

PRODUCTION DEPARTMENT

USER REQUIREMENT SPECIFICATION	
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USER REQUIREMENT SPECIFICATION

NAME OF THE ITEM: WEIGHING BALANCE

FUNCTIONAL AREA: PRODUCTION

PROTOCOL No. : URS/



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1.0 URS APPROVAL:

Protocol Prepared By:

Functional area	Name	Signature	Date
Production			

URS Reviewed By:

Functional area	Name	Signature	Date
Production			
Quality Assurance			
Engineering			

URS Approved By:

Functional area	Name	Signature	Date
Head Engineering			
Head Manufacturing			
Head Quality			



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2.0 Objective:

The purpose of this document is to ensure that all the critical aspects of the Equipment, cGMP & Safety features have been considered in designing the equipment/instrument and is properly documented.

3.0 Responsibilities:

3.1 Preparation of Document

- User department to prepare the URS
- Ensures that the document is in compliance with current policies and procedures of cGMP regulations.
- Ensures that the content is sufficient, clearly defined, technically sound and accurate.
- It is a Guidance document to prepare the URS.

3.2 Review of Document

• To be reviewed by Head of the user department and functional department (Engineering & Quality assurance)

3.3 Approval of Document

• Approval of document by Head Manufacturing/Head Engineering/Head Quality.

4.0 Equipment Description & Identification:

4.1 Scope:

4.2 Purpose:

Purpose of equipment is used in production area for checking the product weight online and Confirming the pack has neither having any missing item or extra item.



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5.0 USER REQUIREMENTS

5.1 System Requirements:

S.No.	SYSTEM COMPONENTS	SYSTEM REQUIREMENTS
01.	Identification	Details of Make, Name, Serial. No., Capacity, Model and
		Year of manufacture should be available
02.	Model/Type	As per attached list
03.	Capacity	As per attached list
04.	Potential Suppliers	Mettler Toledo, Essae, sartorious or equivalent
05.	Other parts	Suitable GMP finish
06.	Pan/Plateforms	SS304 with matt finish
07.	Non metallic contact parts	1. Durable.
		2. Must be easily cleanable.
08.	Adjustment	Setting with zero clearance with required accuracy
09.	Packaging & Transport	Should be packed and transported in such a way to avoid any
		damage during transportation.
10.	No. of requirements	As per attached list
11	Requirements for any power	To be backed up by installed in-house DG set. Battery
	failure backup's	backup provision to be provided
12.	Least count	As per attached List
13.	Accuracy	As per attached List
14.	Printer Requirement in balances	As per attached list
15.	Stamping and calibration of weighing balances	In scope of vendor



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5.2 Technical Description

S.No.	Specification	System Requirements
1.	HMI for various operation	YES
2.	Weighing device (Load cell)	YES
3.	Display graphic LCD colored	YES
5.	Provision of balancing bubble	YES
6.	Easily detachable pan	YES
7.	Selectable weighing units-kg	YES
8.	Manual Tare Facility	YES
9	Indicator housing and load plate-MS	YES
10	Auto power off system for energy saving	YES

6.0 COMPLEMENTARY ASPECTS

6.1 Training

S. No.	Specification	SYSTEM REQUIREMENTS
6.1.1	The vendor Shall supply all available information for the	YES
	adequate exploitation of equipment. For the Compliance of	
	this purpose at the Job site. Vendor's technical staff shall	
	train customer's personnel. The scope of the	
	Training will be agreed during the contract signature.	
6.1.2	The supplier is to include the personnel training activities.	YES
	The contractor is to specify the foreseen time for:	
	Operator/Supervisor training	
	Manager Training	
	Electrical maintenance training	
	Mechanical Maintenance training	
6.1.3	The contractor is to specify the personnel background	YES
	needed for each of the operators maintenance.	
6.2	Pre Delivery Qualifications (FAT)	
S.No.	Specification	SYSTEM REQUIREMENTS
6.2.1	The System or its parts as provided for in the scope of	YES
	supply shall be pre-installed at the vendors shop prior to	
	delivery to customer site. Installation will be completed	
	and documented including mechanical parts as well as	
	electrical connections of all parts to facilitate taking over	
	tests at Vendors shop prior to delivery.	



