



CIRCULAR



ARKA JAIN
University
Jharkhand

SCHOOL OF PHARMACY CIRCULAR

No: AJU/SOHAS/ 199/2023

Date 20th September 2023

This is to inform all the students of B. Pharm 1st semester and D. Pharm 1st year that the Industrial visit 2023 will be held on 11th November 2023 at Sai Mirra Innopharm Pvt. Ltd. Chennai. Total amount to be collected from students is 13000/- per person out of this Rs. 7000/- would be adjustable in 5th Sem for B Pharm and 2nd year for D Pharm. Students' declaration form to be submitted to Mr. Alok Kumar Moharana. Students need to be submitted their final amount Rs 9000/- by 10th of October 2023. Those students who doesn't come under complementary category will not get any exemption towards adjustment.

The Dean
School of Pharmacy

ARKA JAIN University Jharkhand

Dean
School of Pharmacy

Copy to

IQAC

Office of the Registrar

Mr. Alok Kumar Moharana

Class Coordinators

In-charge Website

Office File

INDUSTRIAL VISIT TO SAI MIRRA INNOPHARM (P) LTD CARVAAN 2023

Date of Event	09/11/2023-16/11/2023
Name of the Event	INDUSTRIAL VISIT TO SAI MIRRA INNOPHARM (P) LTD CARVAAN 2023
Type of the Event	Outreach Extension Activity/Collaborative activity
Conducted by	School of Pharmacy and MoU partner Delvin and Sai Mirra Innopharm (P) Ltd
No. Of Participant	79 students+ 7 faculties

OBJECTIVE: To understand the Industrial Challenges, Culture and Skill also to minimize the gap between Industry and academia.

DETAILS: “Sai Mirra Innopharm Pvt. Ltd., Chennai, Tamilnadu” was established in the year April 2001, **Sai Mirra Innopharm Pvt. Ltd. Is the** renowned formulation company of a fully integrated pharmaceutical business group in India, with a strong foothold in R&D, Manufacturing and Formulations, for both domestic and international market. Company produces a diverse portfolio of specialty and generic drug products with regulatory compliance, for a wide range of therapeutic usage and covers a range of dosage forms which include tablets, capsules (both soft and hard), liquid dosage form and oral sachets.

Under the mission of Ek Bharat Shreshtha Bharat this Industrial Visit 2023-24 “CARVAAN 2023-24” organized to promote a sustained and structured cultural connect in the areas of culture, traditions & music, tourism & cuisine, sports and sharing of best practices, etc.

This time School of Pharmacy conducted the Industrial Visit to **SAI MIRRA INNOPHARM (P) LTD, Chennai**. Dr. Jyotirmaya Sahoo had taken the necessary permission from the Industry. Mr. Jayshilan J, Managing Director of **SAI MIRRA INNOPHARM (P) LTD** extended his hands of cooperation for the necessary approval of the academic/industrial tour. The students of Pharmacy started their journey through railway on 9th November 2023 from Kharagpur to Chennai. On 11th November 2023 students and faculties visited **SAI MIRRA INNOPHARM (P) LTD**. On 13th and 14th November all 86 candidates visited the place of historical and spiritual importance like Mahablipuram and Pondicherry. On 15th November 2023 the return journey started and on 16th November 2023 all arrived safely at Jamshedpur. All the students and faculties expressed their gratitude to the honourable Vice Chancellor, Registrar and CFO of the University for the successful arrangement of the industrial visit.

OUTCOMES: The students get to know the functioning of the industry, how the machines work, what principles they follow, how much time it will take to complete the process, how the workers manage the work properly and also the organizational behaviour.

Poster of the Event



SCHOOL OF PHARMACY
ORGANIZES

CARVAAN

INDUSTRIAL VISIT 2023

IN COLLABORATION WITH MOU PARTNER

SAI MIRRA

INNOPHARM PVT. LTD

AND DELVIN FORMULATIONS PVT. LTD

CHENNAI, TAMIL NADU

ON 11TH NOVEMBER 2023

To learn the Technical Skill and to understand the Industrial challenges also to explore culture of different places of India fulfilling the objective of the mission Ek Bharat Shreshth Bharat .





Sai Mirra Innopharm Pvt. Ltd.

Registered Office & Factory: Plot No. 288 & 299,
SIDCO Estate, Ambattur, Chennai 600 098, India.

