INDUSTRIAL TOUR (2021-2023)

Introduction

The industrial study tour is mandatory and it is scheduled at the end of 3rd semester during Pongal holidays for the benefit of study (MHRM –II year course). It may consists of a minimum of 7/8 visit to industrial establishment of different sector in India. In fixing the visit, preference may be given to such an organisation which are not found locally such as plantation, mines etc. It is non-credit requirements but on completion of the tour, a hand written report to be submitted to the department.

Objective

The Industrial Tour are to provide students an insight regarding internal working of companies. We know, theoretical knowledge is not enough for making a good professional career. With an aim to go beyond academics, industrial visits provide students a practical perspective on the world of work.

About the Tour

This year our college has chosen “Bangalore” as one of the preferred location for our industrial visit within which we visited.

- **Hindustan Aeronautics limited (HAL)**
- **Ooty - Tea plantation**
  - **Chocolate factory**
  - **Tea factory**

Hindustan Aeronautics Limited (HAL)

Hindustan Aeronautics limited (HAL) is an Indian State owned aerospace and defence company, headquarted in Bengaluru, India. Established on 23rd December 1940. HAL is one of the oldest and largest aerospace and defence manufactures in the world today. HAL currently has 11 dedicated Research & Development(R&D). Centres and 21 manufacturing division under 4 production units spread across India. It is managed by Board of Directors appointed by the president of India through Ministry of Defence, Govt.of India. It is currently involved in designing and manufacturing of fighter jets, helicoptics, jet engine and marine gas turbine engine, avionics, software development, space supply, overhauling and upgrading of Indian Military aircraft.

Tea plantation

A Tea Plantation in a farm dedicated to growing varieties of camellia sinensis, The plant commonly known around the world as tea. Growing and selling tea has become a world wide practice though some areas are better suited to growing it than other, and it is generally considered to be a valuable commodity.

TEA FACTORY:

- Tea Manufacturing Process

Tea manufacture is the process of transformation of freshly plucked green tea leaves to black tea. The process itself is long, requires much care, attention, control and a scientific understanding of the complicated physical and chemical changes in the leaf as the manufacture progresses. There are several distinctive processes that take place in the manufacture of black teas.

- ## PLUCKING:

The green leaf is harvested on a regular basis at intervals ranging from 5 days to 8 days from each field. The plucking of the soft two leaves and the bud is generally undertaken by well trained women, because of the agility of feminine hands. The manufacture begins from the time the leaf is plucked in the field, and to ensure it retains its freshness, the leaf is sent to the factories from the fields three to four times a day.

- ## WITHERING:

No sooner it is received at the factory, the leaf is weighed and spread on troughs. Withering, is a process, where conditioned air is circulated between the leaves, initially to remove any surface moisture and thereafter to concentrate and chemically breakdown the tea juices. It takes 10 hours to 14 hours for the physical and chemical changes to take place, and bring the leaf to soft and rubbery condition suitable for the next stage of manufacture.

- ## ROLLING:

Is the process by which the leaf is twisted and the leaf cell walls ruptured to bring the juices to the surface of the leaf. The rolling machines have deep jacket, a pressure cap to apply pressure on the leaf, and the table itself has battens and a cone at the center to twist the leaf. There are also the more modern “Rotorvane” machines, which also give the same twisting and turning effect. This process takes about 20 to 30 minutes.

Thereafter to separate the twisted leaf from the untwisted, and to reduce the heat build up, the rolled leaf is passed over a roll breaker. This machine has meshes which separate rolled leaf. The unrolled is put back into the rollers for further rolling whilst the rolled leaf is fermented.

- ## FERMENTATION:

Of the tea juices is an essential process in the manufacture of black tea. Fermentation is the oxidization of the enzymes in the juices, which bring out the flavour, strength and the colour of the liquors and infusions. Fermentations is generally carried out on glass or tiled tables.

As fermentation progresses there is a colour change of the leaf from greenish to coppery brown. The degree of fermentation is judged by the colour and aroma.

- ## DRYING:

The primary objective of drying is the extraction of moisture and the arresting of fermentation. The fermented leaf contains from 45% to 50% moisture. The leaf is passed through driers, which have circuits of trays with perforation, on which are conveyed the fermented leaf.

The drying process takes about 20 to 25 minutes and the initial temperature is about 120 Degrees F(50 Degrees C) and is finished off at a temperature of 200 Degrees F (93 Degrees C) to 220 degrees F (105 Degrees C) . The moisture content of the teas when drying is completed is approximately 2% to 3% and the coppery brown fermented tea particles are now back.

- ## GRADING (SIFTING):

The fired teas after cooling are graded / sifted according to size and shape, as the trade demands. The different grades of tea are identified nomenclature. On completion of the grading, teas are stored in airtight bins of boxes. The sifting is carried out on a series of grading and cleaning machines, which have several

trays of different mesh sizes, to separate the tea particles to the various grades of tea and to remove the stalk and fibre.

- PACKING / DESPATCHING:

Teas are very hygroscopic and rapidly absorb moisture. When sufficient quantities of teas are collected, they are either packed in plywood tea chests of multi-walled aluminum craft paper lined pager sacks and despatched to the auctions or packed into tea packs of various forms for direct export/distribution.

CHOCOLATE FACTORY

The history of chocolate can be faced bad & more than 3000 years to Maya, toltec and Aztec people who prepared a beverage from the fruit of the coco bean.

Located in heart of Ooty, the emerald Chocolate factory and the factory outlets & showroom. Choco galleria has created a buzz amongst all chocolate maniacs ever since its establishment in 1994, Offering a wide range of chocolate, the place is definitely gonna leave you spoilt for choice. All their products are 100% vegetarian and are made using hygienic ingredients.

No.of Students Participated: 18- II M.H.R.M Students

Visit Date: 03/03/2023- 13/03/2023

Outcomes:

Industrial Tour also seems to present networking opportunities for the students with the company's HR, thereby increasing the opportunities for internships, placements, etc., for students. The domain wisdom and practical outlook towards the industry & requisite skills for the industry is also known to the students.