



PHARMA DEVILS

PRODUCTION DEPARTMENT

USER REQUIREMENT SPECIFICATION

NAME OF ITEM: Hardness Tester

PROTOCOL No.....

FUNCTIONAL AREA: Production

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USER REQUIREMENT SPECIFICATION

HARDNESS TESTER

EQUIPMENT NAME	COMBINATION TESTER
USER DEPARTMENT	EXHIBIT BATCH AREA



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(A) PROCESS/PRODUCT REQUIREMENTS

- 1.0 **Name/Description of the equipment**
Tablet Combination tester
- 2.0 **Purpose of the equipment**
Automatic measurement of weight thickness, length/Diameter & hardness of a tablets.
- 3.0 **Number Of equipments Required**
1 No.
- 4.0 **Tentative Process schematic flow diagram**
NA
- 5.0 **Product Dosage type for which to be used**
Tablet
- 6.0 **Suggested capacity and model with suppliers name**
Any latest model which is designed to give reproducible results with high accuracy.

Suggested Supplier
ERWEKA Gmbh,GERMANY
Dr. SCHLEUNIGER(PHARMATRON)
- 8.0 **Requirements for any power failure backup's**
It is attached with UPS all the time.
- 9.0 **Any other specific requirements**
Tilting facility according to USP

(B) OPERATIONAL REQUIREMENTS

- (1) **Production stage**
Compression
- (2) **Material inputs into the equipment**
Core tablets during compression
- (3) **Desired out come from the equipment**
Equipment must comply the operational parameters as designed in Pharmacopoeias.
- (4) **Charge size/lot size**
According to the test of compendia.
- (5) **Method for loading material into the equipment**



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Manually

(6) Method for unloading material from the equipment

After completion of the set resolution/time tablets will be discharged into their individual trays.

(7) Expected running time per day

Total 3 shifts in a day running continuously/intermittently according the need of the product.

(8) Method of cleaning

Manually with lint free cloth (If Require) with tissue paper.

(9) Recommended solvent for cleaning with its chemical nature

Purified water

(10) Utilities required

UPS

(11) Instrumentation

According to design of Instrument

(12) Process control requirements

RPM of the Hardness Tester must be accurate as per the compendia requirement.

(13) Change over parts requirements

None.

(14) Available size of the room for installation

According to the Layout of Exhibit Batch Area

(Compression Area Room No.: FN58)

Size: 3.8 m×5.6 m

(15) Online attachments with other equipments

Calculation of result like % friability, weight loss with printer output.

With Analytical Balance

(16) Any other specific requirements

Model should be compact

Adjustable height & angle of shaft (1 – 3 ft.).

(C) GMP REQUIREMENTS



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- (1) **Material of construction specifications**
Vendor to Specify
- (2) **Working area environment requirement**
Instrument will be kept in Class 'D' area.
- (3) **GMP requirements**
NA
- (4) **Filter requirement on utility lines or for vent purpose**
NA.

(D) DOCUMENTATION REQUIREMENTS :

- (1) **Specify the Drawings/Certificates/Manual required**
GA Drawing
Operating Manual & maintenance Manual
List of Standard Recommended spares
Electrical control circuit diagram
Test certificate for bought out item
Certificates for motor and starter
- (2) **Any other specific requirements**
None

(E) SAFETY REQUIREMENTS:

- (1) **Information related to safety**
Vendor should mention
- (2) **Process Control Alarms**
Buzzer to inform end of process.
Indicator stating time elapsed and number of revolution passed
- (3) **Safety Interlocks**
NA
- (4) **Password protection (In case of PLC systems)**
NA



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(5) **Any other specific requirement**
NA

(F) **ABBREVIATION:**

Abbreviation	Full Form
EBA	Exhibit Batch Area
URS	User Requirement Specification
RPM	Revolution Per Minute
DG	Diesel Generator
Ltrs.	Litre
NA	Not Applicable
IPA	Iso Propyl Alcohol
M	Meter
SS	Stainless Steel
MOC	Material of Construction
PLC	Programmable Logic Control
FnD	Formulation & Development

(G) **DISCUSSION/REVIEW/COMMENTS:**



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(H) USER REQUIREMENT SPECIFICATION APPROVAL:

PREPARED BY

Name & Designation	Sign & Date

CHECKED BY

Name & Designation	Sign & Date

APPROVED BY

Name & Designation	Sign & Date