Tel # 91 (44) 42043221 / 22

info@saimirra.com www.saimirra.com

CIN. U24232TN2000PTC044315

Date: 14/11/2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the students and faculty members of the **School of Pharmacy**, ARKA JAIN University, Jharkhand attended the industrial visit in our **SAI MIRRA INNOPHARM PVT. LTD – PLANT I** facility at Ambattur, Chennai on **11th November 2023**. We congratulate and wish all students and faculties of ARKA Jain University all success in their future endeavours.

Thanking you,

For **SAI MIRRA INNOPHARM PVT LTD**



Jai Ganesh AS

General Manager – Human Resources

Letter of appreciation from Sai Mirra Innopharm Pvt. Ltd., Chennai

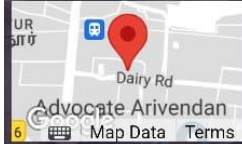
Photos of the Event



Journey begins for SAI MIRRA, CHENNAI on 9th November 2023



Proud with an Unique ID/Boading Pass cum Itinaryary



222/298, Dairy Rd, North Phase, Kannan Koil, Sidco Industrial Estate, Ambattur, Chennai, Tamil Nadu 600098, India

lat: 13.110014 long: 80.169985 alt: 36



At the entrance of Sai Mirra Innopharm Pvt Ltd





Offering Tokens of Appreciation to Authorities of Sai Mirra Pvt Ltd



Ready to visit inside Sai Mirra Pvt Ltd



Celebration of Diwali by the students and faculties during Industrial Visit





Places of historical importance visited by the students at Mahabalipuram





Places of spiritual importance visited by the students Students Mahalaxmi Temple, Chennai



Students at the entrance of Auroville entrance Pondicherry



Students at the Matru Mandir Viewing Point Shri Aurobindo Ashram Pondicherry





Students at the view point nearby Auroville, Pondicherry



Students at one of the churches in Chennai



Students enjoying in a sea beach of Chennai



Students enjoying in a sea beach at Pondicherry



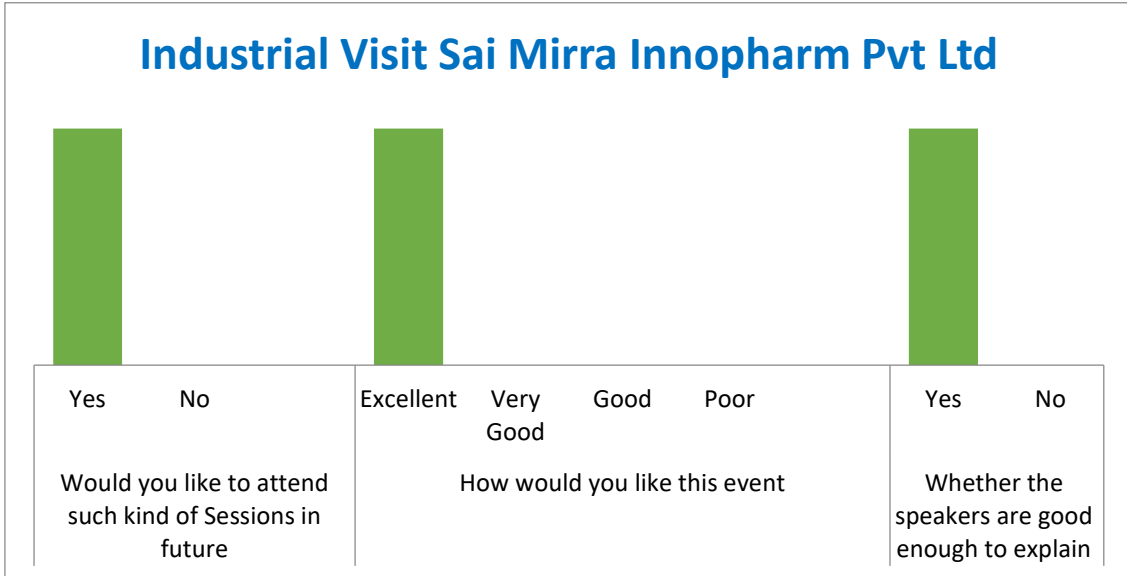
Students relaxing in their room provided at Hotel green palace, Pondicherry



