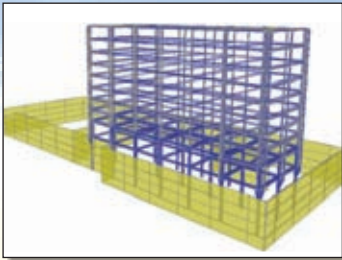


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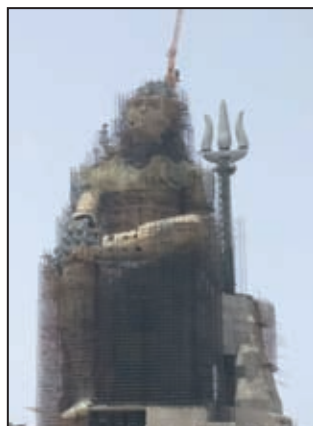


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Shiva Statue at Nathdwara Rajasthan

Engineer Dr. Abhay Gupta



FACTFILE

CLIENTS NAME : TATPADAM UPVAN, MIRAJ GROUP NATHDWARA(RAJ)

SCULPTOR : Mr. NARESH KUMAWAT, TEMPLESMAC, GURGAON

STRUCTURAL CONSULTANT: SKELETON CONSULTANTS PVT. LTD.

PROJECT COST: INR 100 Crores

CONSTRUCTION STATUS: ONGOING

PROJECT BRIEF:

A Gigantic 351-feet high Shiv statue is under construction at the top of a 50m high hillock in the sitting position at Nathdwara near Udaipur in Rajasthan. The base of the main statue approx. 60mx45m rectangular shape is representing a hill top.

This is one of the world's tallest in-situ concrete statues, being fourth after Statue of Unity India 182m, Spring Temple Buddha China 153m, Ushiku Daibutsu Japan 120m, this is 107m tall. As per mandate from project Sponsors MIRAJ group Nathdwara, the design life is 250+ years.

STRUCTURAL GEOMETRICS

The shape of statue is irregular & unsymmetrical. It falls in high importance factor category as per IS1893.

Wind tunnel testing has been done in simulated wind environment on scaled model of statue and surrounding topography, at WindTech Consultants, Sydney Australia. The

analysis of skin under the self-weight and wind forces is done considering the thermal stresses relevant to temperature changes at Nathdwara.

Statue is designed as hybrid Structure. Structural system consists of framework of Steel columns and beams surrounding concrete cores of shear walls in such a manner that the stiff vertical core right up to top is available. High strength (350Mpa) parallel flange rolled steel sections like UB, UCs are used. All connections have been made using High Strength Friction Grip bolts with galvanization. About 2500MT of structural steel sections (parallel flange) are being used to erect the frame which is varying vertically and horizontally in the shape of statue

There will be a 170 feet (51m) TRISHUL free standing by the side of the statue above 120 feet high sitting platform. There

will be a concrete shell skin outside with hollow space inside which will house a lift and stairs for maintenance purpose along with few floors for assemblies.

Project is in the construction stage and likely to be complete by end of 2018. Total weight of statue shall be approx. 25000MT. Er. Ms. Vandana Verma is the lead Designer at Skeleton under the guidance of Dr. Abhay Gupta and Prof. Prem Krishna of IIT Roorkee is peer review consultant. Shilpkar is Mr. Naresh Kumawat, Templesmac, Gurgaon & Contractors are M/s Shapoorji Pallonji co. Pvt. Ltd., Mumbai.

Contact

Skeleton Consultants Pvt. Ltd.
A-75, II Floor, Sector-5, Noida-201301 (U.P)
Tel.: 0120-4222642