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6.3 Supplier Technical Documentation Requirements:

S.No.	COMPONENTS	REQUIREMENTS
6.3.1	Drawings	Pre Installation Requirements will be supplied by
	 Equipment/Systems electrical drawing. 	Vendor
6.3.2	 Equipment and instrument list with Component description. Electrical component parts list with Description. Function check list. Documentation list. 	YES YES YES YES

6.4 Technical Manuals

S.No.	Specification	Requirements
6.4.1	Operating handbook	YES
6.4.2	Trouble Shooting Guide	YES
6.4.3	Equipment /Instrument Description	YES
6.4.4	Equipment/ Instrument specification	YES
6.4.5	Calibration Instruction	YES
6.4.6	Maintenance Instruction	YES
6.4.7	Maintenance Handbook	YES

7.0 SAFETY AND ENVIRONMENTAL PROTECTION

S.No.	Specification	Requirements
7.1	All motors have to be thermally Protected.	NA
7.2	All the Installation must be in accordance with the cGMP.	YES
7.3	The cGMP concerning safety must be applied.	YES

8.0 CLEANING MAINTENANCE AND SERVICE

S.No.	Specification
8.1	In accordance with cGMP guidelines the units must be easy to clean, to disinfect, and where necessary, to sterilize.
8.2	The Supplier should guarantee that, if required, a service team can be on site within one working day.
8.3	The design should be such as to allow mechanical cleaning of the surface and that the cleanliness of the surface can be checked easily.
8.4	All machine parts, in particular instrumentation, should be constructed so that they can be easily removed and calibrated.



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S.No.	Specification
8.5	All special tools required for running and maintenance should be best.
8.6	A spare parts delivery guarantee with in time.

9.0 RULES AND REGULATION

These standards, recommendation and requirements are considered the minimum. Specifications that are more stringent or expansive take the precedence. In case of conflict between published requirements, final determination is the responsibility of the Owners Representative.

10. SCOPE OF DELIVERY

S.No.	Specification	Requirements
10.1	Units described in the specific system requirements including all necessary controls and instrumentation.	YES
10.2	The complete mechanical and electrical installation.	YES
10.3	The Connections to all the necessary utilities, exhaust, and waste lines necessary for its operation.	YES
10.4	All piping and cabling of the units itself.	YES
10.5	Wiring and cable run: all wiring and cable run is part of the supplywill supply the main power switches to be located in correspondence to the electrical and control cabinets delivered by the equipment supplier.	YES
10.6	All internal contacts of the supplied equipment/Instruments for the required utilities.	YES
10.7	Unload on site of the equipment/Instrument the supplier is required to define all the necessary handling devices required to the unloading operation. The supplier will inform at least 4 weeks in advance the day of delivery and the list of required handling devices.	YES
10.8	Assembling operation: the required consumable, the internal transportation, the assembling tools and the required personal are part of the supply.	YES
10.9	A complete set of commissioning spare parts.	NA
10.10	All special tools necessary for use and maintenance of the supplied equipment/Instruments.	YES
10.11	A complete set of spare parts should be listed quoted and offered as option.	NA
10.12	All test activities as specified in this document.	YES
10.13	Training in the use and maintenance of the equipment/Instruments.	YES
10.14	A complete set of documentation as specified In this document.	YES



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11.0 INSTALLATION, COMMISSIONING AND TESTS

11.1 General

S.No.	Specification	Requirements
11.1.1	The Contractor must specify for each piece of equipment the	YES
	Guaranteed performance and the guaranteed system performance.	
	These values will be tested during the acceptance tests.	
11.1.2	In addition the functionality described in the user requirements and	YES
	detailed in the system specifications will be tested.	

11.2 INSTALLATION, COMMISSION

S.No.	Specification	Requirements
11.2.1	The commissioning tests will be carried out in accordance with a	YES
	written test plan developed by the supplier with clearly stated test	
	procedures and acceptance criteria.	
11.2.2	The contractor will approve successfully completed tests and will	YES
	specify items requiring additional work. Representatives from	
	Will attend and participate in the commissioning tests	
	as required.	
11.2.3	The installation and commissioning of the system will be performed	YES
	at the Facility by the contractor.	
11.2.4	The commissioning can only start once all the foreseen documents	YES
	have been delivered by the supplier to	
11.2.5	All equipment should be properly installed, adjusted, leveled, tagged,	YES
	and connected with utilities.	
11.2.6	Point to point checks on wiring and pneumatic should be performed.	YES
11.2.7	All instruments should be properly calibrated.	YES
11.2.8	A equipment /instrument used for qualification must be listed and	YES
	approved by	
11.2.9	The calibration equipment/Instruments must have all the necessary	YES
	documents to demonstrate their maintenance & use.	
11.2.9		YES