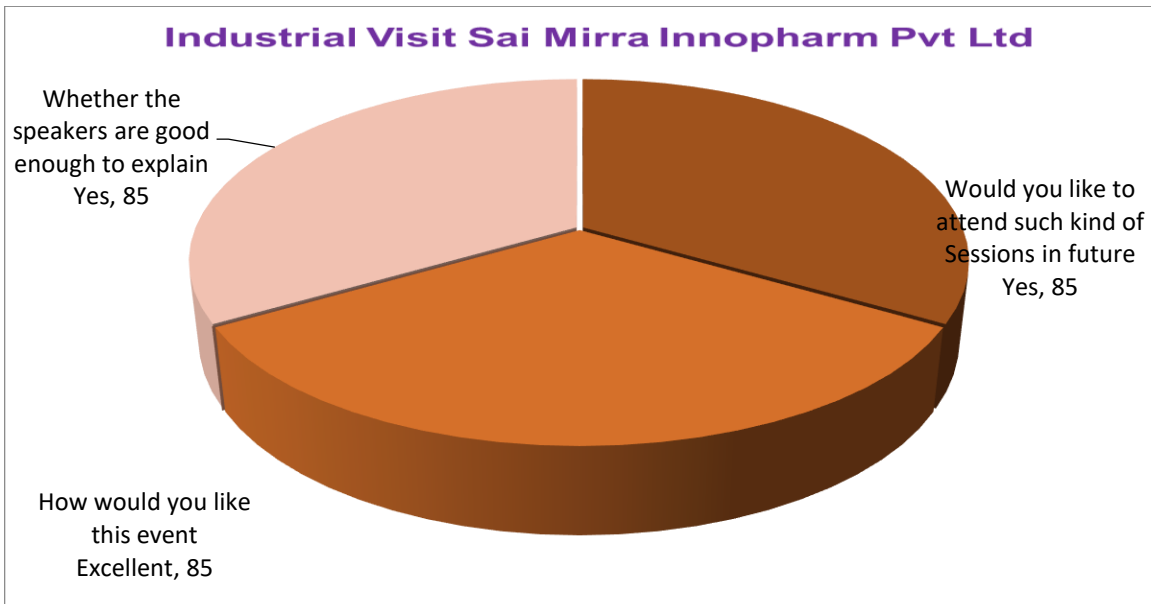
Home coming Students at Chennai central railway station

Feedback Analysis

Industrial Visit Sai Mirra Innopharm Pvt Ltd



Industrial Visit Sai Mirra Innopharm Pvt Ltd



Press Release

Jamshedpur: स्कूल ऑफ फार्मसी, अरका जैन यूनिवर्सिटी के द्वारा चेन्नई के साई मीरा इन्नोंफार्म प्राइवेट लिमिटेड में औद्योगिक यात्रा आयोजित

In East Singhbhum, Latest News, Student Zone

0



424 1.2k
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Jamshedpur: स्कूल ऑफ फार्मसी, अरका जैन यूनिवर्सिटी द्वारा 11 नवंबर 2023 को साई मीरा इन्नोंफार्म प्राइवेट लिमिटेड, चेन्नई में एक औद्योगिक यात्रा आयोजित की गई है। इस यात्रा में 79 छात्र और 7 संकाय सदस्य शामिल हुए। स्कूल ऑफ फार्मसी के डीन डॉ. ज्योतिर्मय साहू ने इस यात्रा के लिए आवश्यक व्यवस्था की थी। यात्रा ने 9 नवंबर 2023 को अपनी यात्रा शुरू की। औद्योगिक यात्रा के अलावा छात्रों ने चेन्नई के आसपास के ऐतिहासिक और आध्यात्मिक महत्व के स्थानों का भी दौरा किया। उन्होंने महाबलीपुरम और पांडिचेरी का भी दौरा किया। अरका जैन विश्वविद्यालय प्रबंधन ने

INDIA > CRIME ACCIDENT ENTERTAINMENT > BUSINESS STUDENT ZONE >

by-arka-jain-university-jamshedpur-school-of-pharmacy-at-sai-mira-innopharm-pvt-ltd/

