PHARMA

Engineers & Consultant

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ABOUT US

Nu Pharma Machinery was setup in **2005** with the objective to develop & provide process technology offering of international standard **Nu Pharma** has full fledge manufacturing setup with proper infrastructure to produce equipment which are as per cGMP STD, Energy efficient and with design that have high level of performance & reliability.

Nu pharma machinery is certified with ISO and CE standard to achieve systemized manufacturing excellence

Mission & Vision

Our Mission
To provide technical excellence through innovation, teamwork and commitment

Our Vision
To be a leading company in in the field of Pharmaceutical Process technology

Qualification Documents

RAPID MIXER GRANULATOR

High Shear Mixer Granulator series is characterized by the compact construction, modern design and all the user and maintenance friendly attributes which form the ergonomics design aspects are essential for a wide range of application.

The High Shear Mixer Granulator performs dry mixing & wet granulating by basic design of the special arm of the mixing impeller and sequences of the mixing process in the cylindrical mixing drum with rounded connection to the base plate, achieve another special effect. The mixing process runs without varying pressure zone in the volume of mixing product.

Advantages:

- Mixing, massing and granulation are all performed within a few minutes in the samepiece of equipment. Gravity loaded
- Unit formula maintained
- Forms desired wet granule rapidly
- Less wetting and more rapid drying
- Homogeneously dry mixes quickly: color distribution is excellent; caneliminate premixes of addition by geometric progression

RANGE:

Model	Gross Capacity (L)	Working Capacity (L)
RMG 10	10	8
RMG 50	50	25
RMG 150	150	120
RMG 250	250	200
RMG 300	300	240
RMG 400	400	320
RMG 600	600	480
RMG 800	800	640

Applications:

Rapid Mixer Granulators (RMG) are primarily used for tablet manufacturing process which requires homogenous mixing, controlled granule size and at the same time assuring great reduction in processing time.

FLUID BED DRYER

Fluid bed dryer is a process unit for Drying of granulated materials for solid dosage forms in batch operations. The Fluid Bed Processor is designed for Drying, Granulating and Coating.

The processor runs in batch operation. The heated inlet air homogeneously flows through the special designed perforated sheet into the product vessel, fluidizes the product and keeps it in constant motion. This ensures an excellent heat transfer and high drying rate. Integrated jet filters separate the product area from the pure gas area. The product particles are held back in the processor and retained in the process. The process air leaves the processor at the top.

Advantages:

- Drying, Granulating & Coating in one unit.
- High Degree of flexibility.
- Quick & easy filter replacement.
- Easy cleaning.
- Flameproof Construction.
- Easy Cleaning.
- Customized units.
- Turnkey units.
- CONIDUR® sieve (optional)

RANGE:

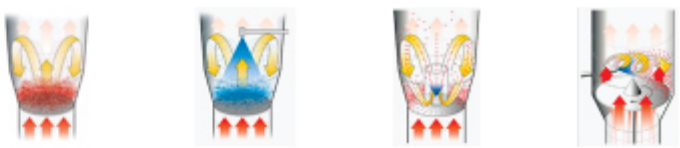
Model	Maximum Capacity	Minimum Capacity
FBD 5	5 kg	2.5 kg
FBD 10	10 kg.	5. kg
FBD 20	20 kg	10 kg
FBD 30	30 kg	15 kg
FBD 60	60 kg	40 kg
FBD 120	120 kg	60 kg
FBD 150	150 kg	75 kg
FBD 200	200 kg	100 kg
FBD 250	250 kg	125 kg
FBD 300	300 kg	150 kg
FBD 500	500 kg	250 kg

FLUID BED PROCESSOR

The Fluid Bed technology achieves constant and reproducible product quality while ensuring gentle process in short process times. Processes ranging from powdery materials to free-flowing materials can be carried out as well as the drying of moist products (e.g. moist granulates). Powders, granulates and other shapes can be coated in this system too. During the process, heated air-in defined quantity and speed - continuously flows through the special designed of perforated sheet into the product vessel. The product starts to fluidize and can be moistened by means of aternary spray nozzle and granulated, depending on the application. Tangential spray nozzles in the area of the bottom (under feed) or a Wruster system are used for coating pellets. Integrated filters- selected according to the process and product - hold back the powder particles in the processor. The particles are retained in the process by continuous filter cleaning.

