



ENCAPSULATION

Concept Range

High Shear Granulator

This design of granulation is for high shear wet granulation, pelletization, etc. suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

Variable speed mixer and chopper.
Mixer torque %.
Glass vessel for 300-700 gms/batch and / or 100-200 gms/batch.
Liquid dosing system.
Product temperature measurement.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by Allen Bradley controller & 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.



OPTIONAL FEATURES :

Stainless steel bowls, Jacketed vessels for melt granulation & pelletization.
Together with a fluid bed you get a complete granulation / drying and coating suite.

THROUGHPUT / OUTPUT :

Model	UHSM - 1	UHSM - 3 / 5
Capacity	150 - 800 gms/batch	1 - 5 kgs/batch

UICE Lab

A Fully integrated extruder and spheronizer for , pelletization, etc. suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.



STANDARD FEATURES :

Cone extruder with feed hopper.
Variable speed for extruder (20-100 rpm), spheronizer (50-1500 rpm).
Standard set-up 1mm, optional size of cone meshes (0.4 / 0.5 / 0.6 / 0.8 / 1.0 / 1.2 mm).
Drum diameter standard 150mm (250 gms/batch) / Optional 75mm (25 gms/batch).
Standard chequered plate : 3.2mm Optional (1mm, 2mm, 3.2mm, 6.5mm).
Recording of critical process data in 21 CFR part 11 certified software.
Controls by 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.

OPTIONAL FEATURES :

Radial extrusion head with various mesh size (0.3 / 0.4 / 0.5 / 0.6 / 0.8 / 1.0 / 1.2 or any size).
Teflon coated drums. Various sizes of chequered plate as indicated above.

THROUGHPUT / OUTPUT :

Model	UICE - LAB	UICE - 20 (with USPH- 380)
Capacity	20 - 1000 gms/batch	5 - 15 kgs/hr

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Mini Lab

This design of bottom spray wurster coating and top spray for wet granulation, pelletization, etc. suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

Stainless steel processing bowl top spray 100 - 500 gms.
Stainless steel processing bowl bottom spray 100 - 400 gms.
Optional bowl for both 50 - 200 gms. (1ltr.).
Process air filter & Exhaust fan.
Inlet air heater.
Liquid dosing system by speed controlled peristaltic pump (volume is optional).
Recording critical process parameters like air flow, temperature, etc.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.



OPTIONAL FEATURES :

Organic solvent processing.
Rotor attachment available with selected machine models.

THROUGHPUT / OUTPUT :

Model	MINI LAB	UFBM - 1	UFBM - 3
Capacity	20 - 500 gms/batch	300 - 800 gms/batch	1 - 3 kgs/batch

Mini Dryer



A fully integrated fluid bed dryer for drying pellets, granules, powder, tablets, etc. suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

Stainless steel processing bowl top spray 200 - 500 gms. drying capacity.
Stainless steel 3 bowl attachment processing bowl for drying 20 - 50 gms. of material.
Optional bowl for both 50-200 gms. (1 ltr.).
Suction blower fan.
Inlet air heater.
Acrylic boor for the bowl to ensure the product material inside the acrylic chamber.
Recording critical process parameters like air flow, temperature, etc.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.

OPTIONAL FEATURES :

Organic solvent processing.
Together with a granulator you get a granulation / drying and coating suite.

THROUGHPUT / OUTPUT :

Model	MINI DRYER - 1	MINI DRYER - 3 / 5
Capacity	0.3 - 1 kg/batch	3 - 5 kgs/batch

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Pan Coater

Small Scale Pan coater, with 6" & 8" size perforated pans suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

Two drum sizes as standard with the machine 6" and 8" perforated pans.
Variable drum speed (3 - 40 rpm).
Electrical heating of inlet air & Pulling air fan.
Stainless steel perforated drum has a plexi door and housing.
Product temperatures measurement & Integrated peristaltic pump for coating.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by Allen bradley and 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.



OPTIONAL FEATURES :

Stainless steel Cabinet, Inlet air filtration.
Together with a fluid bed you get a complete granulation / drying and coating suite.

THROUGHPUT / OUTPUT :

Model	UPCC - 6 / 8	UPCC - 12 / 15
Capacity	50 - 500 gms/batch	1 - 3 kgs/batch

Mini Dryer



A Fully integrated mouth dissolvable film line for , making edible / oral strips, etc. suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

Variable speed of base film, product coating by uniform doctor blade principle.
Uniform air flow throughout the machine.
Liquid dosing system.
Product temperatures measurement.
Stainless steel 316 contact parts rest stainless steel 304, mirror high quality finish.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by Allen bradley and 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.