1/5



Rectangular Sign
WHATSAPP CHANNEL JOIN

Jamshedpur (Anand Mishra) : जमशेदपुर के गम्हरिया सिविल अरका जैन युनिवर्सिटी की ओर से अपने स्कूल और फार्मसी के छात्र-छात्राओं को औद्योगिक यात्रा के तहत चेन्नई सिविल साई मीरा इन्फोर्म प्रोड्युक्ट लिमिटेड का भ्रमण कराया गया। इस दौरान युनिवर्सिटी के स्कूल और फार्मसी के 79 छात्र-छात्राएं और 7 संकाय सदस्य शामिल थे। स्कूल और फार्मसी के डॉन डॉ. ज्योतिर्मय साहू ने इस दौरान लेकर आवश्यक व्यवस्था की थी। छात्र-छात्राओं की यह यात्रा पिछले नौ नवंबर आरंभ हुई। इस क्रम में छात्र-छात्राओं ने औद्योगिक यात्रा के अलावा चेन्नई व आसपास के ऐतिहासिक और आधुनिक महत्व के स्थानों का भी दौरा किया। उन्हें युनिवर्सिटी की ओर से महाबलीपुरम और पाकिवैरी का भ्रमण कराया गया।

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अरका जैन युनिवर्सिटी : स्कूल और फार्मसी के छात्रों ने किया महाबलीपुरम व पाकिवैरी का दौरा - Lagatar



होम न्यूज़ क्रांति - इलाहाबाद न्यूज़ - डेय मैसेज - विचार ऑनलाइन - अरका जैन युनिवर्सिटी - जेस - जगत - मनोरंजन - ईम - ENGLISH



इसे भी पढ़ें : [JGI के छात्रों में 300 प्रति छात्रों में गिरी बत्त -अब तक 25 बच्चों परामर्श, पीएम ने गुआवाचे की प्रीवेंशन की](#)

अरका जैन विश्वविद्यालय प्रबंधन ने यात्रा में शामिल सदस्यों के लिए भोजन और आवास आदि की की समुचित व्यवस्था की थी। डॉ. साहू ने साई मीरा इन्फोर्मा प्रोड्युक्ट लिमिटेड के निदेशक व्यवस्थापन से और महाप्रबंधक (मानव संसाधन) जय गणेश एस के प्रति उनके सहयोग के लिए आभार व्यक्त किया। यात्रा का समापन आलीक गोहरना, अटल, प्रवास, दुब्यांग, पत्नी और पुर्णिमा ने किया।



WRITE-UP



ARKA JAIN
University
Jharkhand (Jamshedpur)

REPORT ON
INDUSTRIAL VISIT 2023

TO



SAI MIRRA INNOPHARM PVT.LTD.

11TH NOVEMBER 2023

SCHOOL OF PHARMACY, AJU

❖ NAME: SOURISH NANDA

❖ ENROLLMENT NO.- AJU/230067

❖ COURSE: BACHELOR OF PHARMACY (B. PHARMA)

❖ SEMESTER / YEAR: 1ST SEMESTER / 1ST YEAR

Sourish Nanda (21/11/23)
SIGNATURE:

SAI MIRRA INNOPHARM PVT.LTD
CHENNAI, TAMIL NADU



SAI MIRRA INNOPHARM :-INDUSTRIAL VISIT :-

Sai Mirra Innopharm is one of the leading pharmaceutical companies in the service of health care. The company produces and exports health care products such as tablets, capsules, liquid dosage and semi-solid dosage forms of pharmaceutical drugs.

CEO → Mr. S.S. Jay Sinha

MD → Mrs. Sukrita

Assistant Manager → Murgan Murku

Tablet Manufacturing Process :-

- > Blending — Binblender
- > Granulation — Rapid Mixer Granulator
- > Drying — Fluidization bed dryer, multimillere
- > Compression — Cadmach compression machine
- > Coating — Neocota coating machine
- > Polishing
- > Branding — Moisture balance, Friability tester, weighing balance, disintegration test Apparatus,
- > Quality Checks — Tablet hardness test
- > Packaging — HPLC system
BBS Machine, Blister cartonator machine

1) Blending → It is a pharmaceutical process of combining two substances to give a mixture which would be passed to the next step of drug development.

Instrument used :-

Binblender → The blending container is shaped like a bin.

→ The container is attached on both ends to a frame & has a loading valve.

→ API (Active Pharmaceutical Ingredient) and excipients are added to get a homogenous mixture.

