

## Powders: Tapped Density Testers

A high reliability solution for routine measurement of the tapped density of powders, granules and similar products, the Copley JVi testers are the only single tapped density systems on the market that offer all three methods specified in Eur. Ph. and USP .

Available with either one or two test stations, the JVi tapped density series provides detailed reports, including Hausner ratio calculations for a wide range of industrial standards.



Ph. Eur. and USP  
Compliant



Adjustable stroke frequency  
control for accelerated or  
high sensitivity testing



Intuitive touchscreen  
control to simplify  
operation



One to two test station  
unit configurations



Supports Methods  
1, 2 and 3



Extensive data  
reporting output  
options



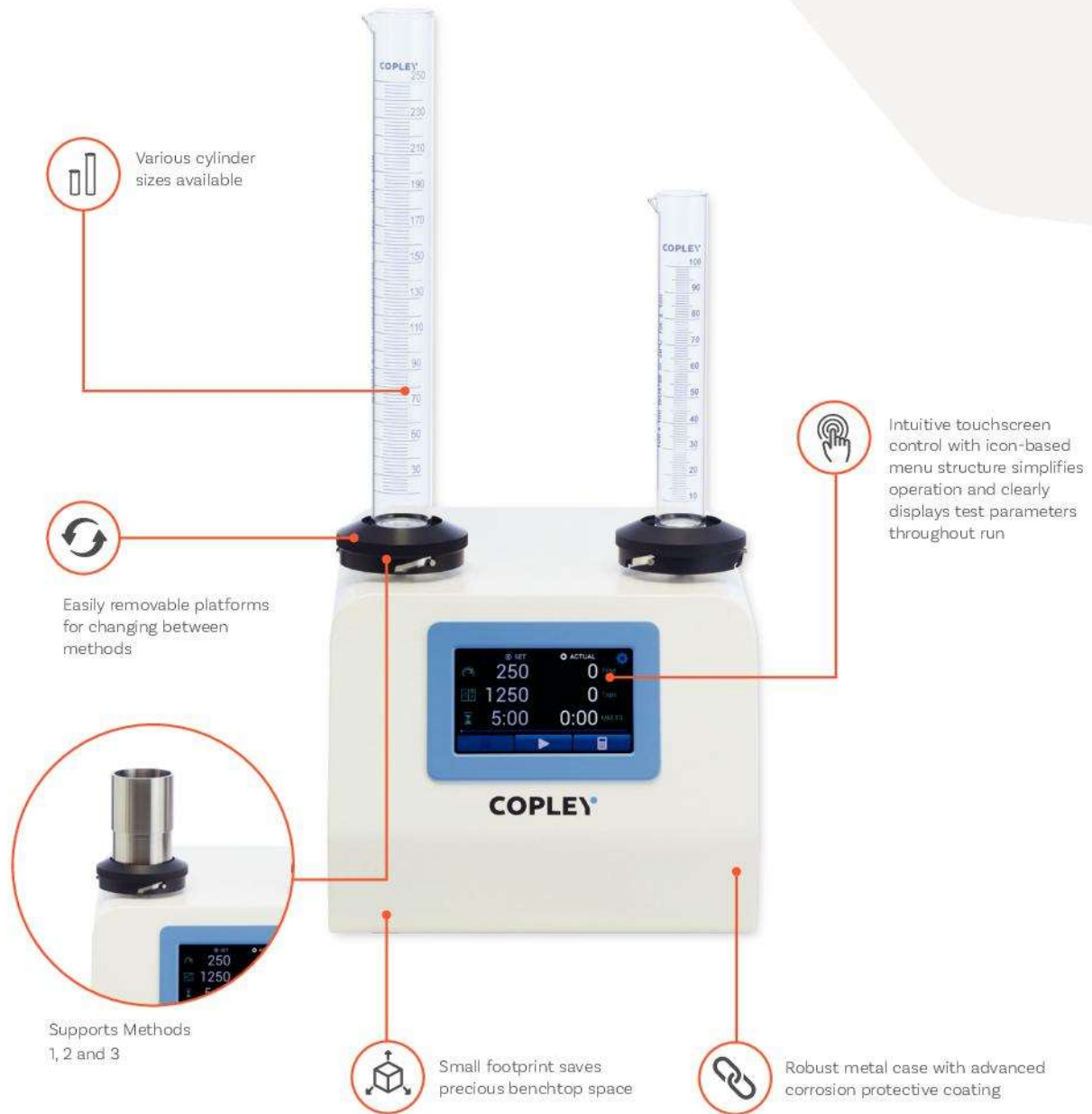
Integrated calculation  
of bulk density,  
tapped density,  
Hausner ratio and  
compressibility index



