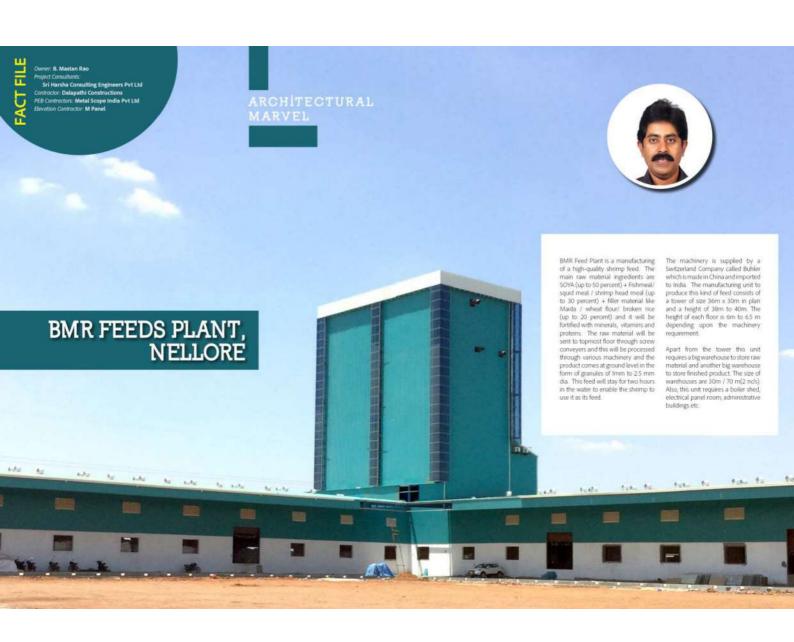


OCTOBER 2020







ARCHITECTURAL DESIGN
BMR feed plant is an architectural marvel
among feed plants. Essentially, this plant
was planned in such a way that movement
of vehicles is seamless and provision for
future expansion is made.

The first unit was planned in 'L' shape which the tirst unit was panned in L snape which means one leg of 'L' is naw material storage shed and the another leg of L is for storage of finished goods and the central pivot is the manufacturing tower which is well connected with raw material godown and finished goods godown.

A continuous canopy has been provided of A continuous canopy has been provided or 75 m cantilever for both the godowns to take care of the huge requirement of intake 200 Tiper day and out flow of 200 tiper day the big cantilever canopy gives freedom of loading, and unloading even during rainy season

In the elevation, Taurus blue colour galvalume sheets for warehouse has been provided and a combination of blue colour glass and Taurus blue colour galvalume sheets. This unique elevation reminds us the unison of sea and sky of the horizon which is very apt for the feed for aqua culture industry.

just adjacent to NH-16 between Kaveli and Nellone. Being in a proximity to the sea (25km) it is subjected to cyclone wind. They have considered 180 kmph wind load and applied cyclone wind factor while analyzing the structure. Initially received drawings the structure. Initially received drawings from machinery supplier indicating all the machinery GA and load points and load data. There was a lot of interconnection between the floors with pipeline connections, screw conveyors and hoppers. To maintain these connections there are many cutouts left in the slab area

By keeping all the above information, By keeping all the above information, framing plans were generated and was sent for approval of machinery supplier. Once, the approval was sorted, a start model in STAAD – PRO and all the machinery loads were applied at appropriate locations. SNAV som load was imposed in all the floors apart from these machinery loads.

After applying the above loads apply wind loads as per IS-875 Part-3 in X and Z directions by keeping height variations intensity and seismic loads was applied. The structure analysed for DL, Machinery Load, imposed load, WL and seismic loads

For warehouse DL, LL and NWL and load combinations was considered as per IS-875. After, analyzing the structure, it was found that wind was a predominant force apart from the machinery loads. The designed foundations were found critical for load combinations.

Uniqueness of the Structure and

Uniqueness of the Structure and Erection:
As the time is the essence of the project, Jindal UB Sections were used for columns and beams. For columns at lower levels have used some additional plates for the columns to take care of higher loads Dalapathi Construction made a good effort in completing the tower in four months both fabrication and erection.

The fabrication was done at the site only. The tabrication was come at the size only. As the column sections are relatively heavy, they have fabricated columns for 24m length and providing necessary cleats and brackets for connecting tie runners and beams. They have erected columns of 24m in one go with necessary give wires to start with and connected columns at floor level main beams in two directions minimum. main beams in two directions minimum to counter the wind loads during erection After connecting, main beams to the columns up to 24m, the rest of 16m columns are erected in a similar process. Simultaneously another group was working at floor level to fix the secondary beams as per the structural drawings.

After finishing all the floor level beams, tie After Inisting, all the floor level beams, be runners were provided in three sides of the elevation and one side it is kept open. From that open side of the structure, machinery supplier along, with erection team erected all the machinery at various levels using a crane. They have finished all the machinery receives and interconnections. erection and interconnections in two months' time. Later tie runners are fixed in

of the structure is blue glass in 'C' shape for the structure at all 4 corners.

ELEVATIONS WORKS

ELEVATIONS WORKS
The glass has been fixed by the M. Panel elevation contractor. By providing glass at the corners the whole building inside is well illuminated during the day time. This unique feature gave the people working inside the factory gave a feeling of working in a corporate building and not in the factory.

WAREHOUSE

While completing the tower structure,

warehouses were also got completed. The warehouse is also well listed by 5 percent roof transparent sheets and provided with turbovents for wind extraction giving a clean environment inside the warehouse.

TASTE OF SUCCESS

IASTE OF SUCCESS
BMR-1 started on 10th September 2015
and was fully operational on 18th June2016 with 1's hape in plan. After tasting the
success of BMR-1 they started BMR-2 on
8th November 2017 and fully operational in
August 2018 with 1's shape in plan.

(Contributed by V Sridhar Reddy,
Managina Di Norder, Sri Harbar Consultines.)

Managing Director, Sri Harsha Consulting Engineers Pvt Ltd)