

STRUCTURE

MARSHALL LOGISTICS MANDIDEEP, BHOPAL

Marshall Logistics is an Ancillary unit of Eicher Motors which is mainly an assembly unit constructed on a plot area of 9.8 acres with a total built up of 17,400 sqm at Mandideep, Bhopal.

Number of labours were very high near about 300 in one shift – thus there movement from the main gate to the locker areas was designed in an organized manner. Also washroom and other labour related utilities were planned inside

the plant such that the movement of labours is monitored, segregation of wet and dry areas is proper and is not hindering the production area in anyway.



The nature of site was rocky, thus levels, drains, service pipelines and necessary approaches were designed in such a way that it met with the requirement of the client keeping in mind the functionality and economy of the project.

There was continuous movement of trucks and trailers around the plant, requirement of 10 docking stations for loading and unloading area each was fulfilled and was planned in a way so that no time is wasted of one vehicle because of the other as proper turning radius and spaces were given.

Clear height of the unit needed to be 12.5m in certain areas with large spans and intermediate mezzanine floors as per product flow, One floor was designed at 3.3 m level from FFI and the other at 6.8m level with an office and other plant related activity.

In structure also steel consumption was monitored from the beginning of the project as this would be the major factor related to total cost of



the project, thus the structural team very cautiously without compromising the norms designed the whole plant with Steel column of height 12.5 M and rafter span of 80 M. The main beam span for intermediate floors was 11m and secondary beam at span of

7.5m. Live load of 7.5 KN/m² was considered.

The abstract requirement of the client was that he wanted this unit of his to be seen from far and to become an iconic structure in the area which we achieved. The architectural team to give the plant a crisp look placed a corrugated sheet of darker colour in tapered form (in an angle) on the same face rather than tapering the whole front grid of the plant to save cost. All this structure, planning and architecture was done so economically that at no place the client felt to compromise from their original requirement due to funds. Vastu was extensively followed in this project from the start to the end.

**Fast Facts**

Project Name: Marshall Logistics Mandideep, Bhopal

Location: Bhopal

Current status: Completed

Project Team: Ar. Kartik Sodhani, Er. Krati Jain, Er. Nandini Bhargav

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