→ It ensures the even distribution of API.

Granulation Room :-

Granulation

It is the process of changing powders into granules.

The main equipments used are :-

Rapid Mixer Granulator → It is used to mix the pharmaceutical ingredients and make the granules before compression, also called as high shear mixer.

→ Binders are added with powder in the granulator and speed is adjusted according to the required size and shape of granules.

Drying → Pharmaceutical process used to remove excess moisture and solvents.

Instrument used :- Fluidization Bed dryer

Fluidization bed dryer → used in the drying process where hot air is introduced at high pressure through a perforated bed plate.

→ Moisture content is checked manually from time to time.

Multi-miller → It is a high speed machine used for dry granulation, mixing etc.

→ Dry granulation is a high-speed machine process where the granules are formed without the addition of any liquid material.

Compression Room :-

Compression :-

It is the pharmaceutical process in which the granules are compressed into tablets.

→ Tablet press machines applies high pressure and the material is filled between the punches.

→ In compression method, physical properties of tablet are affected and dissolution and release of API are also affected.

Instrument used :

Cadmach compression machine → produces 50,000 (Fifty thousand tablets) per hour.

→ converts granulated powder into pressed tablets of uniform size and weight.

Coating Room:

Coating → It is the outermost smooth layer of a tablet that provides a unique identification to the tablets.

→ Coating also masks the colour, taste and smell of the drug and protects the drug from physical and chemical harm.

Instrument used :-

Neocota coating Machine → The machine provides a flexible system for coating of the tablets, uses a peristaltic pump to provide a uniform coat for every tablets.

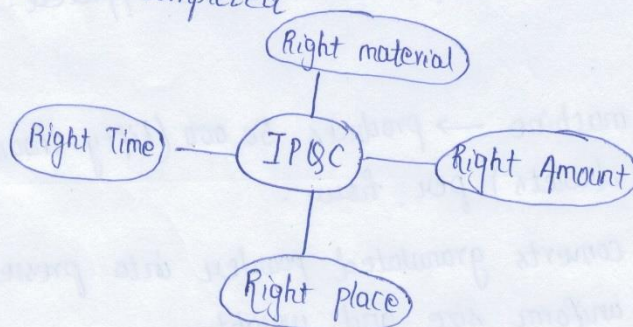
Polishing and Branding :-

Polishing is done to remove any sharp edges of the tablets and makes the tablet smooth and shiny.

→ Branding → It is any printed information on the tablets

IPQC (In Process Quality Control) Room :-

These are checks that are carried out before the manufacturing process is completed.



Moisture Balance → measures the amount of moisture in tablets.

Friability Test → To determine the strength of the tablet

Weighing Balance → To measure the weight of the tablet

Tablet hardness Test → Measures the overall hardness of the tablet.

Disintegration Test Apparatus (DTA) → For accurate estimation of disintegration time of tablets.

Quality Control Department :-

Quality of the product must be checked before packaging

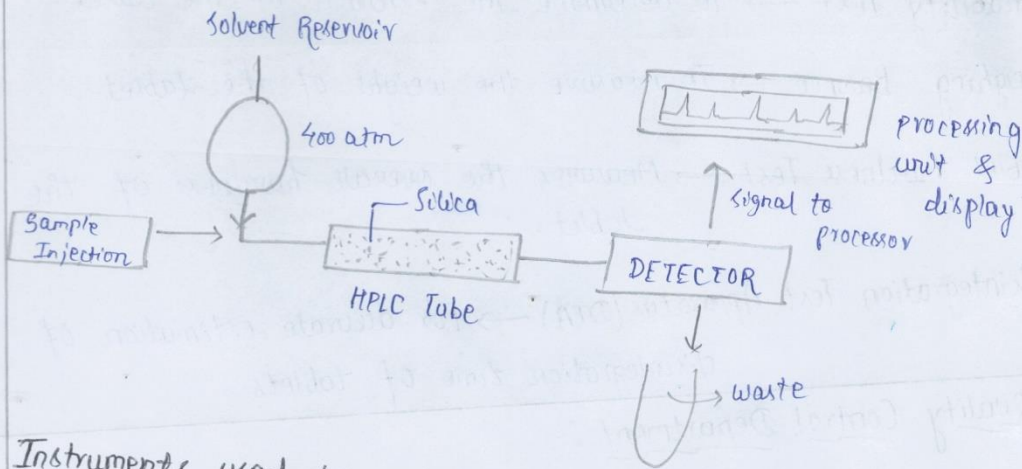
→ After approval from quality control, the batch is packed.

