



FRIABILITY TESTER QFR-200



#### **OVERVIEW**

Friability testing is used to test the durability of tablets during packing processes and transit. This involves repeatedly dropping a sample of tablets over a fixed time, using a rotating drum with a baffle. The result is inspected for broken tablets, and the percentage of tablet mass lost through chipping.

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.

#### **FEATURES**

- Fully USP <1216>, EP <2.9.7> and JP <14> compliant
- 5" TET LCD WITH TOUCH SCREEN
- Auto Unloading By Rotating in Reverse Direction.
- Determine friability and abrasion (optional) of uncoated tablets
- Programmable for number of drum revolutions or rotating time
- Connect a balance to determine the sample weight (optional, weight can be entered manually)
- Connect to RS485/232 Port to copy methods and store test reports
- Integrated protocol printer (optional)
- User and method management system
- Optional Abrasion Drums
- Optional 10Degree Angle Stand



## **PARTS & ACCESSORIES**

Included in the Standard Scope of Supply

- One friability drum made from Plexiglas
   (optional incl. anti-static coating), in compliance
   with the USP, EP and DAB pharmacopoeia
- Comprehensive documentation included (PDF, hardcopies optional):
- User manual
- DQ/QC instrument compliance test certificate
- IQ documentation
- OQ documentation
- Instrument logbook
- Compliance certificates









# **SPECIFICATIONS**

• 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



### **OPTIONAL ACCESSORIES**

- Friability drum with anti-static coating
- Tablet abrasion drum with lamellas
- 10° stand to test large samples
- Internal thermal printer

Tested by:\_

• Certified calibration tools (Digital Vernier, Angle Measuring Tool ,Stop Watch)



### SAMPLE TEST REPORT COMPANY NAME

Date:02/02/2019	Instrument ID:AD/QC1/001	Sr. no.:1902001	
Time:12:04:00		Model:Qfw-2	
Product Name: Sample test		Lot	
No.:AB/QC/T-102			
Batch No. :A-123			
Drum:Friability		No.of Drums: 2	
Mode:timer S	Set rpm :25		
Set Time: 00:04:00(hh:mm:ss)			
Initial weight of tablets in Drum 1:160.0mg			
Initial weight of tablets in Drum 2:180.0mg			
Final weight of tablets in Drum 1:157.0mg			
Final weight of tablets in Drum 2:179.0mg			
Result:			
Result:			
Weight loss of tablets in Drum1= 1.875%			
Weight loss of tablets in Drum2= 0.555%			
Remarks:			
Test: Complete			

# **QUALITY LAB SOLUTIONS**

Approved by:\_

- sales@qlsindia.com labspare@gmail.com
- www.qlsindia.com