



# QUALITY LAB SOLUTIONS

## LAB EQUIPMENTS CATALOG



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## WHO WE ARE

Quality Lab Solutions is Leading Manufacturer of Testing Equipment for Analytical/ Formulation/R&D/ Quality Control Division of the Pharmaceutical Company, Food Processing Company/ Chemical Coating Company.

We have Specialized Division Focussed on Tablet Dissolution Accessories for all Major Dissolution Tester OEM. Our complete Range of Tablet Dissolution Accessories satisfies Precise Specifications of OEM and the USP.

Our Products are Engineered and Manufactured according to the Precise Specifications of the USP where Applicable.

All QLS Dissolution Accessories are Designed to meet Original Equipment Manufacturer (OEM).

QLS is your "LAST STOP" for Custom Fabrication. We Give Customise Solutions to meet your Laboratory Requirements.



## Dissolution Media Degasser



The **Smart Fill 5000** is Compact, Transportable and offers quick and easy preparation of up to 10 litres dissolution media in less than 15 minutes.

In a single pass the media for dissolution tests can be precisely heated, degassed and filled gravimetrically into vessels. Foaming media like SDS (Sodium Dodecyl Sulphate) can also be used.

Product	Smartfill 5000
Function	Heating and Vacuum Degassing
Pharmacopeia Conformance	USP,EP
Control	Smart Touch Panel 7"
Time Needed for Degassing	1000ml in less than 110 sec.
Dispensing Volume	200 ml to 1000 ml to 200g to 1000g.
Dispensing time	1000ml in less than 110 sec at 41°C in ambient temperature .
Dispensing Accuracy	±1% of set volume, but not less than ±5 ml
Heating Capacity	Up to +20°C deg. increase from Ambient Temperature to Max of up to 45°C
Degassing	Up to a maximum of 3.0 ppm, to a level of not less than 5.0 ppm
Input Filter	25 mm in-line filter holder
Temperature Control	Cartridge Heater
Temperature Accuracy	± 2°C
PC Interface	RS-232 (serial) & Thermal Printer
Unit Dimensions	Height 32.28" (82 cm)
	Width 15" (38 cm)
	Depth 17.32" (44 cm)
Weight	37.0Kg
Electrical Power	220V ± 15V 50Hz 8Amps
	(Operating voltage pre-set at factory)

Quick Documentation via Mobile Thermal Printer

### FEATURES

- Smart Design
- Smart Sensor
- In Line Heating
- Piston Controlled Vacuum Chamber
- Variable Dispense Volumes
- Validation and Calibration



*Designed to use with Surfactants and handle Frothing.*

# Electromagnetic Sieve Shakers

## Premium Model (iPremium-QS-200P)

SOP STORAGE UPTO 16 PROGRAMS

SIMULTANEOUS MODE PROGRAM OPTION

DIGITAL AMPLITUDE



10mm  
20µm

NEW



Dry Sieving	Standard
Wet Sieving	Optional Kit
Mode of Operation	3 modes (Continuous, Intermittent & Advance)
Intermittent Operation	At intervals upto 0.5 seconds
Advance Mode	Programmable time for Continuous & Intermittent (Together) in this mode
Capacity	Upto 8 Sieves of 50mm height Upto 16sieves of 25 mm height
Shake Time	Programmable from 1 mm to 99mm
Digital Amplitude Display	Programmable from 0.1mm to 3.0mm 20 x 4 character alphanumeric LCD
Noise Level	Less than 61 db without sieves at maximum amplitude. Less than 71 db with sieves and material at maximum amplitude.
Dimensions (mm)	L 385 xW 305 x H 245
Net Weight	50 kg Without Sieves (Approx)

