



BUILDING HIGHWAYS OF THE FUTURE

Tiki Tar and Shell India

BEST BITUMEN FOR BEST ROADS

HELPING YOU BUILD **HIGHWAYS TO DEVELOPMENT**

A highway is more than just a stretch of lanes or pathways. It, actually, puts a country to the path of socio-economic development, especially in the Indian sub-continent. This region is facing considerable amount of pressure from the ever-increasing traffic, increase in axle loads, and unrelenting climatic conditions among others. All these factors put a break to their progress; and emphasize on the need of building and maintaining 'highways of the future' now more than ever.

Tiki Tar and Shell is committed to providing durable and sustainable solutions to the people of Indian sub-continent for their current and future needs. Tiki Tar and Shell, with its consistent supply of innovative bitumen solutions, is aligned with people's requirement of better built highways for travelling & transportation.

A strong & durable transport infrastructure, like a network of highways, will make journeys faster, comfortable and safer, which in turn lead to reduced production costs, increased productivity and more profitability to companies.



CHALLENGES AT LARGE

Highways in the Indian sub-continent bear massive pressure from the amount of traffic and increasing axle loads daily. This pressure is further intensified by extreme climatic conditions, making highways vulnerable to wear, tear and deformation.

Material quality and specifications: Road contractors need superior quality materials, particularly appropriate bituminous binders with up-to-date specifications to work with, in order to build highways that are durable enough to withstand these pressures over a long period of time. Without this, the country faces the risk of:

- Low useful life of the asset leading to a drain on resources and lower return on investment (ROI)
- Societal and transport disruptions due to constant road maintenance
- Depletion of natural resources
- Lower utilization of budget

SOLUTIONS TO TRANSFORM INDIAN SUB-CONTINENT FOR BETTER

Tiki Tar and Shell understands the Indian sub-continent, and the best way to optimise 'life cycle management' of national highways. With a range of innovative solutions, Tiki Tar and Shell helps mitigate the economic, environmental and social needs of highway constructions in India and neighboring countries.

World-class Solutions

We provide a wide range of Shell Bitumen solutions, derived from a century of research and development, most of which are specially formulated for strength and durability. Shell Bitumen solutions undergo stringent quality control procedures and adhere to strict international standards, resulting in products that can be trusted.

Field-based Technical Specialists for On-site Assistance

A team of technical experts is always at our customers' disposal for any kind of virtual and/or on-site assistance required by them to extract the maximum out of the bituminous offerings.

Consistent Supply of High-Quality Bitumen Products

With far-reaching global resource and supply chain, coupled with a pan-Indian manufacturing network, we are equipped to keep up a consistent supply of high-quality bitumen products for long-term build projects.



OUR FULL RANGE OF PRODUCT OFFERINGS

PRODUCT CATEGORY	PRODUCT DESCRIPTION	PRODUCT GRADE/ SPECIFICATIONS
Polymer Modified Bitumen (PMB)	<p>Shell Cariphalte is an excellent PMB solution that promises superior grip in all weather conditions as well as ideal for highways that bear the constant brunt of heavy-duty axle loads.</p> <p>It's a specially engineered binder and a proven solution to:</p> <ul style="list-style-type: none"> ■ Reduce deformation on the roads even at very high temperature ■ Reduce load and temperature associated cracking ■ Improve cohesion and adhesion resulting in higher moisture resistance 	<p>Shell Cariphalte 40 Shell Cariphalte 70 Shell Cariphalte 120 PMB 70-10 PMB 76-10 PMB 82-10 PMB 76-22 <i>All grades as per IS 15462 and IRC SP 53</i></p>
Bituminous Emulsions	<p>Shell Sparamul is one such bituminous emulsion that ensures improved pavement performance. When applied cold, it requires less energy, ultimately resulting in reduced emissions. And with its ability to cover a wider area, Shell Sparamul meets your construction timelines.</p> <p>It's a cold-applied sustainable bitumen with:</p> <ul style="list-style-type: none"> ■ Rapid setting emulsions that require uniform spraying of thin sealing layers as surface dressing work ■ Medium setting emulsions engineered for premix seal jobs and patch repair work 	<p>Shell Sparamul RS1 Shell Sparamul RS2 Shell Sparamul SS1 Shell Sparamul SS2 Shell Sparamul CSS1 Shell Sparamul CSS1h Shell Sparamul MS <i>Other grades as per ASTM D 2397</i></p>
CRMB (Crumb Rubber Modified Bitumen)	<p>Shell Mexphalte - It's a bitumen solution that offers homogeneity, stability and consistent binder properties, thus helping in:</p> <ul style="list-style-type: none"> ■ Reduced maintenance cost ■ Long-lasting effectiveness by eliminating rutting ■ Improved storage stability over long period of time ■ Being highly economical on a life cycle cost basis 	<p>Shell Mexphalte CRMB 55 Shell Mexphalte CRMB 60 <i>All grades as per IRC SP 53 and IS standards</i></p>
Maintenance Solutions	<p>Our maintenance solutions are designed for improving the functional characteristics and residual life of trafficked pavements.</p>	<p><i>ShellMac Pothole Repair Shell Sparamul Microsurfacing</i></p>
HMVG 40	<p>High Modulus VG40 – specially formulated higher quality bitumen which is manufactured using patented process and technology. The result is a bitumen with higher viscosity and stiffness to resist rutting and high temperature distresses.</p>	

