



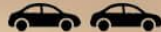
The Tata Nexon has achieved a first-of-its-kind 5-star GNCAP rating for safety, paving the way for safer passenger vehicles in India.

THE CONTEXT



It's a frightening statistic – there are over 150,000 road fatalities every year and passenger cars account for over 22% of these. Safety performance of cars needs to be improved and this is what Tata Motors set out to do. The Tata Nexon demonstrates Tata Motors' technical prowess to the world. The team has achieved the highest industry benchmark – a 5-star rating in the Global New Car Assessment Programme (GNCAP) – and this may compel other manufacturers to follow suit.

THE INNOVATION



The Tata Nexon is the first car designed and engineered in India to achieve the GNCAP 5 star rating. Nexon has been engineered for the highest level of safety performance. The vehicle's Innovative Safety Pack comprises several new technologies and processes. It used digital and physical tools to reduce firewall intrusions, floor deformations and CCB deformations. The dashboard, airbags and seat belts have been designed and tuned to absorb maximum impact loads and reduce occupant injury within stringent limits. The use of crash-locking tongue and pedal blockers for minimising occupant injury is a first in the segment. The Nexon's GNCAP score of 16.06 out of 17 makes it not just the safest car in India but among the safest cars tested by GNCAP throughout the world.

KEY CHALLENGE



DESIGN CONSTRAINTS

While the Innovative Safety Pack was being developed, the team faced several challenges in the form of inherent constraints. For instance, there were carryover components from earlier designs that could not be touched, such as the frontal impact absorbing structure which forms the main load path for crash loads. Identifying safety solutions without modifying these carryover parts was one of the biggest challenges.

THE IMPACT

This innovation has a widespread impact not only on the product but also on the Indian automotive industry

In India where road accidents contribute to 400 fatalities per day, and flagship and most selling cars have scored low on safety performance, Nexon has become a benchmark setter for the Automotive Industry

Nexon's 5 Star ratings in safety would definitely put pressure on other OEMs to develop and offer safer cars to their customers

With this Global achievement from an Indian OEM, the customers would also demand safer cars, which would lead to a spiralling effect in developing safer cars for the country