## Advance Model (iControl-QS-200C)

SOP STORAGE UPTO 8 PROGRAMS

ADVANCE MODE PROGRAM OPTION



10mm  
20µm

NEW



Dry Sieving	Standard
Wet Sieving	Optional Kit
Mode of Operation	3 modes (Continuous, Intermittent & Advance)
Intermittent Operation	At intervals upto 0.5 seconds
Advance Mode	Programmable time for Continuous & Intermittent (Together) in this mode
Capacity	Upto 8 Sieves of 50mm height Upto 16sieves of 25 mm height
Shake Time	Programmable from 1 mm to 99mm
Power Level	Programmable from 1 to 20
Amplitude	0.1mm to 2.5mm
Display	20 x 4 character alphanumeric LCD
Noise Level	Less than 61 db without sieves at maximum amplitude. Less than 71 db with sieves and material at maximum amplitude.
Dimensions (mm)	L 385 xW 305 x H 245
Net Weight	50 kg Without Sieves (Approx)

# Electromagnetic Sieve Shakers

THREE DIMENSIONAL SIEVING MOTION



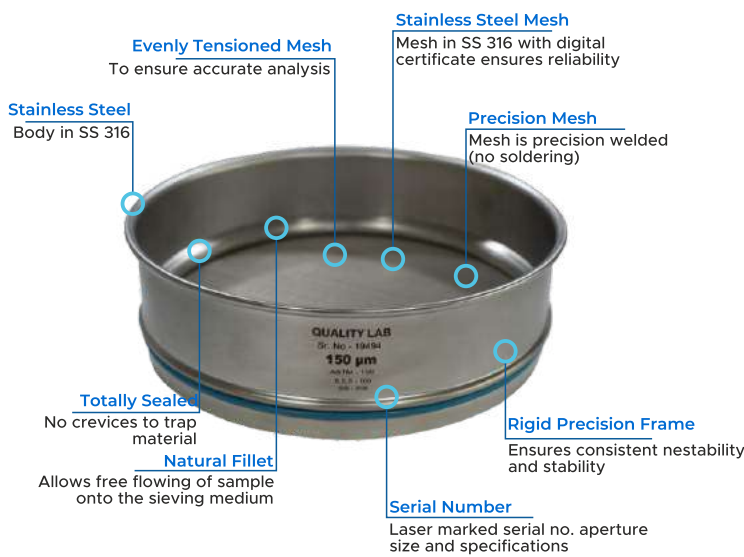
- 10mm  
20µm
- 
- 



## Primary Model (QS-200B)

Dry Sieving	Standard
Wet Sieving	Optional Kit
Mode of Operation	2 modes (Continuous, Intermittent)
Intermittent Operation	At intervals upto 0.5 seconds
Capacity	Upto 8 Sieves of 50mm height Upto 16sieves of 25 mm height
Shake Time	Programmable from 1 mm to 99mm
Power Level	Programmable from 1 to 20
Amplitude	0.1mm to 2.5mm
Display	16 x 2 character alphanumeric LCD
Noise Level	Less than 61 db without sieves at maximum amplitude. Less than 71 db with sieves and material at maximum amplitude.
Dimensions (mm)	L 385 xW 305 x H 245
Net Weight	50 kg Without Sieves (Approx)

## Test Sieve



ISO NORMAL APERTURE SUPPLEMENTARY SIZE R40/3	(MESH SIZE) ASTM E11-01	BSS
6.0mm		
4.75mm		
4.00mm	No.5	No.4
3.35mm	No.6	No.5
2.80mm	No.7	No.6
2.36mm	No.8	No.7
2.00mm	No.10	No.8
1.70mm	No.12	No.10
1.40mm	No.14	No.12
1.18mm	No.16	No.14
1.00mm	No.18	No.16
850µm	No.20	No.18
710µm	No.25	No.22
600µm	No.30	No.25
500µm	No.35	No.30
425µm	No.40	No.36
355µm	No.45	No.44
300µm	No.50	No.52
250µm	No.60	No.60
212µm	No.70	No.72
180µm	No.80	No.85
150µm	No.100	No.100
125µm	No.120	No.120
106µm	No.140	No.150
90µm	No.170	No.170
75µm	No.200	No.200
63µm	No.230	No.240
53µm	No.270	No.300
45µm	No.325	No.350
38µm	No.400	
32µm	No.450	
25µm	No.500	
20µm	No.635	

