machine part) by using X-ray	Manufacturer	ISO9001 certified	
Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Warranty	2 year or more / State the additional cost up to 5	
Application Determination of inside and surface crack and dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range H15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years		years	
dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition Sequired Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	01.7 X ray Testing Machine		
dimension of the object(machine part) by using X-ray Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition Sequired Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Application	Determination of inside and surface crack and	
Tube voltage 70 kV ~ 200 kV in steps of 2 kV Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range +15°C to 40 °C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	rippireution		
Tube current STD mode 5 mA (at 90 kV or more) LOW mode ~ 4 mA (at 90 kV or more) Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years		ray	
LOW mode ~ 4 mA (at 90 kV or more)	Tube voltage	70 kV ~ 200 kV in steps of 2 kV	
Duty cycle Intermittent continuous (1:1 Max. 6 min at 25°C) X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range H15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Tube current	STD mode 5 mA (at 90 kV or more)	
X-ray tube Ceramic X-ray tube Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range H15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years		LOW mode ~ 4 mA (at 90 kV or more)	
Focal spot size (nominal) 2.0 mm x 2.0 mm Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Duty cycle	Intermittent continuous (1:1 Max. 6 min at 25°C)	
Inherent filter Aluminum 2 mm + Beryllium 1 mm Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	X-ray tube	· ·	
Power supply Single phase AC 190 V - 240 V 50/60Hz Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range H15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years		Focal spot size (nominal) 2.0 mm x 2.0 mm	
Power consumption STD mode: 3.1 kVA LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Inherent filter	Aluminum 2 mm + Beryllium 1 mm	
LOW mode: 2.4 kVA Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Required Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Power supply	Single phase AC 190 V - 240 V 50/60Hz	
Generator insulation SF6 insulation gas Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition Required System Poperating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Power consumption	STD mode: 3.1 kVA	
Generator cooling Anode earth, forced air cooling by radiator Accessories Calibration blocks are needed Computer Data Acquisition System Required Operating temperature range H15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years		LOW mode: 2.4 kVA	
Accessories Calibration blocks are needed Computer Data Acquisition System Required Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Generator insulation	SF6 insulation gas	
Computer Data Acquisition System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Generator cooling	Anode earth, forced air cooling by radiator	
System Operating temperature range +15°C to 40°C Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Accessories	Calibration blocks are needed	
Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years		Required	
Manufacturer ISO9001 certified Warranty 2 year or more / State the additional cost up to 5 years	Operating temperature range	+15°C to 40°C	
years		ISO9001 certified	
·	Warranty		
User Guide Required	User Guide	Required	

Use separate price schedule for options
Total Price with VAT (in Words):
Maintenance charges (as a percentage) after the warranty period (If any):
Vat Registration No:
Signature
Duly authorized for signed on behalf of
(Name of the Bidder)
Address
Date

Section VII Contract Data

The following Contract Data shall supplement and / or amend the Conditions of Contract (CC). Whenever there is a conflict, the provisions herein shall prevail over those in the CC.

CC 1.1(i)	The Purchaser is: Uva Wellassa University
CC 1.1 (m)	The Project Site(s)/Final Destination(s) is/are: Uva Wellassa University, Passara Road, Badulla
CC 8.1	For notices, the Purchaser's address shall be:
	Deputy Bursar Uva Wellassa University, Passara Road, Badulla. 055-2226475/055-2226633
CC 11	Goods shall be supplies in compliance with the quality and the specification given.
CC 15.1	CC 15.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:
	For Goods offered within Sri Lanka
	Payment shall be made in Sri Lankan Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed.
	 a) No Advance payment applicable for this contract b) Up to a maximum of ninety (90) percentage of the Contract Price, shall be paid on receipt of the Goods and confirm by the evaluation committee. c) Ten (10) percentage of the Contract price will be hold as Retention for a period of 12 months from the date of commissioning of equipment d) The Retention shall be paid on completion of Twelve (12) months. During that period supplier shall correct all defects and confirmed by the purchase or his agent.
CC 17.1	A Performance Security – 10% Performance security may be in any of the following way (a) A Bank guarantee issued by a reputed bank operated in Sri Lanka. (b) Cash deposit at the Shroff Counter of the University
CC 26.1	The liquidated damage (Late Delivery) shall be: If the supplier fails to deliver any or all of the goods by the date(s) specified above the purchaser may deduct from the payment a sum equivalent to 0.05% of the delivered price of the delayed good, for each day of delay.
CC 26.1	The maximum amount of liquidated damages shall be: 10 % from the contract sum.
CC 27.3	The warranty shall remain valid for a period of time specified with the specifications.
CC 27.6	The supplier shall remedy the defects within 3 Months from the date of information by the purchaser.



"Check List"

	Required Specification	Bidder's Offer			
No		Conformity			
		Yes	No	Page No	Remark
1	Company Profile				
2	Business Registration				
3	VAT Registration				
4	List of Clients				
5	Past three year experience in the industry				
6	Manufacturer Authorization				
7	Public Contract Act				
8	Bid Security				
9	Forms of Bids				
10	Price Schedule				
11	Bid Document Fee (Non – Refundable)				
12	Financial Statement				
Status					

"Bidders mus	t be filled above check List"
Duly authorized	d for signed on behalf of(Name of the Bidder)
Name	:
Signature	:
Designation	:

Deputy Bursar-(Stores & Supplies)
Uva Wellassa University
Passara Road, Baduila.