RANGE:

Model	Batch Size (Kgs.)	Working Volume (L)
FBP 10	0.3-8	16
FBP 20	3-20	40
FBP 60	6-60	120
FBP120	30-120	240
FBP 300	60-300	600



TABLET COATER

Tablet coating system is an innovative answer to current need of Pharmaceutical tablet coating process. Compliance of cGMP, 21 CFR Part 11 most common needs like cleanliness contamination aspects are key features of the equipment. The Coater has been made to boost productivity & flexibility. It facilities users friendly operation, sets toughest safety standards for operation, equipment and environment. Coater is available from 2 Kg to 350 Kg capacity with a perception to accommodate the need of R & D, pilot scale manufacturing & production scale manufacturing

Salient Features

- In FLP Construction
- With solution tank, multi air pump, double skin AHU with Pre, Micro, HEPA filter With steam and chilled coil.
- With exhaust blower.
- With wet scrubber assembly.
- With Anti-Bearding Spray Gun for spraying system

Optional Accessories

- Steam Control Valve
- Chill Water Control Valve (De Humidification Valve)
- Filter Maintenance Monitoring
- HEPA Filter Maintenance Monitoring
- Coating Pan Chamber Negative Pressure Monitoring
- Silencer at Exhaust
- Air Velocity Measurement
- Inlet Air Humidity Measurement

RANGE:

Coater Model	NC 12"	NC 15"	NC 18"	NC 20"	NC 24"	NC 30"	NC 36"	NC 48"	NC 60"
Min. Capacity (Kgs)	0.7	0.9	1.7	4	7	9	25	100	200
Mzx. Capacity (Kgs)	2.5	3.5	6.7	9.6	17.5	24	65	150	300
No. of Guns	1	1	1	1	2	2	2	3	6
Pan Speed	2 to 36	2 to 31	2 to 31	2 to 31	2 to 24	2 to 16	2 to 16	2 to 16	2 to 10
Capacity Consider @ 0.8 BD									

VIBRO SIFTER

Salient Features :

- Reduced power consumption as compared to conventional sifter
- Better throughput due to springs amplified vibrations
- Vibrations are not transmitting to the floor
- GMP model fully SS 316 / 304 is available
- Multiple deck option available
- Dust proof working, phytochemicals, g possible (closed system)

PASTE KETTLE

Salient Features :

- Service :- Starch Paste Preparation (Binder preparation).
- Model / Size :- 5 Liters to 100 Liters.
- MOC :- Contact Parts SS 316, Non Contact Internal Parts Clouded / Covered with SS 304.
- All internal surfaces have smooth rounded edges Internal surfaces smooth mirror
- Polished. Easy access to internal parts for cleaning through large openings and drain ports for cleaning are provided.
- Charging :- Through open top.
- Special Features (Optional) :- The kettle is provided with/without-tilting arrangement with optional bottom discharge ball valve.
- The kettle also has provisions to be lifed by the mobile or fixed loader to charge the RMG.

BLENDER

NU Pharma has wide range with different type of Blenders.....

Capacity of the blenders can be Customized as per client need.

OCTAGONAL BLENDER

Salient Features :

- Material handling in Octa Blender is through Bin charging or a Vacuum charging system
- Bin charging system ensures Dust free closed system for Charging and Discharging of Product
- Power consumption is relatively lower than other tumble blenders
- Capacities available from 1 L to 10000 L (Higher capacity provided on demand)
- Slow speed Blender with Gentle blending of Dry granules
- Rectangular opening Lid with Removable Baffle mounted inside
- Over 100+ machines installed Worldwide
- Optional in built in Vacuum design.
- Zero Jerk Load as machine is both dynamic and statically balanced.
- Maintenance free design.
- cGMP design for ease of cleaning.

