

A  
REPORT ON  
INDUSTRIAL VISIT  
AT  
**GENERAL MOTORS**, HALOL PLANT



ON 3<sup>RD</sup> APRIL 2012

BY STUDENTS OF

MARKETING AND HUMAN RESOURCE SPECIALIZATION

ACCOMPANIED BY

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ORGANIZED BY

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## Plant Visit at GM India Halol Operations



### J K Patel Institute of Management, GTU

(Date of Visit: 3<sup>rd</sup> April 2012)

- On 3<sup>rd</sup> April 2012, we, the students of marketing and human resource specialization got once in a lifetime opportunity to visit one of the top automotive organizations of the world-The General Motors at Halol.
- General Motors Corporation is an American multinational automotive corporation headquartered in Detroit, Michigan and the one of the world's largest automaker.
- Their major brands worldwide are Buick, Cadillac, Chevrolet, GMC, Opel, Vauxhall, and Holden
- General Motors began doing business in India in 1928, assembling Chevrolet cars, trucks and buses, but ceased its assembly operations in 1954.

- G.M re-entered India in 1994 as a joint venture, owned 50 percent by Hindustan Motors and 50 percent by General Motors, to produce and sell Opel branded vehicles. GM operates in India under the name of General Motors India Private Limited
- G.M continued to produce Opel cars at the Halol facility until 2003, when it started production of Chevrolet vehicles.
- GM operates vehicle manufacturing plants in Halol, Gujarat and in Talegaon, Maharashtra, It maintains corporate office in Gurgaon and a large technical center in Bangalore, where R&D is taken care of along with vehicle design and engineering takes place in a vehicle design studio
- The Halol plant has a production capacity of approx. 85,000 cars annually, while the Talegaon plant has a production capacity of approx. 1,40,000 cars annually.
- After a brief introduction about the company, we were shown a safety video and the Do's and don'ts in the shop floor.
- We were accompanied by Mr. Prakash Boghara to the general assembly unit.
- He explained the initial process of how the skeleton of a car is manufactured.
- First metal is welded into metal shell. Then this metal shell is moulded into the skeleton via the process of painting and assembly of the car.

➤ There are four main assembly lines. One single line is for assembly of Chevrolet Tavera and the other three lines are for different cars such as Chevrolet Cruze, Chevrolet U-VA and Chevrolet Optra.

➤ These lines are further divided into two main lines.

1. Trim Line
2. Chassis Line

➤ **The Trim Line:**

➤ In the trim line, the upper parts of a car are assembled. It includes Glass, Wipers, Wiring, Brakes, Steering Panel etc.

➤ There is a train track type of system in which there are parallel small rail bars in which the car is placed on movable wheels.

➤ In each workstation, each worker is given fixed time in which they have to perform their designated work otherwise there would be a major problem in the whole assembly line and it may be stopped

➤ We now start with the trim line assembly process.

1. Tailgate Fitting
2. Wiring Harness (Wiring done on the car skeleton with push and fit plugs)
3. Attachment Of fuel Door
4. Fixing Of Headliners (Inside velvet roof of the car)
5. Attachment Of Seat Belts (Seat belts are generally provided by suppliers)
6. Brake Pedal Fitting
7. Cockpit Fitting (Includes driver panel, fuel meter, speedometer, tachometer etc)
8. Tailgate Setting
9. Glass Assembly
10. Sealant Application For Glass
11. Parking Brake
12. Installation Of Steering Of Car
13. Rocker Panel Trim
14. Install Rear Bumpers
15. Engine Control Module (E.C.M) And Front Structure Of Car

➤ From this point, the car then goes to the Chassis Line, where it is loaded on an overhead hanger.

➤ **The Chassis Line:**

➤ In the chassis line, the work is done below the car, so the car is overhead.

➤ We now start with the chassis line assembly process.

1. Car Loading
2. Fuel Tank Mounting
3. Rear Axle Mounting
4. Silencer Assembly
5. Engine Marriage (The engine is fitted in the car)
6. H-Frame Assembly
7. Stabilizer Link Assembly
8. Hub Nut Tightening
9. Front Headlight Body
10. Under Body Inspection
11. Tyre Fitting

12. Cap Unloading

13. Engine Compartment Assembly

14. Deat Mounting (First back, then rear)

15. Door Assembly

16. Battery

17. Oil Filling To The Power Steering Also To Various Components

- Chevrolet Cruze, Chevrolet U-VA and Chevrolet Optra are assembled in a single assembly line while the Chevrolet Tavera is assembled in another dedicated line.
- Now the car has to undergo rigorous quality checking systems.
- Some of them are wheel alignment, water testing, break and cockpit testing, mirror and lead lamp testing etc.
- The car is put in the care line and finally to the yard.
- From the yard, a sample of five cars is thoroughly checked by the G.C.A (Global Customer audit)
- And finally the process completes with the car reaching the showroom of the dealer.
- **Seven forms of waste according to G.M. (COMMWIP)**

1. Correction
2. Over - Production
3. Motion
4. Material Movement
5. Waiting
6. Inventory
7. Processing

➤ G.M also believes in SPQRCE model i.e. Safety, People, Quality, Responsiveness, Cost, and Environment.

➤ We extend our heartiest thanks to The General Motors for making 3<sup>rd</sup> April 2012 a day to cherish for some of the lucky students who are honoured with your humble gesture to get a once in a lifetime opportunity to visit such an esteemed organization.

➤ We also want to thank our director Dr. P.G.K Murthy and all the teachers, especially to Prof. Priyanka Tailor and Prof. Vijyanti Tikyani for coordinating the visit.