## Tap Density Tester - QS 2010

Tapped Density Tester is Tapped Density Analyzer or Tapped Density Meter . QS-2010 Tapped Density Tester is a bulk density tester used to measure the tapped density of bulk powders, as well as granulated or flaked materials by standardized and repeatable procedures. & meet all international standards such as USP 616, ASTM, ISO, EP etc.



### Features :

- Complies with all international standards such as USP 616, ASTM, ISO, EP etc.
- Supports USP 1 (300 taps per min ) & USP2 ( 250 taps per min ) and ASTM test methods& User Defined Method)
- Simultaneous rotating and tapping motion assures evenly packed surface
- 20 X 4 character LCD
- Online validation of strokes / min
- USER Define Mode with different strokes
- Calculation and printout of tests like tapped density, compressibility index and Hausner ratio.
- Supports 10ml ,50ml, 100 ml and 250 ml cylinders
- Printer port (Rs232,485) for printing test results with validation report as per cGMP standards
- Tap height adjustable from 3 up to 14 mm to meet all standards



Model	QS-2010
No of stations	<b>2</b> ( USP 1 ) ( USP 2 )
Stroke Height	14 mm ± 1 mm 300 strokes / minute ( USP 1 ) 3 mm ± 0.2 mm 250 strokes / minute (USP 2 )
Parallel Port	For Printer
Power Supply	230 V AC, 50 Hz, 880 VA
No. of taps	1-9999
Display	20 x 4 character LCD
Dimensions	(L 330mm x W310 mm x H230 mm)
Motor	13.5 Kg cm unipolar Stepper motor ( USP 1 ) 9Kg cm unipolar Stepper motor (USP 2 )

## Disintegration Tester - QD-200 (Essential)

Disintegration testing determines whether tablets or capsules disintegrate within a defined period of time when placed in a liquid medium. Compliant design according to current Pharmacopeia (USP <701>, USP <2040>, Ph. Eur. 2.9.1) and robust quality components provide a reproducible and standardized method of ensuring that complete disintegration has taken place.

The "QD-200 Essential" tablet disintegration tester Model By Quality Lab Solutions offers user-friendliness in a tried-and-tested design for Capsule Disintegration Procedure.

The manual disintegration tester as a cost-effective alternative to the automatic model & fulfils all EP/USP requirements.

A few quick steps is all it takes to dismantle the testing baskets ready for cleaning. The basket assembly is extremely robust. It can be easily disassembled and even be fully submerged into a cleaning bath.

As each station is powered separately, you can test up to four different products at the same time. The soft start function ensures that the testing basket is immersed in a controlled manner



Model	QD-200(ESSENTIAL)
Stroke height	55mm ( ± 2 mm )
No. of strokes	30 stroke per min ( ± 2 )
Motor	12.6 kg cm bio polar stepper motor
No. of baskets	2 nos. (Each having 6 Glass test tubes)
Display	LCD 20 x 4 character
Water bath	6 mm thick transparent acrylic
Heater	300 watts, S.S. 316
Power Supply	230 V AC, 50 Hz, 880 VA
Temperature range	20°C to 39.9°C
Temperature resolution	0.1°C
Temperature control accuracy	0.5°C
Timer	Range1- 1 sec. to 99 min. & 59 sec. and Range 2- 1 min. to 9 hrs & 59 min.
Timer resolution	Range1- 1 sec. and Range2- 1 min
Dimensions(L x W x H)	(350x 390 x 510) mm (approx.)
Weight	Net 23 kgs

## Friability Tester - QFR 200

QFR 200 is a Double drum tablet friability and abrasion test instrument. It is manufactured in compliance to the USP <1216>, EP <2.9.7> and JP <14> Pharmacopoeias. The instrument features an automated sample discharge at the end of a test and the possibility to connect an analytical balance.