Titration → It is the process of chemical analysis in which the quantity of some constituent of a sample is determined by adding to the measured sample an exactly known quantity of another substance with which the desired constituent reacts in a definite, known proportion.

High Performance Liquid Chromatography (HPLC)

It is a process of separating components in a liquid mixture

→ A liquid sample is injected into a stream of solvent (mobile phase) flowing through a column packed with a separation medium (stationary phase).



Instruments used :-

- 1) Waters (2695)
- 2) Waters (2996)
- 3) Photodiode Array Detector

HVAC System :-

Heating, ventilation and air-conditioning system used for regulating and maintaining the appropriate environment in the manufacturing and storage area in the pharmaceutical industry.

Primary and Secondary packaging Area :-

Primary packaging → Any packaging material that comes into direct contact with pharmaceutical preparations

Secondary packaging → This is overpacking material that lies outside of the primary packaging.

E.g.:- Small retail cartons that contain blister packs of headache pills

Packaging Room :-

BGS machine (Blistering quickly through servo)

This machine is involved in blister packaging of solid drug products such as tablets, hard capsules and soft gelatin capsules.

↳ ACGI - Pampac company

Secondary packing Area

↳ Blister cartonator machine → It is an automatic machine that packages solid products and capsules.

Capsule Area :-

Automatic Capsule Filling Machine (AF 40T)

with an output of up to 40,000 capsules per hour

Capsule Elevator → Designed to eliminate the need for manual feeding of capsules.

Automatic Self-Adhesive Labelling Machine :-

Automatic labelling combines the printing of labels and barcodes with their simultaneous application on boxes, pallets, sacks or packs, among others.

Whole Auto Cartonator → It's a packaging system that can create custom carton boxes or containers.

Liquid Manufacturing Area :-

↳ Mainly syrups and suspensions are prepared and manufactured.

PM → Packaging Material Store

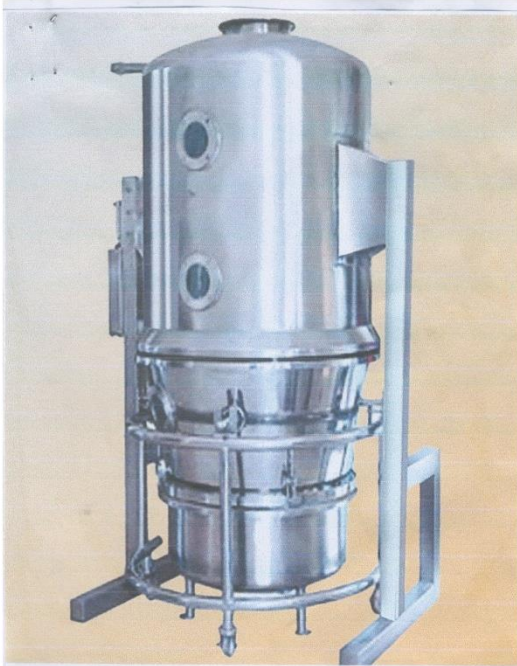
RM → Raw Material Store

Pass box → It is one of the cleanroom systems, which is used to transfer material from one side to other side through controlled environment in order to avoid airborne cross contamination.

↳ manufactured by Suntech Teknopark

Approved Area

After clearing the material followed by physical verification and affix quarantine label, the material is released by QC, QC person shall affix the "APPROVED" label on each container/bags and store person shall transfer the material in the designated approved area as per their storage conditions.