OPTIONAL FEATURES :

Cutting line for cutting into small uniform strips & individual strip packing line.
Homogenizers and mixing tanks for integrations for a complete MDF suite.

THROUGHPUT / OUTPUT :

Model	UMDF - LAB	Homogenizer	Packing and Cutting
Capacity	25 strips/min	1 ltr/batch	Manual machine

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Homogenizer

A Fully integrated semi-solid homogenization, gelification and suspension equipment, suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

- Variable speed high speed homogenizer (high flow and low shear).
- Size reduction till 5 microns, rotation clock and anti-clockwise.
- Variable speed contra-rotating mixing arms with wall scrapers.
- Mixer torque (%). Jacketed glass process vessel (0.5 - 1.5 ltrs / batch).
- Product temperatures measurement.
- Recording of critical process data in 21 CFR part 11 certified software.
- Controls by Allen bradley and 12.1" IPC by a touch panel control with trends.
- Report on Excel file can be exported to USB to view on computer.



OPTIONAL FEATURES :

- Powder dosing funnel with ball valve, Vacuum pump with pressure control.
- Stainless steel jacketed process vessel.

THROUGHPUT / OUTPUT :

Model	UHOM - 1 / 3	UHOM - 5 / 10
Capacity	1 ltr / 3 ltrs /batch	5 ltrs / 10 ltrs /batch

Spray Dryer



A Fully integrated spray drying unit for dryer / chiller for small and large slurry samples. suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

- Electrical heating module for inlet air temperature up to 180 deg. cen.
- Bi-fluid spray nozzle & unique air - flow control system.
- Filtered air, can be heated for spray drying or cooled for spray chilling applications.
- Glass process column and twin cyclone assembly.
- Due to modern design can handle highly unstable temperature sensitive materials.
- Recording of critical process data in 21 CFR part 11 certified software.
- Controls by Allen bradley and 12.1" IPC by a touch panel control with trends.
- Report on Excel file can be exported to USB to view on computer.

OPTIONAL FEATURES :

- Chiller for inlet air.
- Different design of spray nozzle and organic solvent processing.

THROUGHPUT / OUTPUT :

Model	UMSD - 1	UMSD - 3
Capacity	20 - 900 ml/hr	2 - 3 ltrs/hr

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Solid Drug Layering

Drug layering is the new pelletization range that builds on the proven Umang technology a its operational benefits. Similar design of loss in weight twin screw feeder, rotating plate or spray gun for liquid ensures that process and validation wise there is no difference to the layering process from a laboratory scale to a production scale. This unique design of twin screw feeder, plate and spray nozzle makes the not only a perfect drug layering machine it also an ideal machine suited for fast pelletization.

STANDARD FEATURES :

Variable speed high speed homogenizer (high flow and low shear).
Size reduction till 5 microns, rotation clock and anti-clockwise.
Variable speed contra-rotating mixing arms with wall scrapers.
Mixer torque (%). Jacketed glass process vessel (0.5 - 1.5 ltrs / batch).
Product temperatures measurement.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by Allen bradley and 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.



OPTIONAL FEATURES :

Powder dosing funnel with ball valve, Vacuum pump with pressure control.
Stainless steel jacketed process vessel.

THROUGHPUT / OUTPUT :

Model	UHOM - 1 / 3	UHOM - 5 / 10
Capacity	1 ltr / 3 ltrs /batch	5 ltrs / 10 ltrs /batch

UFBM - 1



A Fully integrated spray drying unit for dryer / chiller for small and large slurry samples. suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

Electrical heating module for inlet air temperature up to 180 deg. cen.
Bi-fluid spray nozzle & unique air - flow control system.
Filtered air, can be heated for spray drying or cooled for spray chilling applications.
Glass process column and twin cyclone assembly.
Due to modern design can handle highly unstable temperature sensitive materials.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by Allen bradley and 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.

OPTIONAL FEATURES :

Chiller for inlet air.
Different design of spray nozzle and organic solvent processing.

THROUGHPUT / OUTPUT :

Model	UMSD - 1	UMSD - 3
Capacity	20 - 900 ml/hr	2 - 3 ltrs/hr

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True Sifter

Drug layering is the new pelletization range that builds on the proven Umang technology and its operational benefits. Similar design of loss in weight twin screw feeder, rotating plate and spray gun for liquid ensures that process and validation wise there is no difference to the layering process from a laboratory scale to a production scale. This unique design of twin screw feeder, plate and spray nozzle makes the not only a perfect drug layering machine but also an ideal machine suited for fast pelletization.



