

FLODEX™ POWDER FLOWABILITY

POWDER FLOWABILITY TESTING SYSTEM

The Teledyne Hanson Flodex™ tester provides a simple technique for assessing a broad range of materials in powder form. Raw materials may vary in significant ways when coming from different suppliers or different lots/batches. Such variations can affect the powder's ability to flow freely when loaded into manufacturing equipment, thereby disrupting the quality and efficiency of the manufacturing process.

The Flodex is an easy-to-use tool for determining the flowability index of a powder over an arbitrary scale of 4 to 40. This index can be used as a specification for raw materials. The test takes into account numerous parameters that affect powder flowability such as:

- Particle size and shape
- “Fines”
- Unit surface area
- Actual density and bulk density
- Porosity
- Settling characteristics
- Electrostatic charges

The Flodex intrinsic flowability method is based on the ability of a powder to fall freely through an orifice in a disk. The system comes with a set of 19 disks with orifices sizes ranging from 4 mm to 34 mm. When used in pharmaceutical manufacturing applications the Flodex system is fully compliant with USP <1174> Powder Flow.

INTRINSIC FLOWABILITY

For technical details see “Intrinsic Flowability: A New Technology for Powder-Flowability Classification” by Dr. Alberto Gioia, published in Pharmaceutical Technology Magazine (Feb. 1980). Reprints of this article are available from Teledyne Hanson (document number 99-380-001).



SPECIFICATIONS

Dimensions: 31 cm W x 41 cm H x 23 cm D

Weight: 4 kg

Disk orifice sizes (mm) 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34.

FLODEX™ POWDER FLOWABILITY



FLODEX FEATURES:

- Compliant with USP <1174> Powder Flow
- Consistent and repeatable index of flowability
- Easily operated by non-technically trained personnel
- Enables rapid flowability testing during setup and before filling of manufacturing equipment
- Includes a full set of disks compatible with a wide variety of powder materials
- Stainless steel funnel discharges electrostatic potential that can build up between particles of powder
- Ideal for use in purchasing, receiving, and quality assurance specifications
- Helps to avoid a high coefficient of variation in product uniformity
- Accommodates materials used in manufacturing of pharmaceutical dosage forms, coffee, sugar, plastics, powder coating materials, and more.

ORDERING INFO

For more information, please contact your local Teledyne Hanson representative or email us at:

hansonsales@teledyne.com

21-101-050 Flodex Test System — Complete
Includes a set of 19 disks.

21-101-055 Flodex Index Disk Kit (extra set)



9810 Variel Avenue
Chatsworth, CA 91311 USA

Phone +1 818.882.7266
www.teledynehanson.com

© Teledyne Hanson, a division of Teledyne Instruments, Inc. | 99-310-038 Revised 10 January 2020