DOUBLE CONE BLENDER

Salient Features :

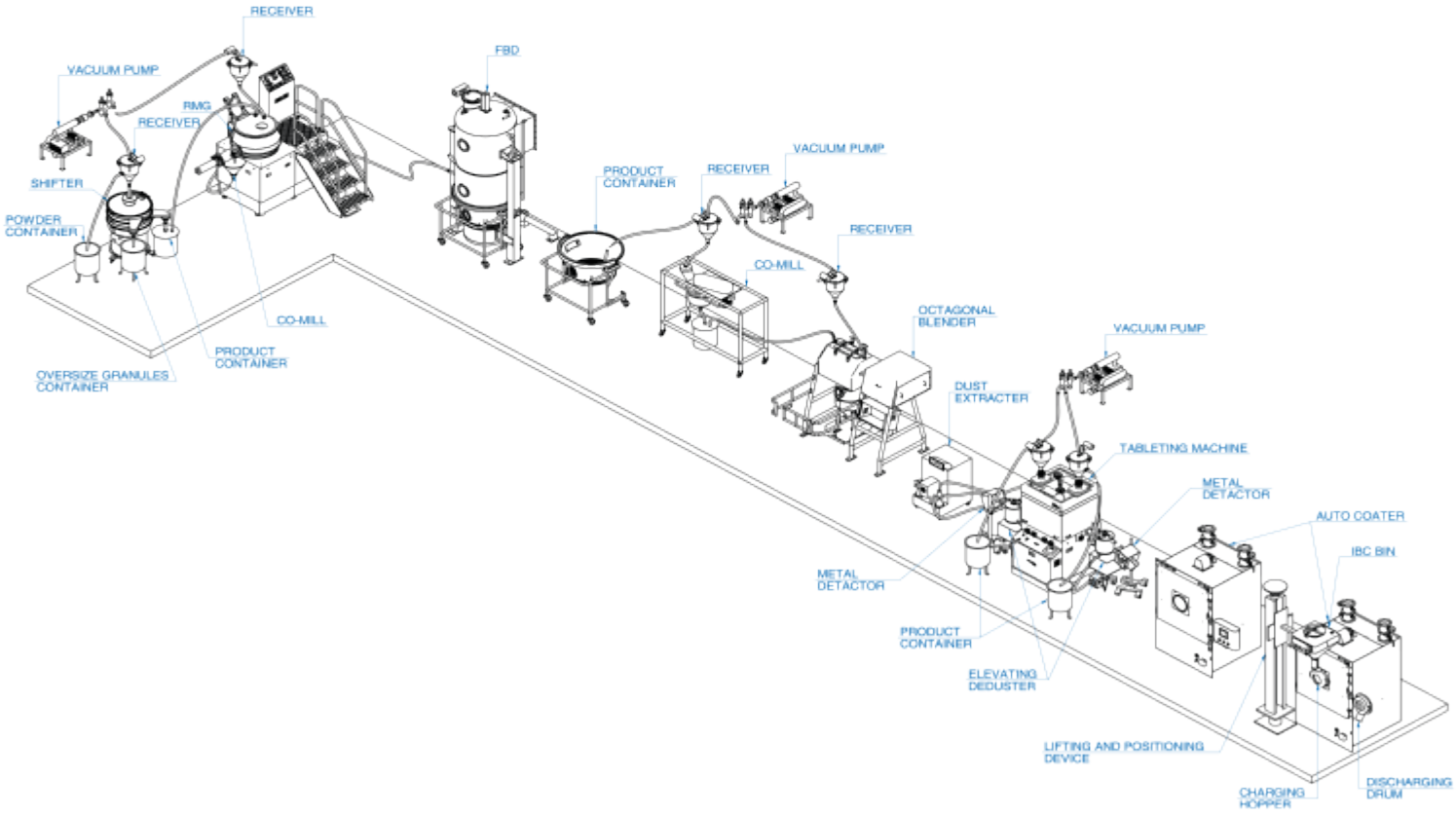
- The conical shape at both ends enables uniform mixing and easy discharge
- The cone is statically balanced which protects the gear box and motor from any excessive load
- Powder is loaded into the cone through a wide opening and discharged through a butterfly.
- Depending upon the characteristic of the product and capacity of blender, paddle type baffles can be provided on the shaft for better mixing, uniform blending and de-agglomeration
- Contact parts are made of S.S.304 or S.S.316
- Dust free bin charging system ensures minimum material handling provided as optional
- Capacity available 20 L to 3000 L

