Technical Specifications

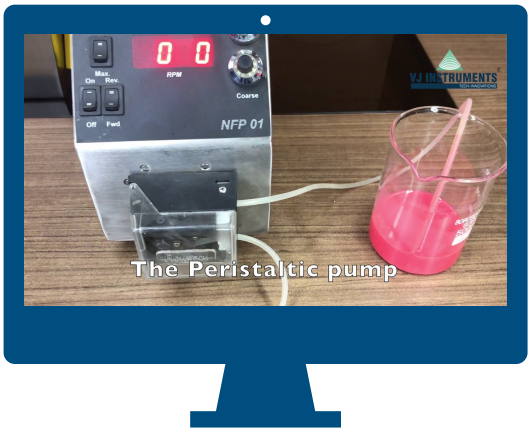
VJ INSTRUMENTS®
TECH-INNOVATIONS

Fluid bed Processor (Coater)

Model No- VJFBP-01
Bottom (Wruster Coating) & Top Coating

WATCH NOW

WATCH NOW



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About VJ Instruments

At VJ Instruments, we're not just a pharmaceutical instruments manufacturer; we're a driving force behind scientific innovation in the fields of Pharmacy and Pre Clinical research. Since our inception in 2006, we have continually strived to revolutionise the industry by delivering world-class products that not only meet rigorous quality standards but also prioritise ease of use

Our team comprises seasoned professionals with extensive experience in the pharmaceutical industry and academia. We have a proven track record of excellence and a deep understanding of the unique challenges and requirements of the field.

Our Products are specifically meant for small animal behaviour research as well as tools used in R&D, pilot drug development. We also deal with innovative custom-based requirements, tailoring solutions to the specific needs of our clients.

Customer Support

At VJ Instruments, we recognise that our clients need to maximise their ROI over the entire lifecycle of ownership. For our clients, machine downtime is not acceptable. To support them, we maintain a dedicated team of service engineers.

Technical Support and Repair

Live and immediate technical support is available using all major communication tools.

Standard on-site response time.

Value Added Services

We offer our clients value-added services so that they can run their machines with the highest efficiency over time.

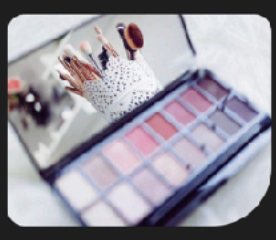
- Operator training programs
- Annual maintenance contract
- Machine upgrade consultations

*Terms & condition apply.

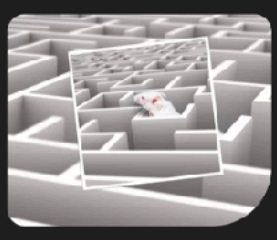
Industries we Serve


PHARMACEUTICALS


FOOD


COSMETICS


NUTRACEUTICALS


PRE-CLINICAL

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Fluid Bed Processor

VJ Instruments has introduced the Fluid Bed Processor, a revolutionary dryer and coater, adapted to handle smaller trial batches of pellets. Our new fluid bed processor offers multiple processing providing both flexibility and cost benefits.

Bottom-Spray Coating (Wurster coating)

This processing option uses the energy and controls the fluid bed to create a pneumatic mass transport inside a special insert, which is consisted of a perforated bottom screen with defined free areas.

This uniform statistical residence time of all particles in the coating zone results in a very uniform coating. Due to the high kinetic energy provided by the pneumatic mass flow moist particles are separated, as such allowing the individual coating of even very small particles. Due to the nozzle being positioned directly inside the product and concurrently spraying a premature viscosity change of the coating droplet is avoided. All these features result in the highest possible coating quality, which is imperatively required to produce defined and reproducible drug delivery profiles.

Top-Spray Coating

Spray coating can be used for all fluid bed systems, be it in batch or continuous operation or if the film is applied from a sprayed solution or suspension. For this processing option from the parameters has to be chosen to avoid agglomeration, i.e. liquid bridges between the air suspended particles.

If spraying a solution or suspension the liquid only serves as a vehicle to deliver the coating material to the surface of the substrate. The quality of the coating extensively depends on the statistical residence time of the particles in the coating zone. For a classic fluid bed unit only top-spray coating is possible. Bottom- spray arrangement can be made by the replacement of container. A perfect film is generally not required for this function, but care must be taken that the droplets should not be too viscous before touching the substrate, in order to maintain a good spreadability. As however neither the particle motion, nor the travel distance of droplet from nozzle to substrate is uniform, the film structure is generally rather porous, but nevertheless measuring up to the above described requirements.

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Salient Features

- Compact GMP Model.
- All contact parts made from Stainless Steel 316 with non-contact part made from Stainless Steel SS304
- All Contact parts are mirror polished to 220 Grit and external surface to matt finish of 180 Grit.
- Uniform Coating.
- Short batch time and reduce cleaning time.
- Air Purge System for filter bags.
- All internal contract parts are polished to the mirror finish.
- PLC based operating panel for precise control of process & automation.
- The heater heats the inlet air to the desired temperature required to dry the pellets. It can be controlled to deliver the air from ambient to 90 C.
- Spray guns is provided which fits in both top and bottom spray coating. The spray gun delivers droplets for the coating solution on the pellets. Its superb performance is achieved by the use of a new range of nozzles made up of SS-316 and metered dozing with the help of peristaltic pumps. It is easily adjust- able along with its standard. You can achieve droplet size from 50 to 5000 micron depending on viscosity of solution. Standard nozzle size of spray guns is 1 mm and customised sizes are also available as per the requirement.
- Peristaltic pump delivers exact amount of solution to the spray gun through silicon pipe.
- All In addition to handling aqueous as well as organic film coating systems, it is extremely portable. An advance control panel helps you to monitor and record all the settings for the Fluid bed processor. Coating bowl is consisted of central cylindrical portion fabricated from SS- 316 quality material.. A Glass Cylinder is provided on the upper cylinder to have view while coating.

