

TRUSSING Gets an Indian Twist

How Giant Truss is driving the metamorphosis of the trussing landscape in India



Arvind Kumar, Chairman, and Akshay Kumar, Sales Director, Giant Truss (far right) talks about trussing with Anil Chopra, Founding Director, PALM Expo & PALM Expo Magazine and Ramesh Chetwani, Project Director, PALM Expo

Trussing can be a task. But **Giant Truss** is up to it. **Anil Chopra**, Founding Director, **PALM Expo** and Editor of **PALM Expo Magazine** and **Ramesh Chetwani**, Project Director, **PALM Expo**, join **Arvind Kumar**, Chairman, **Giant Truss** in a conversation on how, through quality innovation and maintenance, the trussing giant is poised to change the way the world looks at the Indian trussing industry.

A celebrated name in the Indian trussing and rigging manufacturing industry, **Giant Truss** is synonymous with quality and consistency. Right from manufacturing bespoke trusses for its consumers to putting each truss to test with a thorough quality check, Giant Truss is a company that doesn't compromise on its promise – delivering crème-de-la-crème trussing equipment every single time.

But where did it all begin? What makes Giant Truss a class apart from its competitors even today? **PALM Expo Magazine** explores the journey, the differentiating factor, and the road-map of the trusses brought to life by Giant Truss.

Elaborating on how the 'Make In India' campaign drove him and his team to start making trusses in India, **Arvind Kumar**, Chairman, Giant Truss, states, "I started this initiative in 2014, when the present government came into power and pushed the 'Make in India' campaign. We thought this is the right time to start making trusses. None of us have studied business man-



Every single truss from Giant Truss features a custom design and the structure required to give it the strength to sustain on uneven Indian landscapes, making it a safe and successful product

agement, marketing, or engineering. All we had was motivation.”

Kumar further expands on the need to invest in quality control in the trussing industry in India in order to ensure that the industry thrives, “The entire world is looking at India right now. The only problem is trust and quality. Indian manufacturers don’t know how to make the SOPs and maintain the quality of manufacturing throughout the production timeline. They invest in machines, but forget to invest in quality control. As a result, the consumers receive the wrong product and remain skeptical about the quality of the products. This will only change when businesses will start thinking about quality and develop the standards of quality along with maintaining that quality that equals the likes of the US, Europe, or China. This is precisely what will make us grow.”

The Design Of The Truss

When asked about the one thing that can make or break trussing, Kumar responds, “The most important part is the design. The first thing is to understand what we want to make and why do we want to make this. Without this, one can keep the most cutting-edge machines in your factory, the most efficient manpower, your product won’t be of top-notch quality.”

He adds, “This is what we began studying first. Because one of our trusses fell in 2013. We were using locally purchased steel trusses. At the time, businesses rarely had aluminum trusses, except for the big business houses. So, for three to four months, we worked hard on our trusses. We started talking to truss manufacturers to source better trusses. I insisted on my truss never ever falling again. We studied the product, we researched all about it on the websites. We learnt all about trussing - the machines, the processes, or how to read the structure. We went through several engineers’ blogs to understand this more deeply. I even studied about welding processes thoroughly – right from the kinds of welding machines out there to finding out the strength of the welding. We did all of this on our own, because the market at that time was not aware about the nuances of trussing.”

But it wasn’t just about studying the truss design. For Kumar, the mission was to create a one-of-a-kind truss in India. Elucidating on the same, Kumar shares, “We studied the Chinese and European trusses – the structure of the European trusses was very nice. The design of the structure was able to take the load. However, this was not as per the Indian market. In India, we overload, abuse, and even misuse the structure of the truss. So, at Giant Truss, we thought that the design and the structure needed a little bit of modification – we needed to put some extra strength on some parts to make it a safe and successful product.”

Delving deep into the specifics, Kumar expounded, “The most important thing in trussing is the control system. When you improve the base plate, you improve the ground support, and you improve the top plate (since the load hangs over the top plate). So, there’s the base plate, which can make the tower collapse, and there’s the top plate, which pulls up the entire load. Ultimately, the load is going in the truss, through the base plate, and then it penetrates into the Earth, maintaining the center of gravity. Hence, the top plate must be strong.”

Illustrating the above-mentioned point, Kumar shares, “When the base plate is compromised, the tower is compromised. The size of the base plate was small, so the core of the base plate’s design was also wrong. That is the first thing we changed. The second change that we made was in a component known as ‘height

adjustors.’ Indian surfaces are uneven in nature, be it the banquet halls or the gardens – 99% vendors don’t waste time in balancing the plates. They are always in a hurry to put up the truss and let things work on autopilot. We improved on that. We were the first ones in India to bring CNC manufactured height adjustor machines to the country.”

Transforming the Truss with a Steel Bullet

At Giant Truss, trussing isn’t just a business. It is a science. To perfect the art and science of trussing in India, the company introduced and inculcated several components, techniques, and approaches to putting up a truss the right way. “We worked on the locking system, especially on the steel bullet. The steel bullet is the most critical part. There is more tolerance and more precision, because ultimately, this bullet is going to take the entire load of the structure. In most trusses that collapsed, it was the bullet that cracked. I saw a good truss break because the welding cracked and the connection emerged out of the truss. So, for our trusses, I improved the length of the connection.”

But it doesn’t end here. Giant Truss is on a mission to revolutionize the trussing landscape in India. To do this, the company has adopted a unique way of calculating the loading capacity of the structure. Kumar outlines, “To calculate the loading capacity of the structure, one has to input the values of the weakest point, not the strongest point. If the strength of the weakest point is 200 MPa, then one has to input the value of 200 MPa in the entire structure from every joint. If I put in the higher capacity point, let’s say, 350 MPa, the capacity will become almost double. So, my study was to understand and find out the weakest point in the structure, and hence, the strength of the weakest point. No one in the Indian entertainment industry has ever spoken about this in so much detail.”

What’s Next for Giant Truss

Giant Truss isn’t going to stop at manufacturing trusses with an Indian twist. The goal is to keep growing and thriving. Kumar brings the expansion of the company beyond national borders into the conversation, and shares how the trussing giant is strategically investing in stretching the horizons of its growth trajectory, “We invested a lot of money in machines – robots, new welding tables, CNC cutting machines. We are moving to a massive new plant – 20 acres of land – where our facility will be developed. We will change the way the world looks at India – especially in this industry. We have several inquiries coming in from different countries and continents, the Middle East, Europe, and many more. We have also exported our trusses in Bangladesh. We are currently getting numerous orders from Germany as well. We have also applied for standard certification and are in touch with the agency who will help us get there. The day our truss will land in Germany with their certification, we’ll be unstoppable.”

Talking about Giant Truss’ major projects in India, Kumar concludes, “We are growing very fast in India, working with the top-of-the-line agencies and events – take for instance, *A.R. Rahman, Arijit Singh, Diljit Dosanjh, Salman Khan, Aditya Birla Group Awards*, and more. Our truss is also deployed within the new Parliament building, the country’s largest convention centre, in Jio World Drive, and more. Yes, we are expanding and introducing new product lines as well – aluminum stages, aluminum scaffolds, aluminum liftings, aluminum stands, and more – and these are 100% Made in India.”