HFBTE Rotational Viscometer Adapter

HFBTE Rotational Viscometer Adapter Instruction Manual

For NDJ-1, NDJ-5S, NDJ-8S, NDJ-9S Viscosity Meters

Introduction

This manual provides instructions for the HFBTE Rotational Viscometer Adapter. This adapter is designed to be used with NDJ-1, NDJ-5S, NDJ-8S, and NDJ-9S viscosity meters, expanding their measurement capabilities. It includes rotor types 1#, 2#, 3#, and 4# for various viscosity ranges. Please read this manual thoroughly before use to ensure proper operation and maintenance.

Product Overview

The HFBTE Rotational Viscometer Adapter set includes various rotors and components for precise viscosity measurements. The components are typically stored in a protective case.

The HFBTE Rotational Viscometer Adapter set comes in a durable, protective case for safe storage and transport.

Inside the case, the adapter components, including various rotors and shafts, are securely held in foam cutouts.

A view of the individual components of the viscometer adapter, including the main body and different rotor types.

Detailed view of the four different rotor types (1#, 2#, 3#, 4#) included in the adapter set, designed for varying viscosity ranges.

Another perspective of the adapter components, showing their precise fit within the protective foam lining of the storage case.

This image highlights the main adapter components as they are stored in the case, ready for assembly.

Product Video

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This video demonstrates the HFBTE Rotational Viscometer Adapter components, showing how each rotor is handled and stored within its protective case.

Setup

1. **Unpacking:** Carefully remove all components from the protective case. Inspect for any visible damage.
2. **Viscometer Preparation:** Ensure your compatible viscometer (NDJ-1, NDJ-5S, NDJ-8S, or NDJ-9S) is clean and powered off.
3. **Rotor Selection:** Choose the appropriate rotor (1#, 2#, 3#, or 4#) based on the expected viscosity range of your sample. Refer to your viscometer's manual for rotor-to-viscosity range correlation.
4. **Attaching the Rotor:** Gently screw the selected rotor onto the viscometer's spindle shaft. Ensure it is securely fastened but do not overtighten.
5. **Leveling:** Confirm the viscometer is level before proceeding with measurements.

Operating Instructions

1. **Sample Preparation:** Prepare your sample according to standard laboratory procedures. Ensure the sample is at the desired temperature.
2. **Immersion:** Carefully lower the viscometer with the attached rotor into the sample. Ensure the rotor is fully immersed and positioned correctly, avoiding contact with the bottom or sides of the sample container.
3. **Power On:** Turn on the viscometer.
4. **Setting Parameters:** Set the desired rotational speed (RPM) on your viscometer. Consult your viscometer's manual for guidance on appropriate speeds for your sample and rotor combination.
5. **Measurement:** Initiate the measurement process on the viscometer. Allow the reading to stabilize before recording the viscosity value.
6. **Repeat Measurements:** For accuracy, perform multiple measurements and average the results.
7. **Cleaning After Use:** After completing measurements, turn off the viscometer, carefully remove it from the sample, and proceed to the cleaning steps.

Maintenance

- **Cleaning Rotors:** Immediately after use, clean the rotors and adapter components thoroughly with an appropriate solvent that will not damage the materials. Ensure all sample residue is removed.
- **Drying:** Dry all components completely before storage to prevent corrosion.
- **Storage:** Store the adapter components back in their protective case in a clean, dry environment, away from direct sunlight and extreme temperatures.
- **Inspection:** Periodically inspect rotors for any signs of wear, bending, or damage. Damaged rotors can lead to inaccurate measurements and should be replaced.

Troubleshooting

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Inaccurate Readings	Incorrect rotor selection; Rotor not clean; Viscometer not level; Sample temperature not stable; Rotor damaged.	Verify rotor type for sample viscosity; Clean rotor thoroughly; Ensure viscometer is level; Stabilize sample temperature; Inspect and replace damaged rotor.
Rotor not spinning freely	Rotor touching container sides/bottom; Viscometer spindle bent; Obstruction.	Adjust rotor position in sample; Check viscometer spindle for damage; Remove any obstructions.
Difficulty attaching rotor	Threads misaligned or dirty; Overtightened previously.	Clean threads on rotor and spindle; Ensure correct alignment before screwing.

Specifications

Feature	Detail
Rotor Types	1#, 2#, 3#, 4#
Compatibility	NDJ-1, NDJ-4, NDJ-5S, NDJ-8S, NDJ-9S Viscosity Meters
Manufacturer	HFBTE
Included Components	Viscometer Adapter (set of rotors)
Parcel Dimensions	20 x 12 x 6 cm
Country of Origin	China

Warranty and Support

For warranty information or technical support, please contact your supplier or the manufacturer directly. Refer to your purchase documentation for specific warranty terms and contact details.
Manufacturer: HFBTE