Fluidization
Bed
Dryer

Multimiller →



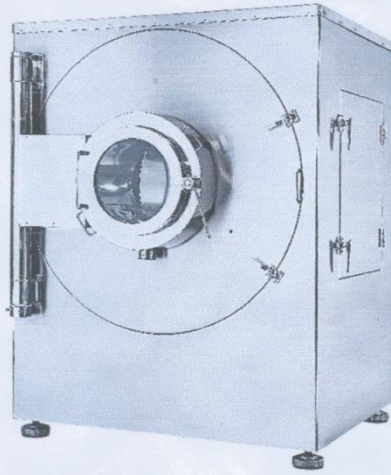
Cadmach compression
Machine



Bin blender



Rapid Mixer Granulator



Neocota Coating Machine



Moisture Balance

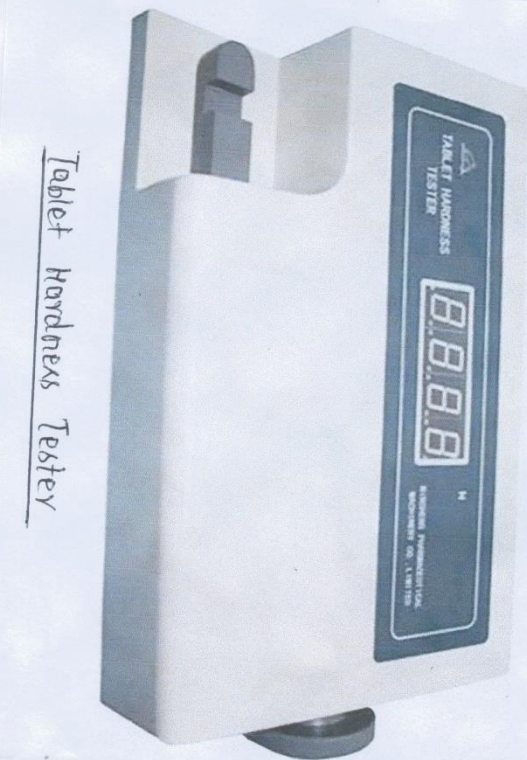
Apparatus
Description Text



Friability Tester



Weighing Balance



Tablet Hardness Tester



Disintegration Test
Apparatus



Waters 2695 hplc system



Waters 2695 hplc with 2996 photodiode Array Detector



Waters 2996 Photodiode Array Detector



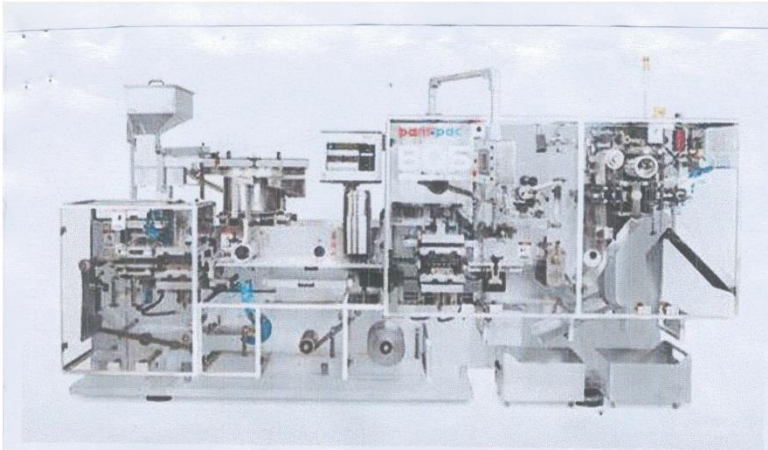
Primary packaging



