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Indian Star

Kalyani Group launches the ambitious Indian Gun Program at DefExpo 2014

THE INDIAN GUN PROGRAM (IGP), one of Kalyani Group's star projects in the defence sector, is its key initiative in the field of artillery gun systems. Being developed under the aegis of Kalyani Strategic Systems Ltd, a group company of the Kalyani group, it is the first indigenous 155/52 cal gun being developed in the country. Its uniqueness lies in the fact that it is 100 per cent designed and developed in-house, including the complete ordnance and carriage, which by itself is a big accomplishment for the Indian defence market. As an end-to-end solution provider of artillery systems, Kalyani group has developed this gun system by creating a synergy between its rich experience in the manufacturing and engineering domain and its thrust for innovation and excellence in all its endeavours.

Making of the Gun

Design and development of an artillery gun system is a complicated science which requires cross disciplinary domain knowledge and its effective integration. Hence, the mammoth exercise of realisation of this dream project was started by first putting up together a highly dedicated team with experts across verticals like metallurgy, material science, mathematical modelling, servo-electrical, hydraulics, electronics, etc. This expertise when married with Kalyani Group's well-proven strong capability in design, engineering and manufacturing, resulted in the production of this avant-garde product.

The special ESR grade steel required for the ordnance parts of IGP has been manufactured by one of the group companies — Kalyani Carpenter Special Steels Ltd. This has been a real time-clincher as the long lead time generally involved in this process was substantially saved. The open die heavy forging of the barrel was done by Bharat Forge Limited, the flagship company of the group. The next cycle of process i.e. the barrel manufacturing was carried out

LOREM Ipsum

in the recently set up gun barrel manufacturing plant of the group, a one of its kind set up in India. It is a state of the art plant with highly sophisticated machines which cater to every need of the barrel manufacturing process. The other ordnance parts like breach, muzzle, etc were also forged and machined in-house owing to the already existing high-end capabilities of the group companies.

The structural portions, including upper carriage parts like saddle and cradle and lower carriage parts like main weldment, trails & chassis have been fabricated and machined under the aegis of GED Satara, the fabrication hub of the group. These being extremely complicated and intricate, were engineered with utmost accuracy and precision. Even the auxiliary propulsion unit (APU) has been fully-designed and developed in-house with the help of another group company Automotive Axles, adding to the indigenisation cause of the project.

Major Advantages

The IGP being developed by the Kalyani group is an ultra-modern gun with innovative features making it very soldier-friendly. It has some very high-tech advantages like Automatic Laying System, Anti-Backlash Drive for Elevation & Traverse, Superior All-Terrain Mobility, Electronic Steering system, etc., which make it a truly unique system.

Conclusion

The Kalyani Group, led by Baba Kalyani, takes pride in being at the forefront of globalising India and in making 'Made in India' a global brand in manufacturing industry. The endeavour now is to make the same true in the realm of artillery solutions through this ambitious programme.

Kalyani group has provided a gun which not only meets the current required specifications, but is also futuristic in outlook and use. This will ensure that the solution remains valid and in service for a very long time, thereby proving to be cost and effort effective.

SPECIFICATIONS

Caliber	155mm/52
Weight	14,500 kg
Range	41 km
Traverse	40 degree Right, 30 degree Left
Elevation	-5 degree to +72 degree
Rate-of-fire	Three to Five rounds/minute
Deployment time	Day: One minute; Night: 1.5 minute
Crew Size	Six
Mobility	30kmph in self- propelled mode