|  |  |
| --- | --- |
| **VIBRATORY SIEVE SHAKER** | **Name of the equipment:**  Vibratory Sieve Shaker  **Make & Model**  Retsch, Germany AS 300 CONTROL  **I-Stem Registration ID-**    **Category of Instrument:**  Particle Size Analysis  **Types of Analysis / Testing:**  Granulometric (sieve) analysis  **Application:**  Separation and classification of particles based on size  **Description of Instrument**  The Vibratory Sieve Shaker uses controlled vibrations to separate particles through a stack of sieves, enabling accurate determination of particle size distribution in powders and granular materials. |

**Booking Details**

|  |  |
| --- | --- |
| **Book through I-STEM:**  <https://www.istem.gov.in/>  **Slot Booking Link**  I-STEM Slot Booking link for External User | **Booking available for**  Internal and External Both  **Requisition form for**  Internal  External |

**Contact Details**

|  |  |  |
| --- | --- | --- |
| **Faculty In-charge:**  Dr. Murali KP  **Email ID:**  [kpmurali@nitc.ac.in](mailto:kpmurali@nitc.ac.in)  **Phone number:**  0495-2286414 | **Technical Staff:**  Sanal PR (TA SG I)  [sanal@nitc.ac.in](mailto:sanal@nitc.ac.in)  Jithin Krishna M (TA)  [jithinkrishnam@nitc.ac.in](mailto:jithinkrishnam@nitc.ac.in)  Jijeesh k (ST)  [jijeeshk@nitc.ac.in](mailto:jijeeshk@nitc.ac.in) | **Department**  MED  **Office Email ID**  [medoffice@nitc.ac.in](mailto:medoffice@nitc.ac.in)  **Location**  Material Science Lab  Production Block  **Lab Phone No**  0495-2286450 |

**Features, Working Principle and Specifications**

* **Feed material**: powders, bulk materials, suspensions
* **Measuring range\***: 20 µm - 40 mm
* **Sieving motion:** throwing motion with angular momentum
* **Max. batch / feed capacity** :6 kg
* **Max. number of fractions:** 11 / 17
* **Max. mass of sieve stack** :10 kg
* **Amplitude**: digital, 0.20 - > 2.20 mm
* **Controlled amplitude:** Yes
* **Sieve acceleration** :1.0 - > 10.0 g
* **Time display:** digital, 1 - 99 min
* **Interval operation:** 1 - 99 s
* **Storable SOPs:** 99
* **Suitable for dry sieving:** Yes
* **Suitable for wet sieving:** Yes
* **Serial interface:** Yes
* **Including test certificate / can be calibrated:** Yes
* **Suitable sieve diameters:** 100 mm / 200 mm / 203 mm (8") / 305 mm / 315 mm
* **Max. height of sieve stack:** 510 mm
* **Clamping devices:** standard, "comfort", each for wet and dry sieving
* **Protection code:** IP 21
* **W x H x D:** 417 x 220 x 384 mm
* **Net weight:** ~ 42 kg

**Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions**

|  |
| --- |
| * Sample Type: powdered samples * Maximum No. of Samples Accepted at a Time- 1 * Minimum No of Days Required for Analysis – 2 Days |

**User Charges Rs. (GST Extra)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Internal** | **External Academic Institutes** | **National R&D Lab** | **Industry** |
| 300/- per hour | 600/- per hour + GST | 600/- per hour + GST | 600/- per hour + GST |