

INDIA

Carving A 3D Theatre Under A Hill by Ram Bhavanashi

Hansa Pictures Does a Wonder at Girnar



There have been many, many fascinating expressions of technology meeting spiritualism world over, and India does have some epitomes of real and ethereal worlds coming together. However, this one is a bit different. For, it's crafted under a hill. Though small in size, and probably scale, it's the challenge, and perfection with which the challenge was addressed that makes it special.

The making of 3D theatre at the base of the famous Girnar hill in Junagadh district of Gujarat, India, does seek to exemplify the expertise available in the country, and passion for making things happen. Bengaluru-based Hansa Pictures had this honour of creating this picture-in 3D. Read on...

For those who know it, the very name of Girnar hill in Junagadh district – some 327 km southwest of Gujarati capital Ahmedabad, at 3100 feet above the sea level – springs in a spell of spiritual fervor and an excitement of historical appreciation.

For, the hill is part of a mountain range that is dated older than the mighty Himalayas; home to a huge pantheon of gods and saintly abodes; and rich repository of archaeology and history. A huge rock-edict of Ashoka – one of the most famous emperors of ancient Asia (3rd century BC) – on top of the hill; as many as 866 stone-carved temples of both Hindu and Jain faiths spread over five famous tonks (peaks) dating back to 12th century AD, makes its rich historicity while its' being adjacent to the Girnar forest which is home to the famous Asiatic lions adds an eco-logical appreciation as well.

While all that made one of the most exciting settings for any technology solution provider, what it actually posed for integration was an equally challenging proposition. At the foot of the hill is a *Dharmasala* (a place for pilgrims to stay, rewind and meditate), which was still under construction when the solution provider had a first glimpse

of the site meant for the technology deployment.



*Gautam N Shah,
Head-Projects at
Hansa Pictures*

When Gautam N Shah, Head-Projects at Hansa Pictures visited as part of his regular spiritual pursuits his *Guruji* (Jain monk) *Param Pujya Hem Vallabh Saheb* at the hill, the spiritual master shared his vision with his trusted follower-

creating a 3D movie and a theatre which talked about hell and showed the horrifying events that would happen to humans due to the multitude of their sinful deeds. All was exciting till the master took his follower to the basement of the building and told it was the site meant for the creation of the 3D theatre. "It was 76 feet in length, 33 feet in width, and 12 feet in height. It was the



'only' place where I had to create a theatre," Gautam reminisced. "There were some major civil issues which we addressed then and there- for instance lowering the floor level by a few inches, to ensure that the water does not seep in."

The spec for Hansa Pictures was that the place had to look appealing to the young, feel like a modern theatre and get the impactful message through. It was twin-responsibility, first- to identify a good moviemaker who would re-create hell on screen, and second- to make a 'wow' effect 3D theatre.

"We had two options- to make people enact the different roles; or to make an animated movie," recalled Mehul Shah, the spokesperson for the *Guruji*, and theatre management. "We employed real actors, and shot them in 3D," he explained, "*Guruji* was at the top of the concept visualization, and story-telling; Gautam handled the long stretch of hiring actors, director, getting the movie shot, preview and review, then commission in the theatre."

The Hansa Exec had to spend a lot of arduous hours to scout the able moviemaker and artistes, and get the movie made as per the script, and even as it was being made, he had to focus on carving the 3D theatre out of the small basement which was already reduced by a few inches to allow for AC and other ducting.

According to Mehul Shah, the *Dharmasala* was already under construction when the 3D theatre idea was being visualized; therefore only the basement portion could be used for creating the theatre. Having decided thus, the challenge was to build it from scratch.

"The place was small in terms of volume, and it had to have the environment of 3D," Gautam recalled, "it had to sound good and look beautiful too. So, from determining the ideal screen size, seating layout; seat size; deciding on the type of 3D system, everything was critical." The theatre was specified to seat around 120 people in one go.

A thorough brainstorming and research for over two months, led to the theatre size being further reduced by 20ft to stay 56ft in length, keeping in view the screen size and providing suitable sight angles to every single seat.