YOUR PARTNER OF CHOICE IN **SHAPING ICONIC PROJECTS**

Our products are the solution of choice for iconic structures globally.
Here are some of the most iconic infrastructures with Shell Cariphalte as the main bitumen solution:



A2 Motorway (Germany)



E17 Motorway (Belgium)



M25 Motorway (United Kingdom)



Ahmedabad-Vadodara Expressway (India)



Chang'an Avenue (China)

BE A PART OF INDIAN HIGHWAYS' **SUCCESS STORY**

Tiki Tar and Shell India is a joint venture that brings together two major players in the Bitumen industry. Both are committed to bringing customer-centric engagement and fit-for-purpose solutions to the sub-continent region/market.

GLOBAL QUALITY STANDARDS, LOCAL SUPPLY CONSISTENCY

Our established supply chain consistently delivers high quality products that meet customer timelines and specifications through:



An extensive network of bitumen sources including existing Shell refineries regionally and globally

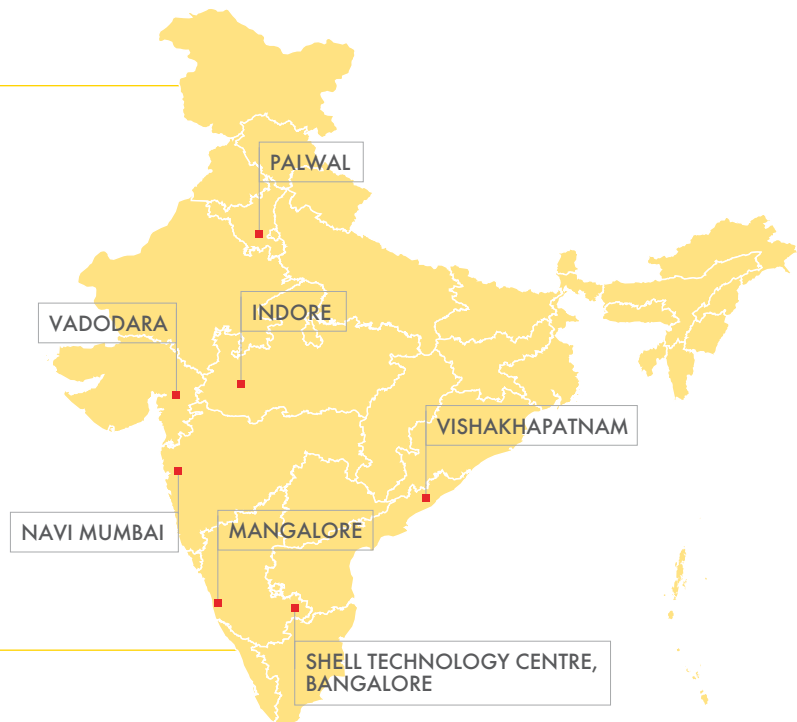


Strategically located pan-India plants for manufacturing and supplying modified bitumen and emulsion



Robust quality management processes to ensure consistency in the quality of the products

OUR MANUFACTURING FACILITIES SERVING THE INDIAN SUB-CONTINENT ARE WIDESPREAD ACROSS STRATEGIC LOCATIONS:



Get in touch:

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Be a part of our learning sessions and share knowledge of global standards/best practices! For enquiries, please reach us: Tiki Tar and Shell India Pvt.Ltd. Tiki Tar Estate, Village Road, Bhandup West, Mumbai 78, India