It is an undisputable fact that India’s new tyre manufacturing plants are world class in terms of technology, design, quality, sustainability and production processes. Although domestic manufacturers compete among themselves for market share, there are many critical industry issues that they constantly confront: upgradation through innovation and technology absorption. It is here that the Indian Tyre Technical Advisory Committee (ITTAC) is playing a crucial role for the past half-a-century. It a specialised agency of the Automotive Tyre Manufacturers’ Association (ATMA), the apex body of tyre companies. In this interview to Tyre Asia its Chairman PK Mohamed, the veteran tyre technologist and Chief Advisor, R&D of Apollo Tyres, speaks about ITTAC’s pivotal role in India’s tyre technology development field.

The Indian Tyre Technical Advisory Committee (ITTAC) has been substantially contributing to the technological development of this niche segment for the past 50 years.

“ITTAC has been on the forefront of the Indian tyre industry’s drive to emerge as a force to reckon with in technical and manufacturing capabilities,” says its current Chairman PK Mohamed, veteran tyre technologist and Chief Advisor, R&D of Apollo Tyres. ITTAC’s close interface and interaction with international and national standards organizations and proactive engagement with the Indian tyre industry has enabled it to reach an enviable milestone in its memorable journey of 50 years, he says.

“As a result, the new greenfield tyre manufacturing facilities in India vie with the best in the world in technology, practices, quality of products and sustainability,” he says.

Formed in 1966, ITTAC is a specialised resource of the Automotive Tyre Manufacturers’ Association (ATMA). Its role has become critically important at a time when the Indian tyre industry is poised to see exciting times ahead.

“The axis of tyre production is moving towards Asia and India has emerged as the preferred base for tyre manufacturing for all major tyre companies in the world,” vows Mohamed.

Indian tyre majors also are ramping up production and going beyond shores for international presence. Its growing tread print requires absorption of updated technologies and standards.

“For the sustainable development of the tyre sector, a robust technical and standards infrastructure is a de rigueur. More so since the road profile in India is among the most diverse. The range of tyre specifications required is, therefore’ one of the widest,” he explains.

With the unfortunate rise in road fatalities in India, raising awareness on tyre related safety aspects has assumed all the more importance. ITTAC, as the august body for tyre technical aspects, is committed to contribute to the overall road safety on Indian roads.

**Growth agenda**

The years to come will witness ITTAC playing a still larger role in development of a safe, environment friendly and well-regulated Indian automotive system, says Mohamed.

Broadly, the objectives of ITTAC are to collaborate with national and international organizations, stakeholders and policy makers with a view to establish relevant and pragmatic national standards for tyres and allied products.

ITTAC also aims to advance the frontiers of technical excellence through knowledge sharing. It will work towards safer and environmentally responsible operations through dissemination of sustainable practices.

It will also strive to foster the need for tyre care as an integral part of road safety through continuous awareness programmes.

If the Indian tyre industry is increasingly converging...
With the world in terms of practices, product quality and technology, the role of ITTAC cannot be overstated. As a steadfast ally of the Indian tyre industry, it is spearheading several important aspects including, he asserts.

They include development covering technical aspects of pneumatic tyres, tubes, rims and valves used in automotive vehicles, Mohamed points out. “We wish to align National Standards with the ultimate aim of achieving inter-changeability of pneumatic tyres, rims and valves as far as fitting and use are concerned.”

If Indian tyre industry is increasingly converging with the world in terms of practices, product quality and technology, the role of ITTAC cannot be overstated. As a steadfast ally of the Indian tyre industry, it is spearheading several important aspects including

The ITTAC agenda also includes establishment of engineering standards for tyres, tubes, rims and valves, preparation and publication of engineering norms and specifications, extending advice to members on legislation and other national and international practices, which could have a bearing on the activities of member firms.

ITTAC will continue to cooperate with national or international organizations whose objects are similar or complementary, he said.

Focused development

A major challenge of Indian tyre makers is the variegated nature of its roads, their diverse profiles and weather conditions call for development of unique specifications.

“Indian realities are very different from other countries,” Mohamed notes. “For a tyre maker, India represents a challenging terrain. Road conditions here have a wide spectrum from expressways to potholed lanes to unmetalled roads. Developing tyres for such varied road conditions needs robust standards and constant innovation in product development.”

Not only the road profiles, there are wide variations in weather conditions from freezing cold in the mountains to tropical heat and rains in between that a vehicle may need to pass through different weather conditions in a single journey.

“Tyres need to be standardised for optimum performance in all weather conditions. The standards developed by ITTAC take into consideration all such Indian realities,” he points out.

Till a few years ago, several Indian tyre companies had tie-ups or technological collaborations with international majors for sourcing technologies. Today, leading Indian companies have their own robust R&D operations with emphasis on Indian conditions and adhering to Indian standards.

ITTAC has been spreading best practices among its members. The knowledge sharing has helped member companies in sharpening the cutting edge in technology.

A study of recently released Global Tyre Industry Report reveals that four Indian companies rank among the top 20 tyre majors in the world in terms of R&D spend as a percent of sales as well as in absolute R&D spend as well.

Research collaboration

ITTAC is also instrumental in encouraging industry-academia collaboration for the development of sustainable materials for the Indian tyre industry.

Says Mohamed: “Several Indian Institutes of Technology (IITs) and other research institutes in India and abroad are working closely with Indian tyre Industries on developing new and sustainable raw materials with low environmental footprint and also development of new technology to meet the mega trend.”

Tyre is a raw material intensive industry and a large number of raw materials are used in the manufacturing of tyres. The demands from tyres are changing. Increasingly tyres are expected to have lower rolling resistance and yet adhere to highest levels of safety and sustainability.

Change in the design, weight and rolling resistance of tyres to meet the new-age expectations is leading to a relook at the raw material portfolio of the industry.

For instance, need for higher quality natural rubber has been conveyed to the Rubber Board by the industry. The debate on carbon black vs silica is also raging.

ITTAC is also contributing to the development of standards that are unique to the Indian conditions. The country produces one of the largest varieties of tyres manufactured anywhere in the world. The road scenario is vastly diverse with ultramodern cars and primitive vehicles plying together.

It is in this market environment that the Indian tyre industry has been developing tyres and standards for all needs. Even before a vehicle is launched, the tyre industry is ready with the customized and tested fitments and standards, he says.

When asked what is ITTAC’s contribution to skill development and re-skilling in order to enhance Indian tyre industry’s quest to develop technologically advanced tyres, Mohamed highlighted the cooperation among various industry bodies.

“ATMA, along with rubber industry body, the All India Rubber Industries Association (AIRIA), has promoted the Rubber Skill Development Council (RSDC), the sector skill council for rubber sector in the country,” says Mohamed.

“RSDC is intensely involved in improving skill competitiveness on the shop floor. The state of the art new facilities use lot of automation too.”

He points out that the industry understand that there is a need to update the curriculums in engineering institutes. RSDC has developed job profiles incorporating inputs from the industry including ITTAC.

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