STANDARD FEATURES :

Variable speed high speed homogenizer (high flow and low shear).
Size reduction till 5 microns, rotation clock and anti-clockwise.
Variable speed contra-rotating mixing arms with wall scrapers.
Mixer torque (%). Jacketed glass process vessel (0.5 - 1.5 ltrs / batch).
Product temperatures measurement.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by Allen bradley and 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.

OPTIONAL FEATURES :

Powder dosing funnel with ball valve, Vacuum pump with pressure control.
Stainless steel jacketed process vessel.

THROUGHPUT / OUTPUT :

Model	UHOM - 1 / 3	UHOM - 5 / 10
Capacity	1 ltr / 3 ltrs /batch	5 ltrs / 10 ltrs /batch

True Spheres

A Fully integrated spray drying unit for dryer / chiller for small and large slurry samples. suitable for pre-formulation development, formulation assurance, process consistency applications and academic laboratory use.

STANDARD FEATURES :

Electrical heating module for inlet air temperature up to 180 deg. cen.
Bi-fluid spray nozzle & unique air - flow control system.
Filtered air, can be heated for spray drying or cooled for spray chilling applications.
Glass process column and twin cyclone assembly.
Due to modern design can handle highly unstable temperature sensitive materials.
Recording of critical process data in 21 CFR part 11 certified software.
Controls by Allen bradley and 12.1" IPC by a touch panel control with trends.
Report on Excel file can be exported to USB to view on computer.

OPTIONAL FEATURES :

Chiller for inlet air.
Different design of spray nozzle and organic solvent processing.

THROUGHPUT / OUTPUT :

Model	UMSD - 1	UMSD - 3
Capacity	20 - 900 ml/hr	2 - 3 ltrs/hr

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Umang was inception in the year 1982, with an objective to serve the clients with all kinds of equipments and accessories under one roof. Within a very short span of time, we succeeded to be the most reliable brand name in the market supplying equipments and solutions to the Pharmaceutical industry for Pelletization and granulation solutions.

In 2007, the company ventured into solutions for Personal care industry majorly focusing on Oral care products, giving encapsulated ingredients for cooling applications. In 2009, the company further integrated it self to give solutions for Bakery and food applications like Chewing gum, mouth dissolving films etc. Today the company has three major divisions : Personal care, Bakery and food ingredients, Pharmaceutical division for innovative dosage form development. "Sprinkles N More" brand started in 2011 for complete retail solutions for bakery decoration / coloring solutions.

Pelletization & Edible Film



Complete engineering equipment solutions like Pelletization : Extrusion, spheronization, layering, Granulation, Fluid bed Coating, drying and Edible film line for innovative dosage form.

Websites:
www.umangpharmatech.com
www.umangengineering.com
www.extruderspheronizer.com

Laboratory range of equipment solutions like Pan coating, Sphericity checking, Laboratory edible film line, High shear mixers / Homogenizers, Extrusion & Spheronization, etc.

Websites:
www.concept-machines.com
www.coating-machines.com

Concept Range



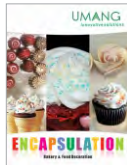
Personal Care & Home Care



Encapsulation of oils, fragrance, flavors, actives, extracts, vitamins, etc. & Visual effects for all kinds of Home & personal care products, with customization as per customer needs.

Websites:
www.umangpharma.com
www.cosmeticbeads.com

Bakery & Food Decoration



Bakery decoration products like Luster/ disco/ edible dust, edible glitter, Sparkling jimmies / pearls/ sugars, etc. for all kinds of Baking / Ice cream decoration needs in bulk / retail packs.

Websites:
www.umangpharma.com
www.edibleglitters.com
www.ediblefilm.co.uk

Pharmaceutical & Nutraceutical



Encapsulation solutions for Pharma industry, technology like SR, IR, Pulsed, Edible films, etc., with customization as per customer needs & out licensing of products with/without equipments.

Websites:
www.umangpharmaceuticals.com
www.pharmaceuticalpellets.com
www.pharma-spheres.com

Neutral Pellets & Coating Polymers



Complete range of Sugar / MCC / Tartaric acid / Lactose / Manitol / Starch / Calcium carbonate pellets / beads / Acrylic coating polymers for Pharmaceutical coating like L-30D, L-100 & E-100.

Websites:
www.umangpharmaceuticals.com
www.micro-pellets.com
www.pharma-spheres.com

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