厉害！港珠澳大桥获国际桥梁工程界公认的最高奖项！

日前，一年一度的国际桥梁与结构工程协会（IABSE）“杰出结构工程奖”评选结果揭晓，港珠澳大桥主体桥梁工程从全球众多土木结构工程中脱颖而出，荣膺唯一的“2020 年度杰出结构工程奖”。

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ALL MATERIALS
WORLDWIDE

PRESS RELEASE
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IABSE Awards 2020

The International Association for Bridge and Structural Engineering (IABSE) is pleased to announce the Laureates of the IABSE Awards 2020.

THE OUTSTANDING STRUCTURE AWARD

The IABSE Outstanding Structure Award (OStrA) was established in 1998. It is one of the highest distinctions awarded by IABSE and recognises, in different regions of the world, some of the most remarkable, innovative, creative, or otherwise stimulating structures. Sustainability and respect of the environment is also an important factor. This Award recognises the most remarkable, innovative, creative or otherwise stimulating structure completed within the last few years. The Awards are restricted to a maximum of one Award per year. The Outstanding Structure Award Committee chaired by Naeem Hussain.

Winner: Hong Kong Zhuhai Macao Bridge, China

Outstanding Structure Award (OStrA) 2020 is presented to the Hong Kong Zhuhai Macao Bridge, China, *'It is the world's longest sea-crossing link and consists of reclamations, artificial islands, immersed tunnel, marine viaducts and cable-stay bridges. It can be seen from land, sea and air and its design has been driven by aesthetics, environmental, engineering and durability aspects.'*

At 55km, Hong Kong-Zhuhai-Macao Bridge (HZMB) is the world's longest sea-crossing link and consists of reclamations, artificial islands, immersed tunnel, marine viaducts and cable-stay bridges. It can be seen from land, sea and air and its design has been driven by aesthetics, environmental, engineering and durability aspects. Significant use has been made of large pre-fabricated elements to achieve quality and construction speed. HZMB will improve connections between 11 cities to create an economic and business hub in the Greater Bay Area and significantly reduce vehicular journey time between Hong Kong and Zhuhai from four to one hour. A number of innovations were implemented in this project:

- Precast pile caps and pier columns as a single unit lowered onto composite piles with temporary cofferdams supported off the pile caps, permitting connection to the piles to be done in the dry.
- Combined precast pile caps and pier columns avoided un-friendly wet works in a sea environment and enabled durable and quality construction to be done in reduced construction time.
- Sail type and dolphin type towers for Jiuzhou and Jianghai bridges respectively are stiff in the longitudinal direction and eliminated the need for intermediate back span anchor piers in Jiuzhou Bridge and gave the required stiffness for the central tower of Jianghai Bridge.

Type of structure:	*Hong Kong Zhuhai-Macao Bridge*
Date of completion:	*June 2018*
Location:	*Hong Kong Zhuhai and Macao, China*
Owner:	*Hong Kong-Zhuhai-Macao Bridge Authority (Mainland Section), Highways Dept. Hong Kong*
Structural Design & Contractor:	***Short span marine viaduct + Jiuzhou Navigation Bridge*** *Contractor: China Major Bridge Engineering Co. Ltd (MBEC)* *Designer: China Railway Major Bridge Reconnaisance & Design Institute (BRDI) + Halcrow (UK)* *Concept Designer: Arup* ***Long span marine viaduct + Jianghai and Qingzhou Navigation Bridges*** *Contractor: CCCC First Harbour Engineering Co. Ltd + Guangdong Changda Highway Engineering Co. Ltd Designer: Highway Planning and Design Institute HPDI (China) + Chodai (Japan)* ***Immersed tunnel and artificial islands*** *Contractor: China Communications Construction Company Ltd (CCCC)* *Designer: HPDI (China) + STEDI (China)* ***Hong Kong Link Road Marine Viaduct*** *Contractor: Bouygues + Dragages + VSL + China Harbour JV* *Designer: YWL Engineering Pte Ltd. and Mott MacDonald Hong Kong Ltd.* *Concept Designer and Employer's Engineer: Arup*

国际桥梁与结构工程协会创建于 1929 年，是**国际上最大的桥梁与结构工程专业协会**，现有 100 多个国家和地区会员，在桥梁工程行业具有广泛的影响。

该协会自 1998 年设立了“IABSE 杰出结构奖”，专门授予全世界最具创新性的桥梁和建筑结构，该奖是**国际桥梁工程界公认的最高奖项**。此次奖项授予港珠澳大桥，是继 2008 年上海卢浦大桥、2010 年苏通大桥、2012 年西堠门大桥、2014 年泰州长江大桥后，国内大桥再获此殊荣。

此前，英国的默西盖特威大桥、美国的旧金山奥克兰海湾大桥等也曾获得过该奖项。

上海卢浦大桥

苏通大桥

西堠门大桥

泰州大桥

英国默西盖特威大桥

美国 旧金山奥克兰海湾大桥

港珠澳大桥是连接香港、珠海、澳门两岸三地的大型跨海通道，是**中国交通建设史上技术最复杂、标准最高的工程之一**。主体桥梁工程长约 22.9km，主要包括青州航道桥、江海直达船航道桥、九洲航道桥等。三座大跨度钢结构斜拉桥，每座均有独特的艺术构思。

港珠澳大桥主桥的曲线设计与斜拉桥体

面对水文、通航、航空、气象、环保、水利、地质等多项复杂的建设条件，大桥的设计融合了美学、环境、工程和耐久性，创造性提出**“大型化、工厂化、标准化、装配化”的建设理念**，依靠当代先进的科学技术和国家强大的工业实力，确保实现**“高品质、长寿命”**的建设目标。

港珠澳大桥主体工程以其耐久环保、高品质、高质量、可持续等特点获得评委青睐，它的落成将推动粤港澳大湾区城市群的互联互通，加速大湾区经济发展。