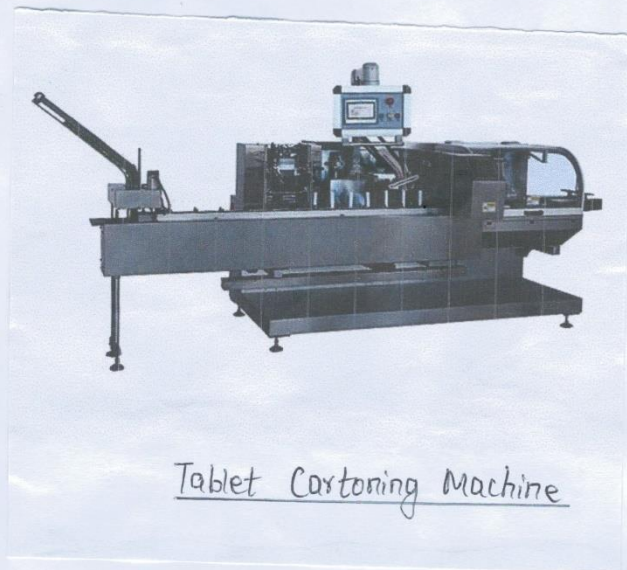
Secondary packaging



Tertiary Packaging



BQS Machine

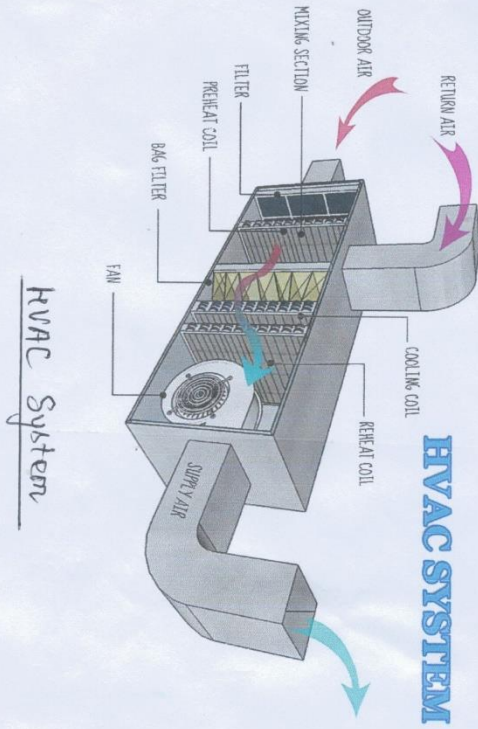


Tablet Cartoning Machine



Automatic capsule

Filling Machine (AF-40T)



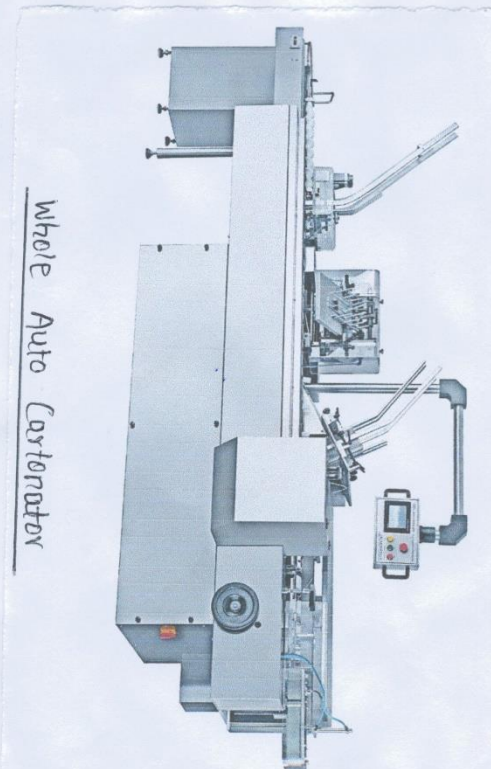
HVAC System



Capsule Elevator



Labelling Machine



Whole Auto Costrotator



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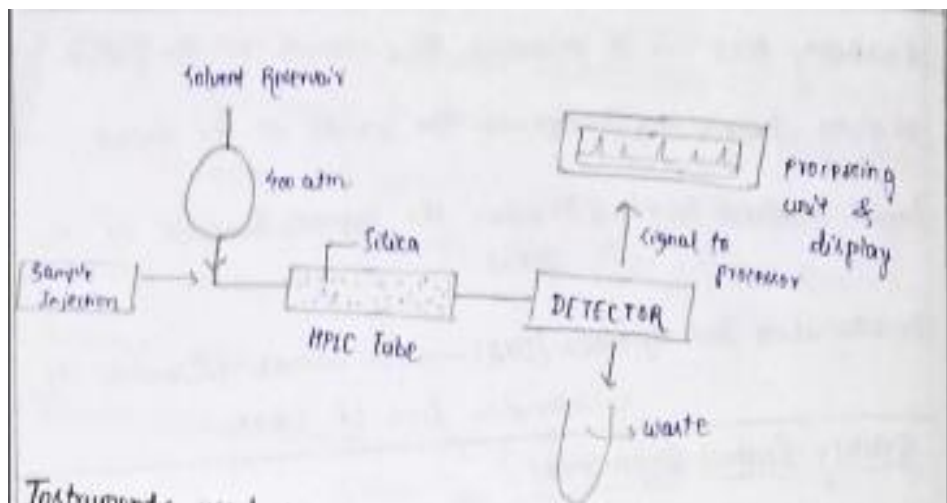
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Rectangular Strip

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Saurish Nanda

AJU/230067