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S.No.	Specification	Requirements
11.2.10	The last calibration of all this equipment must be less than 6 months	YES
	old, and evidenced by certificate.	
11.2.11	Verification that the interior surfaces of equipment are free of	YES
	practices and dirt and all points of product contact meet the specified	
	material requirements.	
11.2.12	All the clearances and tolerances specified in the drawing or	YES
	recommended by component manufacturers are correct.	
11.2.13	On site verification that valves and other equipment with moving parts	YES
	are in their normal position if in a power down condition and move in	
	the correct direction with the correct speed and precision.	
11.2.14	Verification that all the Input and Output points are connected and	YES
	labeled according to the documentation and that all the along the input	
	values have been scaled in accordance with the system specification	
	and process requirements. That all equipment components requiring	
	configuration	
11.2.15	The commissioning should demonstrate that the system supplied by	YES
	the contractor has been properly installed and that the functions are in	
	accordance with User Requirements specifications,	
	Vendors System specifications Manuals and other Documentation.	

11.3 Site Acceptance Test (SAT)

S.No.	Specification	Requirements
11.3.1	This test will be carried out once the commissioning will be	YES
	completed. The scope will be to verify the performance and the	
	functionality of the system integrated with the other factory systems.	
11.3.2	The test will be carried out to verify the system response with the	YES
	expected productivity of the system.	
11.3.3	Details on the test realization will be defined during the project Phase.	YES
	The supplier is asked to specify the proposed duration for SAT and the	
	standard procedure proposed.	
11.3.4	During SAT the required functionality, performances and system	YES
	reliability are met.	
11.3.5	The Functionality described in the User Requirements Specification	YES
	and in the System Specifications are verified and met.	



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S.No.	Specification	Requirements
113.6	All the documentation agreed has been delivered.	YES

12.0 QUALIFICATION/VALIDATION

S.No.	Specification	Requirements
12.1	The maintenance Qualification is responsibility of the customer. However, the supplier is responsible for delivering the basic documents for maintenance qualification.	YES
12.2	This includes all side costs such as: calibration measuring equipment and instruments: manpower (IQ and OQ will take place completely on)	YES
12.3	Time Schedule for IQ/OQ execution will be developed by With the supplier.	YES
12.4	Suppliers personnel used for IQ/OQ must be well trained and experienced. This should be documented.	YES
12.5	The onsite test run performed by the supplier might become part of the IQ.	YES
12.6	Main IQ/OQ steps such as calibration must be performed and documented in accordance to a SOP approved by	YES
12.7	All equipment used for qualification must be listed and approved by	YES
12.8	The last Recalibration of all this equipment should be less than 06 month old. Proofed by Certificate.	YES
12.9	OQ can only start after IQ approved by	YES
12.10	IQ will be carried out by During Installation phase. IQ will include the tests performed by the contractor.	YES
12.11	Part of the OQ will be carried out by During commissioning and SAT phase. OQ will include the tests performed by the contractor.	YES
12.12	After installation of the equipment at customers site. Complementary IQ & OQ tests will be performed by the Customer and may be supervised by a member of Technical staff.	YES
12.13	Qualification documents (In case of equipments/Instruments)	DQ, IQ, OQ & PQ

13.0 GAURANTEE/WARRANTEE

S.No.	Specification	Requirements
13.1	The System must be guaranteed including all the sub- system and components for a period of 12 months from the date of the system acceptance for a 03- shift operation.	YES
13.2	The servicing companies involved for the Sub- systems maintenance must be declared and the maintenance group organization described.	YES



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	Furthermore, the contractor will be directly responsible of the system assistance and the required operation will be co- ordinate by him.	
13.3	In case of failures, the intervention will be guaranteed by the contractor within a maximum time limit. The contractor is asked to specify the maximum time limit.	YES
13.4	The supplier is asked to propose as option maintenance and assistance contract after the guarantee expiration.	YES