"V" BLENDER

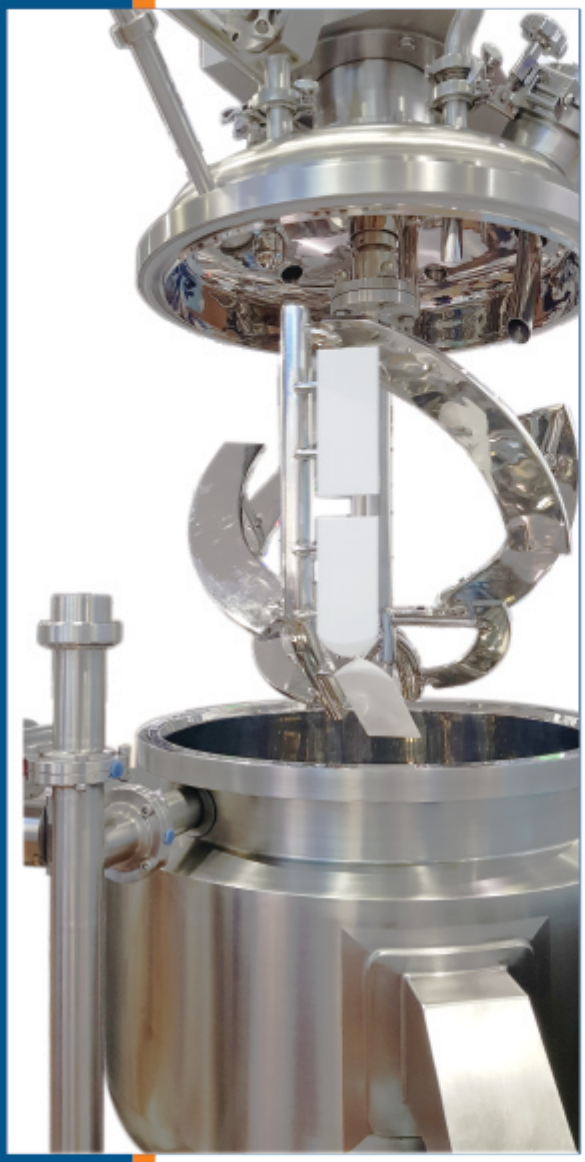
Salient Features :

- Easy to clean
- Minimum maintenance
- Integrated Vacuum loading option available
- Material of construction is SS 316 Capacity available from 5 -1200 L (Higher capacities upto 16000L also provided on demand)
- The Bin charging system can also be incorporated in it which provides complete dust free closed environment for charging and discharging as and optional
- The V-blender is good for blending dry powders and granulated products
- The shape of blender body results in a near complete discharge of product material, clearly an added advantage over horizontal blenders.
- V-blenders are easy to clean.
- According to product characteristic lump breaker are provided as optional in Internal attachments

SOLID DOSAGE PRODUCTION PROCESS (WET GRANULATION)



Planetary Mixer



We are a very enormous name of the industry for delivering a wide range of Planetary Mixer to our esteemed customers. The planetary motion of various beater enables faster mixing of material in lesser time. We use superior raw material in the fabrication process of the mixers. Our team of expert quality controller also conduct various tests on the consignments to assure a defect-free range to the customers

Description

- Planetary Mixer is ideal for mixing of wet/dry materials. It has a homogenous mixing action.
- The planetary motion of the beater enables faster and better mixing of material at a considerably lesser time.
- It is high shear mixer and is available in variable speed drive.
- Slow speed is used for dry mixing with less dust generation and faster speed for kneading operation during wet granulation.
- Portable mixing bowl with top mounted agitator has a dual advantage of material transfer and no risk of gland packing contamination.

Salient Features

- All contact parts of the mixing bowl and beater are made out of S.S 304 material or S.S. 316, as per requirements. Scrapping blades can also be provided if required
- The mixing bowl can be jacketed for electric / steam heating
- Ideal equipment for small batch sizes
- Manual lifting arrangements for agitators up to 50 Lts and motorized lifting arrangement for capacities of 100 lts and above can be provided
- The top of the mixing bowl has an S.S. lid with a charging hole
- The mixing bowl is provided with castor wheels and locking system for easy handling and transportation
- Flame proof motor can be supplied as optional
- Capacity offered 20L to 500L

Application

- Powder to Powder mixing
- Manufacturing of starch paste with steam or thermic fluid electrically heated jacketed
- Dry powder to wet phase mixing for wet granulation

Ointment / Cream Manufacturing Plant

The Ointment Manufacturing Plants are ideal tools for the pharmaceutical & cosmetic industries for the production of Ointment, Cream, Lotions, Tooth Paste & other emulsions & homogenizations.

