

**Clive Hickman**

Research and Development, Tata Motors (India)

"We Want Technology Leadership"

With the launch of the Nano, Tata has shaken up the automotive world, and its recent acquisition of Jaguar and Land Rover sent shock waves through the industry. The company plans to create a wide range of models between the 2500-dollar car and the luxury segment. Directing these operations will be Clive Hickman, who is responsible for research and development at Tata Motors. In an exclusive interview with ATZ, he sets out his strategy.

ATZ Clive Hickman, here in Europe we were somewhat surprised at the waves caused by the launch of the Nano. Were you expecting this to happen?

Hickman It was clear that the car would have a great impact in India, but my Indian colleagues were very, very surprised at the reaction in the rest of the world. As for myself, I wasn't so surprised, as I come from the western world and was very interested in the project when I went to Tata. If I was so fascinated, why shouldn't others be?

ATZ Everyone is now talking about the Nano, and it has introduced many people to the name Tata for the first time. What they don't know, however, is that the head of development is European. What is your impression of the degree of maturity of India's automotive technology?

Hickman My Indian co-workers are among the most intelligent engineers I've ever worked with. This intelligence, coupled with their huge capacity for learning and their enthusiasm, is the basis for

forming a good team. All they lack is a little experience

ATZ ...as well as contacts to European suppliers ...

Hickman We work with European, Japanese, American, Korean and Indian suppliers. Our approach is to develop on a truly international level. Some compa-

"First, We Have to Satisfy the Huge Demand in India"

nies in Europe and the USA have become somewhat complacent with regard to their development activities. Therefore, we talk to anyone, regardless of where they come from, about how they might contribute to our success. We make sure that we get as much information as possible and use it to make cars that the world really wants.

ATZ The world? Aren't you mainly concentrating on the Indian market with the Tata brand?

Hickman We want to go far beyond that. The New Indica will come to Europe within twelve months and will meet the EuroNCap requirements. The Nano might follow one day, but first we have to satisfy the huge demand in India.

ATZ Tata above all has a cost advantage on the world market ...

Hickman It's true that we have a lower cost base than others, but that does not mean that we don't have a great appetite for high tech. We want technology leadership.

We are not able to offer that in all segments yet. But the Nano is the technology leader in its segment. We are already working on other projects that will make us world class.

ATZ That won't work in all segments at the same time. In which areas do you see Tata achieving the world class status that you are striving for?

Hickman I believe that transmissions are a technology in which we can be leaders. Another opportunity is engines, as we

are working with the best suppliers and service providers and expect the best technology. For me, it's important that our suppliers make the best teams available to us. That wasn't always the case in the past, because we come from India. We expect to be given the respect that we have earned.

ATZ The Nano has been dismissed by many people in Europe – not safe enough, too thirsty ...

Hickman That's good, I like that. That's how they used to talk about Toyota – and where is Toyota today? Apart from that, the Nano meets the regulatory safety standards and is much safer than the scooters that you see everywhere in India, with a family of four perched precariously on them.

ATZ In your opinion, how far behind are you in terms of technology?

Hickman People should not underestimate us. The team that developed the Nano and the new Indica will prove with the next vehicle generation that it has much greater potential.

ATZ One challenge will certainly lie in complying with the ever stricter emissions standards in India without excessively driving up costs.

Hickman In India, we are only one generation behind Europe, in other words about four years. When we develop engines today, we design them in such a way that they can be converted in the short term to Euro IV for export and, in a few years' time, also to Euro V.

ATZ You now have the opportunity to design a whole new engine family. What is your strategy?

Hickman With this new family, we have to be able to comply with Euro VI and to introduce new technologies without giving up our cost advantage. Conversely, the challenge for European manufacturers is to achieve our cost level without losing their technology lead. I think our job is easier.

ATZ Is the two-cylinder engine in the Nano already part of a new engine range?

Hickman I would prefer to delete this as it could be misinterpreted and instead – Nano engine is a standalone product designed in collaboration with a German partner, it could be used on other products in the fullness of time.

ATZ Which engine technologies are most suited for reducing fuel consumption within a low-cost approach?

Hickman One should consider first-generation direct injection and variable valve timing in simple versions, for example to implement selective cylinder cut-off. In addition, the use of electric ancillary components is a suitable means of reducing CO₂ emissions.

ATZ On a more personal level, what was the reason why you chose to go to Tata?

Hickman Coming from the engineering services sector, I already worked for Tata Motors before moving to the company. It is the only company in the industry that is really working towards long-term success. This attitude reminds me of Europe twenty years ago. Whereas Europe is now somewhat lethargic, India is very exciting – the people there want to prove what they can do.

ATZ Mr. Hickman, thank you for this interview.

Interview conducted by Johannes Winterhagen.

Clive Hickman

is Head of Development at Tata Motors and is in charge of 2500 employees in Pune (India) and a further 500 in other countries, mainly in Great Britain. The mechanical engineer started his career in 1978 at GKN. In 1984, he took the first management task at Austin Rover. After stations with MIRA and Westinghouse he took over 1997 the management of the engineering services company Ricardo UK PLC. To Tata Motors he came 2005.

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