Option to automate  
and remotely control  
JVi systems



# JVi Series: Key Features



# JVi Series: Touchscreen User Interface



## Key Features:

- **Intuitive menu structure** enables users to locate features quickly and easily
- **Easy-set** user-configurable **test parameters**:
  - Test speed
  - Number of taps
  - Test duration
- Status of 'Actual' v 'Set' test **parameters clearly displayed** throughout testing
- **Test progress bar** provides clear and constant indication on run status
- Resistive touchscreen interface can be **operated with gloves on**
- Hygienic **wipe-clean** screen
- High productivity - **easy system set-up and operation** minimises training burden.
- **Calculation of**:
  - Bulk Density
  - Tapped Density
  - Hausner Ratio
  - Compressibility Index

- A** Setting a test parameter
- B** Calculation screen (before data entry)
- C** Set v Actual test parameters (before test run)
- D** Set v Actual test parameters (during test run), with test progress bar
- E** Calculation screen (after data entry)
- F** Settings menu
- G** Report output settings menu
- H** Motor speed (TPM) verification



## Reporting

Extensive data output options are available as standard, including direct reporting to a printer or PC.

### Reported parameters

- **Speed (taps per minute)**

Set  
Average  
Maximum  
Minimum



- **Number of taps**

Set  
Actual



- **Calculations**

Start weight/volume (g/mL)  
End weight/volume (g/mL)  
Bulk Density (g/mL)  
Tapped Density (g/mL)  
Hausner Ratio  
Compressibility Index (%)



## Compliance & Maintenance



- ✓ Certificate of compliance to Ph. Eur./USP provided as standard
- ✓ Comprehensive IQ/OQ/PQ documentation packages and toolkits available

## Choose your JVi Tapped Density System



**JV 100i**

**Cat Number**  
1631

**Test Station Capacity**  
1 Cylinder

**Eur. Ph and USP Test Methods Supported**  
1, 2, 3

**Unit Dimensions (w x d x h)**  
260 x 347 x 562 mm (with 250 mL cylinder)



**JV 200i**

**Cat Number**  
1632

**Test Station Capacity**  
2 Cylinders

**Eur. Ph and USP Test Methods Supported**  
1\*, 2, 3

\* Only one station available for this method

**Unit Dimensions (w x d x h)**  
260 x 347 x 562 mm (with 250 mL cylinders)



Acoustic Cabinet  
reduces the noise level  
produced by the JVi series unit



JV 200i with Method 3 platform

### JVi Series: Technical Specifications

<b>Pharmacopoeial Compliance</b>	Ph. Eur. 2.9.34 USP <616>
<b>User Interface</b>	Resistive touchscreen
<b>Test Duration Parameters</b>	Time or Taps
<b>Testing Run Time</b>	Up to 99 hours, 59 minutes, 59 seconds
<b>Test Station Capacity</b>	Up to 2 stations (1 left, 1 right)
<b>Data Output</b>	RS 232 USB Type A (for a USB printer) USB Type B (for communications with a PC)
<b>Methods Supported Details</b>	Method 1: 14 mm @ 300 taps/min Method 2: 3 mm @ 250 taps/min Method 3: 3 mm, 14 mm - 50/60 taps/minute
<b>Alarm</b>	End of testing (audible)

### JVi Series

Cat. No.	Description	Cat. No.	Description
1631-1	Tapped Density Tester JV 100i - Method 1, 250 mL Cylinder	1604	250 mL Measuring Cylinder (spare)
1631-2	Tapped Density Tester JV 100i - Method 2, 250 mL Cylinder	1605	100 mL Measuring Cylinder (option)
1631-3	Tapped Density Tester JV 100i - Method 3 - 3mm Drop	1635	Tapped Density Method 3 Cup
1631-4	Tapped Density Tester JV 100i - Method 3 - 14mm Drop	1643	Platform for use with 250 mL Cylinder - Method 1
1632-2	Tapped Density Tester JV 200i - Method 2, 250 mL Cylinders	1644	Platform for use with 250 mL Cylinder - Method 2
1632-3	Tapped Density Tester JV 200i - Method 3 - 3mm Drop	1641	Platform for use with 100 mL Cylinder - Method 1
1632-4	Tapped Density Tester JV 200i - Method 3 - 14mm Drop	1642	Platform for use with 100 mL Cylinder - Method 2
1603	IQ/OQ/PQ Documentation Pack	1645	Platform for use with Cup - Method 3 - 3mm Drop
1616	Qualification Tools	1646	Platform for use with Cup - Method 3 - 14mm Drop
1617	Re-calibration of Qualification Tools	1636	Acoustic Cabinet for JV100i / 200i
		1609	50 mL Measuring Cylinder Kit
		1610	25 mL Measuring Cylinder Kit
		1611	10 mL Measuring Cylinder Kit
		1612	5 mL Measuring Cylinder Kit