It is specially designed to take care of two critical factors which directly affects the quality of the Ointment / Creams.

- Negligible vacuum drop during mixing & blending.
- Minimum man handling

Ointment Manufacturing Plant consist the following equipment's and accessories

- Manufacturing Vessel or Jacketed Planetory Mixer
- Phase Vessel
- Water Phase Vessel
- Storage Vessel
- Vacuum Pump
- Control Panel
- Product Piping
- Working Platform
- Material Transfer Pump to Transfer material from manufacturing Vessel or
- Planetory Mixer to Storage Vessel & Storage Vessel to Ointment (Tube) Filling M/C. (02 nos.)

- This system consists of a closed-circuit manufacturing facility from feeding of Wax / Water Phase to loading the hopper of filling machine.
- The Wax and Water at required temperature are transferred to Manufacturing Vessel or Planetory Mixer, by vacuum through conical filter.
- The product during emulsion formation is recirculated through Ointment Transfer Pump. The Pump also discharges the product in the Storage Vessel.
- The Storage Vessel is then taken to the filling area and is connected to again Ointment Transfer Pump. or Storage Vessel remain fixed (In bigger size) & pump transfer the ointments in the hopper of the Ointment Filling Machine.
- The entire Plant can be operated by centralized operating panel by one operator .
- The plant is equipped with an electrical control panel with digital temperature indicators and digital timers.
- Minimum two batches per shift of the same product can be assured in this plant.
- This plant conforms to CGMP standards (Paint Free Construction).
- All material transfers are done by vacuum or by transfer pumps. (Optional)
- The entry of all agitators are from top & High Speed Emulsifier from bottom or In- line Emulsifier (as per customer choice).
- All vessels are suitable for internal pressure of 1 Kg. / Sq. cm. and hence can be sterilized.
- All pipes, pipe fittings and valves are of SS304 / SS316 (as per custom requirement) seamless quality, internally electro polished, with tri-clover ended joints.
- The entire plant is equipped with CIP & SIP connections, so that customer can use these facility, if have CIP & SIP equipment (As per customer choice)
- All the inlet & outlet connections are provided with tri clover joints, which are very easy for cleaning & replacement.

ROTARY BOTTLE WASHING MACHINE

The Rotary Bottle Washing System consists of main structure, rotary platform, bottle holder/cups, flow regulators, pressure meter, solenoid valve, Geneva mechanism, 2 nos. of SS tanks with pump, nozzle, electrical panel & AC motor

ONLINE FILLING & SEALING MACHINE

Filling Machine :-

The Premium Filling System consists of main structure, material transfer pump, product transmission belt with adjustable guide, material storage tank, Safety acrylic cover, pneumatic priming & stopping facility, filling pump, isolated transformer, electrical panel, motor, PLC & HMI, AC drive & storage tank. The special HIGH / LOW liquid level indication in the tank is an added advantage.

Sealing and Capping Machine :-

The Automatic Premium Bottle Cap Sealing System consists of main structure, product transmission belt with adjustable side guide, in-feed screw, star plates, sealing head, mechanical Vibratory Bowl, cap discharge chute, product's height adjustment screw, centralized lubrication system, isolated transformer, sensors, safety acrylic door, motor, electrical panel, PLC & HMI,. The complete operation is PLC based.

Automation of both systems will be provided as option

FULLY AUTOMATIC DOUBLE / SINGLE STICKER LABELING MACHINE

The Automatic Sticker Labeling System consists of main structure, covered with SS cabinet and safety acrylic doors (OPTIONAL), product transmission belt with adjustable guide, separator unit, label dispenser unit, label wrapping unit, electrical panel, PLC & HMI, AC drives & a batch printing unit(OPTIONAL). The complete operation is PLC based.

24", 30", 36" AND 48" DIA. TURN TABLE

Turn table machine is separately provided in running line for further automation purpose and this can be provided as optional in complete filling line automation.

POUCH PACKING MACHINE

FOR PACKING OF VARIOUS POWDER, SEASONING, TEA, TABLET ETC.