• Drums	: Acrylic ,two numbers
• Display	: 5" TFT LCD with touch screen.
• Parameters	: Time, count
• Unit Time	: hour minute and seconds
• Rpm Control	: Microprocessor controlled stepper motor
• 10° Stand	: to Test Large Samples
• Rpm Range	: 20 to 50 rpm
• Rpm Accuracy	: ± 1% of full scale
• Rpm Resolution	: 1%
• Timer Range	: 1min to 999min
• Timer Accuracy	: 0.1%.
• Count range	: 001 to 999
• Count accuracy	: ±1
• Printer	: connectivity through RS232/485 port.serial / Dot matrix
• Power Requirement	: 230VAC 50 Hz 5A./110VAC 60Hz 10A
• Dimensions (L x W x H)	: 350 x300x450
• Weight	: 10kg
• Validation Documents	: IQ/OQ Documents



## Leak Tester - QLT-600P

The QLT-600P is used to test for the integrity of packed strips, blisters and small sachets containing tablets, granulates, liquids and so on. The instrument is used to test the quality of the packaging process and to check that the seals enclosing the product are perfectly intact. The QLT-600P leak tester is designed to find the smallest holes and imperfections in blister packs and other semi-rigid product packaging. It is designed in compliance to the USP monograph <1136>.

PARAMETER	SPECIFICATION
Vacuum Level	> 650mmHg
Vacuum Setting	Vacuum can stabilize for a set value from: » Less than 400mmHg: ± 10mmHg within 30 seconds » Above 400mmHg: ± 5mmHg within 30 seconds
Display	20X4 LCD DISPLAY
Data Entry	Function key
Timer	Can be set from 1 to 99 minutes
Desiccator Sizes	300mm, 250mm, 200mm or 150mm Ø (optional)
Printer	Parallel port for dot-matrix printers
Power	230V.50Hz
Instrument dimensions	Approx. 400 x 240 x 220 mm (Length x Width x Height)
Net weight	Approx. 17kg
Certification	All components certified to USP / EP requirements
Validation	All IQ & OQ documents included





## Manual Powder Flow Tester - QMPT-01

Manual Powder Flow Tester - By Quality Lab Solutions - QMPT 01 With Digital Height Gauge with platform for measuring Height. (as per European Pharmacopeia).

It is with interchangeable discs with holes of various diameters

- Provides simple, repeatable flow ability index of powders and granules
- Easy calculation of angle of repose
- Provides simple, repeatable index of flow ability of powders
- Determines the repeatable flow ability index of powders over an arbitrary scale
- Included with tester are a complete set of index flow disks.

Machine is offered with various Outflow openings as per Ph. Eur:

- 10 mm
- 15 mm
- 25 mm

Customized openings are also available

Flow Properties & Angle of Repose	
Flow Property	Angle of Repose
Excellent	25 - 30
Good	31 - 35
Fair - aid not needed	36 - 40
Passable - may hang up	41 - 45
Poor - must agitate, vibrate	56 - 55
Very poor	56 - 65
Very, very poor	> 66



## Tablet Hardness Tester - QHT-01



Model	QHT-01
Hardness range	upto 500 Newton
Display resolution	0-110lbs 0.05
	0-50Kg 0.02
	0-500 N 0.2
Accuracy	0.5%full scale
Tabletsize	2mm to 28 mm
Power	1.5V("AA" battery) 4 nos.
Optionalpower	6VDC adaptor (on request)
Dimensions(L x W x H)	(247x 91 x 76) mm
Weight	Net1.1 kgs
	Gross 2.4 kgs