It was then the call of acoustics. Given the setting of the theatre, echo was a big thing, and placement of speakers too was a potential challenge. Hansa came up with the idea of concealing the surround speakers so that they would not obstruct anyone's vision and also stay free of known or unknown tampering. "The RT in the space was over 4 seconds, and it was like a closed box booming from within," said Gautam. "We had to create acoustic walls on all the four sides keeping in mind maintenance issues like speaker wiring, electrical wiring, and air-conditioning." According to him, the acoustical ceiling grid had to be higher as the hall was quite low. So they made the grid within the beam to beam. Using Himalayan acoustics, they incorporated 15mm fibrette tiles over the ceiling and 20mm fibrette boards on the walls. An infill of polywadding was also applied for insulation.

There were as many as six 1.5-tonne air-conditioners for the theatre, and one for the Control Room. This A/C noise had to be accounted by the acoustic treatment. "The toughest design to create was within this hall," explained Gautam. "It took me over a month to come up





with the design. It was very satisfying personally seeing the final finished design working fine."

The A/V System – The Real Play

Hansa chose Electro-Voice system for the entire audio solution of the 7.1 surround cinema system that was suggested. They chose two full HD projectors from Optoma over a 3D converter making it is a passive system. The theatre was fixed with 110 seats, with an additional provision of 10 seats.

They did have issues with electrical wiring too, as some simple electrical material like MCBs and switches were not even heard of in the Girnar area, and thus had to be procured from Bangalore. For the lighting part, they wanted lights that would give a wall wash and illuminate the rooms. That even these lighting materials were strange to the locals, the integrator had to procure and ship them from Bangalore.

Admits Mehul: "No one in this region has any knowledge of what is 3D technology; what it requires to be deployed. There are no providers of this solution in this region. Fortunately we had Gautam who is well-versed with the solution, and we rested the entire onus on his shoulders."

The other set of challenges was in term of multitude of people and views being thrust on the team. That the finance for the theatre came from the Trust,

it also came with multiple views and suggestions; so keeping them all happy was by no means an easy task.

The Hansa team stayed at the place for over a month to install and commission the theatre amidst these conditions. However, focused that they were, their efforts met accomplishment with high praise.

The only compromise, if at all that be, was the location, feels Mehul. They could have done a much better job had they got a different place than the basement to build the theatre, he says. He, however, admits that it was never in their vision when they were building the *Dharmasala*; it only came later into their mind. That there was no other free place, and they could not dare venture into the dense forest nearby, they depended on the basement.

However, Mehul and the Trust he represented were apparently happy with what they had achieved. "The project was benefited in a huge way," endorsed Mehul. "After watching the movie, people began taking oath in front of the *Sahebji* about the austerity measures they will adopt. I've seen a few people coming from overseas, and appreciating the whole effort, and donating finances for the facility.

It was a big accomplishment too for Gautam, who is a devout follower of the Guruji. "Here is one project which is

very close to my heart," said the pious integrator. "Such a project comes very rarely in the life of an AV integrator where the client just tells about the concept and completely rests on us- from suggesting pin to plane, absolutely no questions asked, and more happy with the solution deployed."

www.hansagroup.in

The A/V Equipment

Audio

- EVU-2082 for the L-C-R- 3 units
- EVID 6.2 for the surrounds: 12 units
- EV Q-66 amplifier-2 units
- EV Q-44 amplifier-units
- ETX 18SP Subwoofer-1 unit
- Marantz AV7702 Pre-Amplifier- 1 unit
- Furman PL8CE Power conditioner-1 unit
- Cables we used Clicktronic speaker & HDMI cables.

Video

- Optoma HD-25LV Projector-2 units
- 144" X 61"H Fixed frame with silver screen-1 unit
- Geobox 3D Converter-1 unit
- Panasonic DMP-BDT 330 Blue ray player-unit
- Tviz HD Café Media Player-1 unit
- Passive 3D scratch resistant glasses from Get D