

Honshu-Shikoku Bridge Expressway Company Limited

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Company Limited



Company name	Honshu-Shikoku Bridge Expressway Company Limited
Employees	435 (As of January 1,2026)
Head office	Kobe, JAPAN
Capital	4 billion yen
Establishment	1970 (Honshu-Shikoku Bridge Authority established) 2005 (Honshu-Shikoku Bridge Expressway Company Limited established)



Kurushima Kaikyo Bridges
(Open 1999, Length 4,106 m)



Seto-Ohashi Bridges
(Open 1988, Length 9,360 m)



Akashi-Kaikyo Bridge
(Open 1998, Length 3,911 m)

Honshu-Shikoku Bridge Expressway Company Limited (HSBE) operates and maintains three expressways between Honshu and Shikoku with our group companies. HSBE constructed these expressways, including 17 long-span bridges from 1970 to 1999, when it was formerly known as HSBA. Since the completion of these expressways, HSBE has been developing the maintenance technologies to conserve the bridges efficiently for more than 200 years. Furthermore, HSBE is providing the technical assistance to long-span bridge operators around the world with our knowledge and advanced technologies.



Advanced Technologies of Honshu-Shikoku Bridges

- Long-span bridges for more than 200 years -
Technologies de pointe des ponts Honshū-Shikoku
- Ponts à grande portée conçus pour une durée de vie de plus de 200 ans -



Maintenance Technologies for Long-span Bridges

Inspection technology

Advanced tools help to streamline the bridge inspection works, especially for cables and steel components.



Main cable inspection



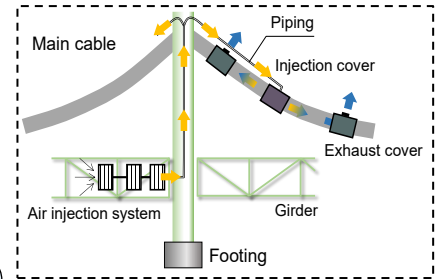
Suspender rope inspection



Tablet app with BIM & MR

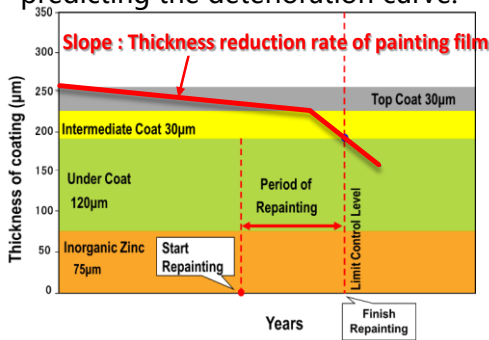
Cable dehumidification system

Corrosion is prevented in the main cables by injecting dehumidified air into them



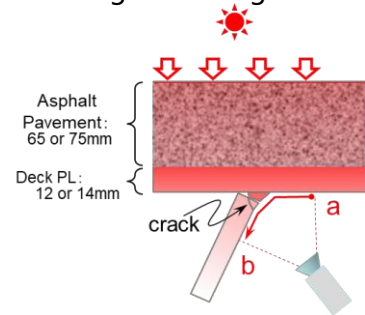
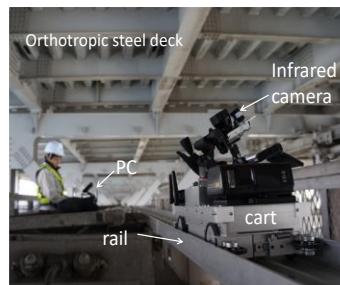
Coating maintenance system

For efficient maintenance of coating, HSBE has been investigating the thickness reduction of coating and predicting the deterioration curve.



Fatigue crack detection technology

It is a fatigue crack detection technology for orthotropic decks that measures the temperature difference between the deck plate and trough rib. Cracks can be detected remotely without removing the coating.