## Tablet Hardness Tester - QHT-01P



Min load	0.1N
Accuracy	0.5%full scale
Tablet size	2 mm to 28 mm
Power	Ni-Hi8.4V, 1200mA
Optionalpower	6VDC adaptor (on request)
Carry temperature	27°/ 70°C
Relative humidity	5% 80% RH
Work environment	No vibrancy
Dimensions (L X W X H)	355 x 91 x 76
Weight	Net 1.5 kgs
	Gross 2.4 kgs

## Bulk Density Tester - Volumeter (BT-200i) Premium (iSmart)

The BT-200i Scott Volumeter by Quality Lab Solutions is a Digital Version of standard bulk density tester that is widely utilized in powder testing applications. The system determines the bulk density of free-flowing powders, such as metal powders, compounds and paints according to various international standards.

BT-200i Scott volumeter and Bulk Density Tester Apparent density meter determines bulk density of powders according to

- International Standard ISO 3923 – 2 Metallic powders – Determination of apparent density – Part 2: Scott volumeter method
- USP Chapter 616 Bulk Density and Tapped Density of Powders Method II-Measurement in a Volumeter
- ASTM B 329 Standard Test Method for Apparent Density of Metal Powders and Compounds Using the Scott Volumeter

In principle, a measurement of the mass of a specific quantity of powder in loose condition can be made, as it precisely fills a cup of known volume. This loose condition is achieved by cascading the powder over a range of inclined plates in a Scott Volume. The ratio between the volume and the mass then indicates the apparent density.

### Features :

- Complies with USP and ASTM specifications
- Software Enabled Programming and Inbuilt Weighing Scale Features Completely Eliminate the Manual Procedure followed in the Manual Version of the Machine.
- Measures the bulk density of fine powders and similar products
- Easy calculation of bulk density in terms of grams per ml
- Useful in calculating powder flow ability index
- Complies to USP & ASTM
- Simple & Easy to operate
- Calculates & Displays the bulk Density of sample powder
- No need to connect external weighing scale
- 20X4 LCD display with back Lit
- Membrane Keypad for easy operation
- Menu driven operation
- Inbuilt Thermal printer for test report & validation report
- 10 mesh screen as standard and other meshes as optional
- Suitable for powders including metal powders compounds, pigments etc.
- All the material in contact with the sample are made up of stainless steel 316 grade and glass
- Fully enclosed baffle pack.



## Bulk Density Tester - Volumeter (BT-200i) Premium (iSmart)



MODEL	BT-200i (-iSmart)
TOP FUNNEL WITH MESH	18 mesh
DISPLAY	LCD 20 X 4 character
BAFFLE / MATERIAL	4 NOS / GLASS
BAFFLE BOX	45mm X 45 mm
BOTTOM FUNNEL	SS 316
INSTRUMENT STAND	LEVEL & VIBRATION FREE
CYLINDRICAL CUP	SS316 Cylindrical receiving cup with an volume of $25.00 \pm 0.05$ ml and inside diameter of $30.0 \pm 2.0$ mm
LOAD CELL	5 KG ACCURACY 0.01 mg
Power Supply	230 V AC, 50 Hz, 880 VA

## Bulk Density Tester - Volumeter (BT-200) Economy (Basic)



MODEL	BT-200
TOP FUNNEL WITH MESH	10 mesh
BAFFLE / MATERIAL	4 NOS / GLASS
BAFFLE BOX	45mm X 45 mm
BOTTOM FUNNEL	SS 316
INSTRUMENT STAND	LEVEL & VIBRATION FREE
CYLINDRICAL CUP	SS316 Cylindrical receiving cup with an volume of $25.00 \pm 0.05$ ml and inside diameter of $30.0 \pm 2.0$ mm
LOAD CELL	5 KG ACCURACY 0.01 mg

## Contact

Are you curious and want to find out more?  
Head over to our website and download our product brochures.



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Technical specifications of products described  
are stated without warranty and subject to  
change at any time without further notice.

