



TAP DENSITY TESTER  
QS-2010

## OVERVIEW PRINCIPLE

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.

### Principle

Definition of tapped density is an increased bulk density attained after mechanically tapping a container containing the powder sample (tap density testing machine). Tapped density is obtained by mechanically tapping a graduated measuring cylinder or vessel containing a powder sample. After observing the initial powder volume or weight, the apparatus measuring cylinder or vessel is mechanically tapped, and volume or weight readings are taken until little further volume or weight change is observed. The mechanical tapping is achieved by raising the cylinder or vessel and allowing it to drop under its own weight a specified distance by either of three methods as during tapping may be preferred to minimize any possible separation of the mass during tapping down. This parameter is very important in packing the material. During tapping of the sample, the smaller particles try to fit themselves in gaps of the larger particles and hence the total volume of the powder reduces

## 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



## FEATURES

- In addition to default frequency, user can freely set any rpm to meet special requirement
- In addition to tap number, user can freely set any tap number to meet special requirement
- Login either as Administrator or User. Only Admin can modify the setup, GMP compliance
- Flowability such as Hausner ratio or Compressibility are obtained during measure tap density
- Sample Loading Volume: standard 5-250 mL or as per request
- Test Results are saved to Database for record, GMP compliance. NEW
- 110/220V and plug available as per request
- Double work stations.
- Appearance is exquisite, light weight and size, reasonable structure for easy maintenance
- Tap density tester calibration such as Tap height selection, being printed on the test report
- New Generation of operating system, control the operation by 20X4 LCD
- During test the set parameters are visible to understand and evaluate working conditions

## SPECIFICATIONS

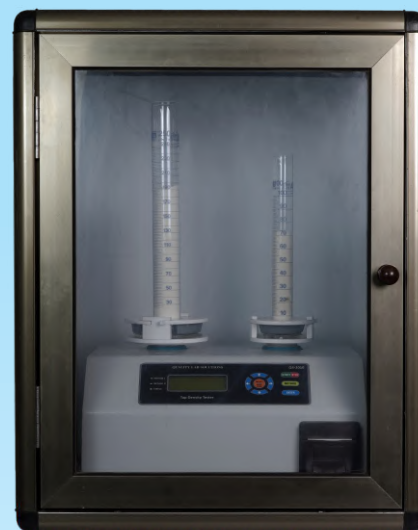
Model	QS-2010
No of stations	2 ( USP 1 ) ( USP 2 )
Stroke Height	14 mm $\pm$ 1 mm 300 strokes / minute ( USP 1 ) 3 mm $\pm$ 0.2 mm 250 strokes / minute ( USP 2 )
Parallel Port	For Printer
Power Supply	230 V AC, 50 Hz, 880 VA
No. of taps	1-9999
Display	20 x 4 character LCD
Dimensions	(L 330mm x W310 mm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



## PARTS & ACCESSORIES

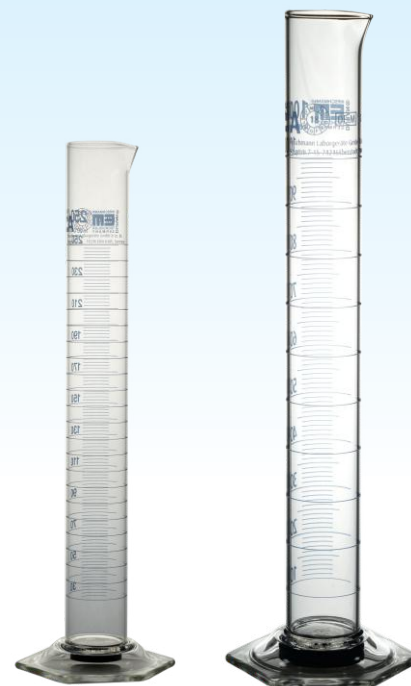
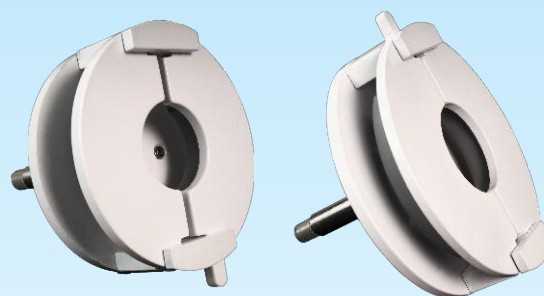
Standard Accessories.(In Scope of Supply)

Part Number	Description	Quantity
	Validated Measuring Cylinder 250ml Class "B"	1
	Validated Measuring Cylinder 100ml Class "B"	1
	250ml Cylinder Holder	1
	1000ml Cylinder Holder	1



## OPTIONAL ACCESSORIES

Part Number	Description	Quantity
	Acoustic cabinet ( sound cover to reduce high sound level to 71 db to meet laboratory standards )	1
	Validated Measuring Cylinder 250ml Class "A" With Calibrated Certificate	1
	Validated Measuring Cylinder 100ml Class "A" With Calibrated Certificate	1
	Validated Measuring Cylinder 50ml Class "A" With Calibrated Certificate	1
	Validated Measuring Cylinder 10ml Class "A" With Calibrated Certificate	1
	Membrane adapter for 10 ml cylinder	1
	Printer	1



# QUALITY LAB SOLUTIONS

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