SPECIFICATION

PEALING TYPE	3 Sides sealing, 4 sides sealing or center sealing (upon request)
PACKING SIZE	L: 50 120 mm, or 100 240 mm (Film Length) W: 20 160 mm of 20 220 mm (Film Width) (Enlarged type can be made upon order).
PACKING RANG	0.5-30 gm, 30-50 gm, 10-100 gm, 100-300 gm (Depending on specific gravity of packing objects).
SPEED	60 - 120 bagslinin, 45 - 90 bagslinin, (Depending on the following rate & volume of packing objects).
PACKING MATERIAL	Heat sealable for minared mm such as : PET + PE, oPP + PE, Alum. Foil + PE, simile paper + PE, manfifold paper + PE and other special heat sealable film.

PACKING BELT CONVEYOR

Unique Features :

- Fully stainless steel construction.
- Simple and compact in design.
- S.S Square Pipe Constuction.
- A.C Drive for speed control.

Features & Specification :

- For online coding of pouches / cartons.
- For conveying cartons, any products.
- Can be made as your requirement

Application :

- For visual inspection of bottle in the alternate white & black back ground to check for any particles in the liquid filled, sealed & breakage of bottle.

SHRINK TUNNEL COMBI MACHINE

1. Shrink Tunnel Machine Size : 12 x 12.

- Voitage : 220V (50/60Hz).
- Power : 8.5 KV.
- Conveyor Speed : 0 - 10 m/ min.
- Window Size : 300 x300
- Conveyor Loading : 8 Kg.
- Machine Size : 1280* 760* 1360 mm
- Any size available as per customer requirement.

2. Automatic L Type Sealer With Conveyor Size : 15 x20.

- Voitage : 220V - 240V (50/60Hz).
- Power : 3.8 KV.
- Max. Packing Size : 15" x 20"
- Machine Weight 100 KGS

Process section, Liquid section, Plant & Machine Consulting

MIXING TANK

Nu Pharma has offered Jacketed & Non Jacketed type of mixing tanks according to client requirements. Capacity can be also customized as per customer need. The whole assembly is available in S.S 316 and S.S 304 material construction

AUGUR TYPE POWDER FILLING/ ONLINE POWDER FILLING MACHINE

Automatic dry powder augur filler is versatile filling machine ideal for non free flowing, fluffy & sticky powders in bottles. Automatic single head dry powder auger filler utilizes the principle of positive displacement of screw. Precisely designed augur is displaces product through funnel and container convey by conveyor belt. Dry bottles are feed through turn table to conveyor and flat conveyor feeding bottles to filling head on set speed and bottles stop and hole for filling station. Sensor gives signal to electromagnetic clutch start to rotate augur for filling. It will fill desire quantity of powder in to the container through auger. An Auger filling times precisely sets on desire requirement by timer controls and speed of auger can be set by variable speed drives. After filling of bottle pneumatic cylinder unhold bottles and move forward to further process on conveyor.

FILTER PRESS

"Nu Pharma" has offered a wide range of Sparkle and Zero Holdup filter press in India consisting of stainless steel shell with bolted top cover. This feature helps the filter press to create and maintain its pressure. Several disc type filter plates are arranging horizontally in the filter cartridge assembly with perforated supporting screens, filter media and interlocking cups. The whole assembly shell stands on S.S. trolley and structured with pump and Piping

MANUAL VIAL & BOTTLE INSPECTION MACHINE MAGNIFY DOME TYPE

Magnify glass with inspection conveyor is separately provided in running line for further automation purpose and this can be provided as optional in complete filling line automation

COLLOID MILL

Colloid Mill is suitable for Homogenizing, Emulsifying, Dispersing, Mixing, Comminuting of liquids to highly viscous products. It is based on rotor-stator principle. It is available in plain as well as Water Jacketed model which is suitable for heat sensitive products. Flame Proof electrical can be supplied on demands.

HOMOGINISER / STIRRER

Homogenizers are fast and efficient and are capable of producing a fine droplet or particle size, typically in the range of 2 – 5 microns. This degree of homogenization is suitable for the vast majority of products, such as creams and ointments, lotions, sauces and flavor emulsions.

Nu Pharma offers a range of in-tank and In-Line mixer homogenizers for these applications.

Mfg. & Exporter of

Pharma, Food, Cosmetic
Ayurvedic Machinery
Bulk Drgs Machinery
Plant Consultant Design &
Consulting With Turnkey Project

"Success story of Nu Pharma"

PHARMA
Engineers & Consultant

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