Technical Assistance for Long-span Bridges

- Technical Advice for Construction & Maintenance
- Dispatch of Engineers to Bridge Construction Sites
- Seminars on Maintenance for Bridge Engineers

Technical Advice for Tsubasa Bridge (Cambodia)



Technical Advice for Matadi Bridge (Democratic Republic of the Congo)



Seminars on maintenance of long-span bridges



World's Longest Wide-Span, Low-Positioned Road Lighting for Bridges

Le plus long système d'éclairage routier à grande portée et à faible hauteur d'installation pour ponts au monde



- World's longest 30-m illuminance coverage**
(Conventionally 6 to 20 m ⇒ Newly 26 to 30 m)
- Improving visibility with** custom LED lenses and full pro-beam lighting
- Comfortable driving even in poor weather** by optimal illuminance, visual guidance lighting and outer line lighting
- Improving road safety** by eliminating the risk of pole collapse and fixture fall
- 99% cost reduction for maintenance**^(*1)

Conventional pole lighting: _____ \$190,000/year

Wide-span, low-positioned road lighting: _____ \$2,000/year

(Comparison of the cost including the traffic regulations, labor and machine cost for inspection)

- 64% reduction of electricity consumption**^(*2), contributing to carbon neutrality

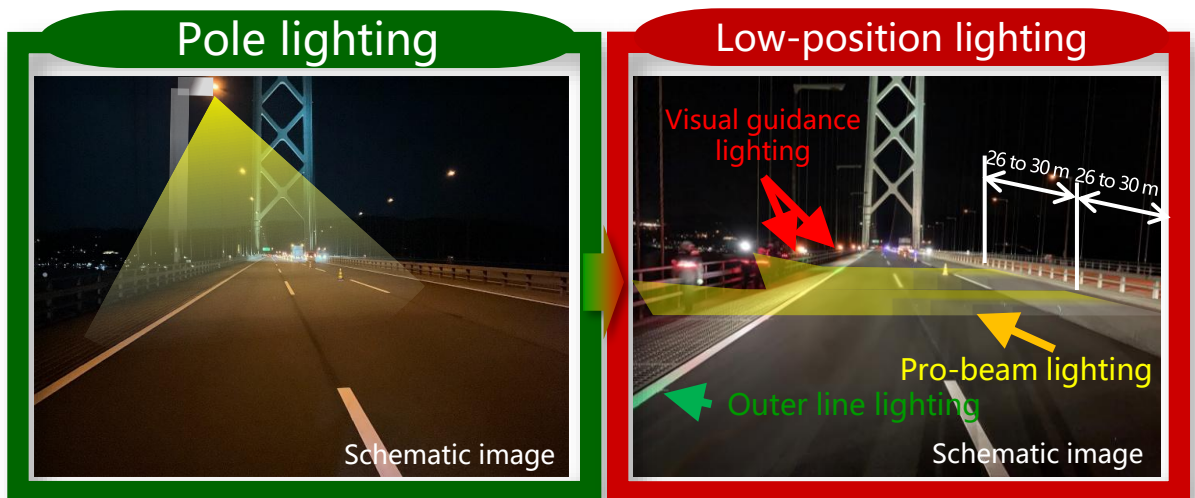
Conventional LED lighting: _____ approx. \$70,000/year

Wide-span, low-positioned road lighting: _____ approx. \$25,000/year

(Comparison of pro-beam lighting, The Chugoku Electric Power Co., Inc., kouatsu TOUA)

(*1) Maintenance cost includes traffic regulation, aerial work platform and labor cost, and excludes electricity consumption.

(*2) 64% reduction of electricity consumption was realized with custom LED lenses.



(Patent pending)



Wide-span, low-positioned road lighting for bridges installed on railings

Jointly developed by Honshu-Shikoku Bridge Expressway Co., Ltd., Honshi-Expressway Bridge Engineering Co., Ltd. and IWASAKI ELECTRIC CO., LTD.

