

	Measurement Units, Standards and Services Department Application for a Certificate of Pattern Approval of Measuring Instrument/Device	Date of Issue : 2016.10.24	Rec No: LG/PA/01	
		Rev No: 1	1 of 9	

Reference No:

Note: Applicant should submit Annex A (check list) and Annex B (General Requirements) with this application.

(01) Type of Approval				
Please tick (√) the relevant category.				
New	Amendment	Previous Approval No.		
(02) Description of the Item				
(a)	Item (Weighing Instrument or part of the instrument, measuring systems, software, Volumetric measures, Provers or Storage tank, Fuel dispensers, Taxi meter)			
(b)	Category Please tick (√) the relevant category.	Mechanical	Electronics	software controlled
(c)	Model			
(d)	Other Accessories Please tick (√) the relevant category.	Printer		Other(specify)
		Remote display		
		Remote controller		
(e)	Interfaces (RS232, USB, Ethernet)			
(f)	Description of Measuring instrument/ accessories or measuring system (If applicable)			
(g)	Inspection site Address			

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(03)	Details of Applicant	
(a)	Name of the Organization	
(b)	Address	
(c)	Business Registration No.	
(d)	Date of Registration (Attach a copy)	
(e)	Full name of the applicant	
(f)	Designation	
(g)	National ID No.	
(h)	Telephone No.	
(i)	Fax No.	
(j)	E-Mail	
(k)	Web site	
(04)	Business Type (a, b, c) –Approval Category Please tick (√) the relevant category.	
	Importer	Manufacture
	(a) Import complete instrument and all other accessories from manufacture	(b) Manufacture complete instrument in Sri Lanka
		(c) Import parts and assemble in Sri Lanka with some additional/local parts

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(05) Details of Manufacturer/s	
	Item Name
	Manufacture Name, Address, Tel. No., Fax No., E-mail, Web site
(a)	
(b)	
(c)	
(d)	
(e)	
(06) Details of Technical Staff	
(a)	Name of Technician
(b)	Address
(c)	Qualifications
(d)	Address of the workshop

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I agree to comply with the Approval Procedure for Measuring Instruments/Device, General Metrological and Legal Requirements for legal control of testing equipment and all provided details in the application and documents provided according to the Check list for relevant equipment for pattern approval (Annex A, Annex B) with the application are true and correct

Signature of Applicant	
Name	
Date	
Company stamp	

For Office use only

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Approval Procedure for Measuring Instruments/Device

1. Instrument requiring pattern approval

Every measuring instrument/device used for trade should be pattern approved by the Director of Measurement Units, Standards and Services Department.

2. Application for pattern approval

2.1 Except for instrument for which general certificates of approval have been issued, an application for examination of a pattern should be submitted to the Measurement Units, Standard and Services using the appropriate application form. If a certain model comes with different capacities and variations, each of these requires separate approval.

2.2 The application should refer to the pattern of a complete measuring instrument. Director may decide to examine only part of a measuring system depending on the function of each part. But the certificate is required to be given to a complete measuring system to be used in trade.

If the approval is required for modified part of a pattern, the director may require that part to be examined when fitted to a complete measuring instrument.

2.3 Technical information in the form of working drawings, functional drawings, electrical diagrams or piping diagrams, etc. should be provided, together with sufficient specifications photographs and descriptions to enable a complete understanding of the construction and the method of operation of the pattern. All the descriptive material for above must be in English.

2.4 If the pattern is approved in other country, the name of the approving authority, number and the title of the approval should be provided. Copies of overseas approval (translated in to English where applicable) and the details of the test result may facilitate the approval but will not necessarily replace the examination and the resting by the director.

3. Provision of a sample instrument

3.1 A sample instrument or such parts of the instrument as the director may require should be made available for examination.

3.2 The pattern examination will be carried out at the laboratory of Measurement Unit, Standards and Services Department at Mahenawatta, Pitipana, Homagama or at an alternative site appropriate to the type of examination to be performed.

3.3 The applicant should be responsible for the traction and disassembling of the instrument and the provision of special facilities required for testing.

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3.4 An application may be rejected if the applicant fails to provide a sample instrument with three months of the acceptance of his application or fail to provide a modified sample instrument within three months of the issue of the examination report.

3.5 Incomplete Documentation

It is applicant responsibility to ensure that you have read and understood the application requirements and have gathered and submitted all the necessary documents **with signature and company seal** including the all pages of the application.

If any required document is not submitted or submitted in the wrong way, your application will not be accepted.

3.6 Verification

MUSSD checks the authenticity of your documents with the issuing institution or any other means MUSSD reserves the right to reject the application if supporting documents are discovered to be fraudulent at any stage of the process of type approval.

Submission of false documents is a violation of Sri Lanka law and is considered ground of for legal action.

3.7 Sample of complete Instrument, software and accessories shall be submitted when request by the department after the submission of application.

3.8 If the sample instrument is not complying with the *major documents provided with application, application will be rejected and payment will not be refunded.