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Sr. No.	Specification	Details
1	Certificate	GMP, ISO,CE
2	Capacity	700 ml, (50 gm - 400 gm)
3	Type	Standard Unit GMP Model
4	Spray Gun	Head - Single 1.00- 4.00 mm bore size with wall thickness of 1.5mm. Display - 3 digit LED display for RPM Duel Roller with spring loaded Truck.
5	MOC	Contact part SS316 & Non contact part SS304
6	Peristaltic Pump	1 to 100 rpm.
7	HMI Display	4.3” Vivid Colour Touch HMI.
8	Temperature Controller	Ambient to 90 degree celsius.
9	Temperature Sensor	PT 100
10	Quality Assurance	Design, manufacture, installation & documentation in accordance with Good manufacturing practice.
11	Finish	Product contact parts internally finished to mirror. Externally finished to dull matt.
12	Electrical rating	220V, 50 Hz, 1-phase
13	Dimension with pan	710 mm (L) X 400 mm (W) X 860 mm (H)
14	Weight	110 Kg (Approximate) 160 kg with packing (Approximate)

Note- Fluid bed machine need compress Air.

Compressor Air with minimum 41.5 CFM @ 7 KG/CM2 Bar Pressure, 270 ltr Tank, Oil free with dryer.

Above Supply should be provided by Client.

Note - Upgrading design is continuous process.

1. All the images displayed in the offer are for representation purpose only but actual may vary.
2. Dimension & weight may vary

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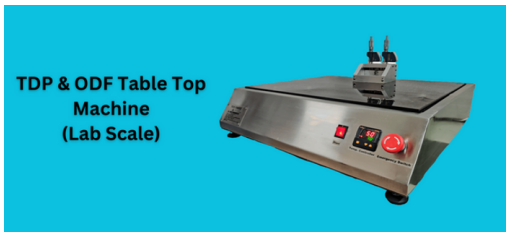
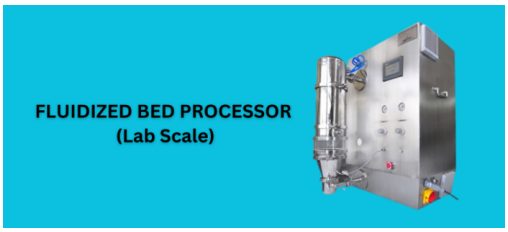
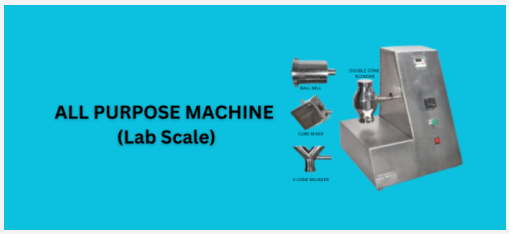
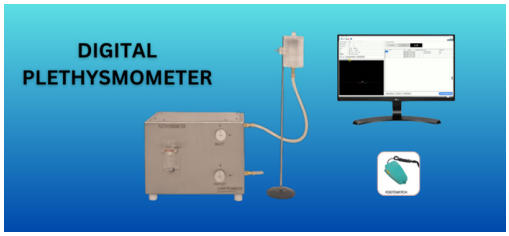
Some of Our Other Instruments.

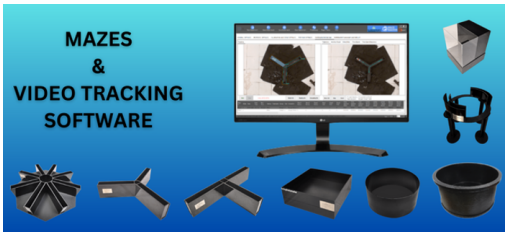
https://www.vjinstruments.com/products/











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International Clients

hikma. Medisca Seedcare syngenta Global Y.S.P. SAH
helicon Комплексное оснащение лабораторий с 1997 года
FITABEO THERAPEUTICS
VIRA RAHESH PHARMED
DEC PHARMACEUTICAL COMPANY
Astron Estd. 1956

Industrial Clients

Akums
fertin India a Fertin Pharma Company
LUPIN
HILTI
Incozen
inventia
MEDCHEM
TATA CONSUMER PRODUCTS
iPHARMED
MOREPEN The Joy Of Growing Together
KASHIV BIOSCIENCES
BELLATRIX AEROSPACE Propelling Dreams
MICRO LABS
nsr
ETONEX LABORATORIES PVT. LTD.
Talent Healthcare
LEBEN LIFE SCIENCES Responsible Healthcare
Rusan A TECHNOLOGY DRIVEN ENTERPRISE
Optimus
AUXILLA Pharmaceuticals And Research LLP
YUTIKA Natural Private Limited
NuLife
Sai
CRYSTAL BIOLOGICAL SOLUTIONS
UMESH MODI GROUP MODNAGAR
AMTZ

IITs, AIIMS, CSIR, Goverment & Private Institute

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DRDO
KOLKATA
AIIMS New Delhi
NEERI
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DPU
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NIPER GUWAHATI
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MIT-WPU
Bombay COLLEGE OF PHARMACY Estd 1957 Autonomous
KAKATIYA UNIVERSITY

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