***Major document- Check list (7) (f), (g), (h), (i), (j), (8) (a) or (b)**

4. Provision of drawing and photographs for approval drawings

The applicant should provide specially prepared drawings and photographs suitable for publication in the approval documents.

5. Assurance of instruments

The Director will not be liable for any loss or damage during the test to the sample instrument and/or parts of sample instruments submitted for examination.

6. Removal of instruments

The applicant should be responsible for the packing and removal of the instrument and/or parts of instruments from the laboratory premises or the agreed examination site when notified that they are no longer required.

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7. Cancellation of approval

If any measuring instrument/device which has been approved earlier by the Director is found to be defective on sub sequent examinations, the Director shall have the power to cancel such earlier approval.

8. Fees for pattern approval

1. Weights, measures and beam scales spring balances	Rs. 2,000.00
2. Counter scales and mechanical platform scales	Rs. 5,000.00
3. Weighbridges or electronics weighing scales	Rs. 20,000.00
4. Fuel dispensing pump	Rs. 30,000.00
5. Gas Analyzers (The instruments used to test smoke emission of motor vehicles)	Rs. 20,000.00
6. Prover Tanks	Rs. 20,000.00

Note: Pattern approval fee shall be paid upon the submission of sample instrument/s. Those instruments that failed the pattern approval test with minor modifications in markings, software/firmware functions which is not affected to the measurement accuracy and stability will be returned for modifications or corrections and may resubmit for approval after modification/correction with in three month from the date of return, an additional fee of 20% shall be paid for each resubmission. After three month, it is considered as a new approval and fee for new approval is applicable. Instruments with major failures with measurement sensor or transducer, Main electronic circuit boards, and general construction which affected to measurement accuracy and stability will be rejected and may resubmit with modifications as a new application and fee for new application shall be paid.

General Metrological and Legal Requirements for legal control of testing equipment

Measuring equipment shall be included all required characteristics required for legal controlled of measurements of measuring equipment for pattern approval, initial verification and periodic verification by Measurement Units, Standards and Services Department(MUSSD) as follows;

- Physical access to internal components, circuitry and mechanical parts critical to affect to measurements shall be physically sealable.
- For calibration and change of parameters effected to measurement results shall secure by a physical jumper or switch inside the sealable unit according to 1.1 and could not be accessed without breaking the seal or include a non-resettable event counter and

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event log in software/Firmware including records of calibrations, changing calibration parameters, Number of times changed calibration parameters, date time stamp in YYYY-MM-DD hh:mm:ss format in Sri Lanka Standard Time and other critical parameters like Fare rates, Corrective factors, constant etc. which shall be readable without any password.

- Measuring equipment shall able to calibrate from traceable measurement standard for the required range and accuracy and shall have menu or display to check calibration parameters and calibration dates. If calibration expired measuring equipment shall be inhibited its measuring operation and clearly indicate its status.
- Intermediate checks shall be conducted 3 months' intervals with traceable measurement standards to verify the annual calibration/verification status and adequate traceable measurement standards available for above purpose. Proper maintenance schedule shall be followed and technical staff, equipment, tools and materials shall be available for maintenance work. All above details shall be properly documented.
- Shall have a method to identify the equipment operator by a proper method (Passwords, RF cards, Fingerprints etc.) when the operator intervention is significant for final measurement results, equipment unique identification (Serial number etc.) and calibration/verification date. Above information shall be available with the final measurement results.
- Shall have a method for verification of calibrated parameters and other critical parameters (Fare rates, Corrective factors, constant etc.) with a measurement standard and shall be included a convenient audit menu/display for above purpose.
- Software of the measuring instrument can be operated on a general operating system (OS), but access to other functions shall not allow any means without passing through the software dedicated for the measuring instrument. Software shall have all the characteristics for legal control. Identification of the software with its version numbers/revision numbers shall be available. Any alterations to the approved software shall be restricted by adequate physical/ software means.
- Equipment and its software used real time for reporting data, logging actions and importing functions shall refers to the Sri Lanka Standard Time (SLST) and included a suitable method of synchronization with Sri Lanka Standard Time(SLST).

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- Whole measurement system including sensors/transducers, equipment, computers, software/firmware, data transfer network etc. shall have arrangements, security features, physical access and design to have all the characteristics to be legally controlled and documentation of the whole system shall be available and Should comply with the OIML D31:2008, General requirement for software controlled measuring equipment.
- Measuring instrument used for trade, commercial or regulatory purpose shall comply with the Measurement, Units Standards and Services act no35 of 1995, and comply with **OIML D2**- legal units of measurements, **OIML D3**- Legal qualification of measuring instrument, **OIML D19** Pattern evaluation and pattern approval, **OIML D 20**-Initial and subsequent verification of measuring instrument and process, **OIML D23**-Principle for metrological control of equipment used for verification.
- Measuring instrument shall be measure correct values under influence environment conditions specified as in OIML D11-Genaral requirement for measuring instrument environment conditions and relevant standards for the instrument. Measuring equipment shall properly install with proper electrical connections, proper mounting accessories and proper environment and in a suitable location to ensure its normal operation.