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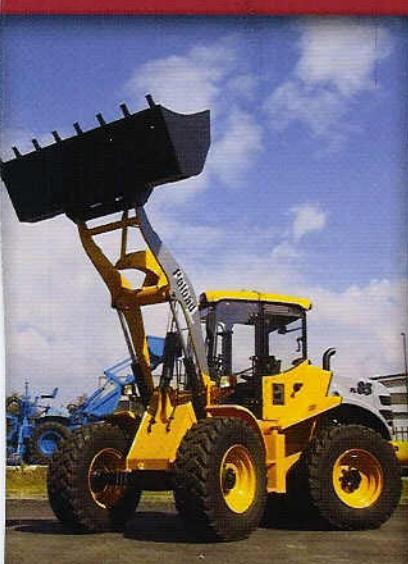
تخدم صناعات البناء ومعدات البناء والطرق وتوليد الطاقة في الشرق الأوسط وشمال أفريقيا منذ ١٩٨٣
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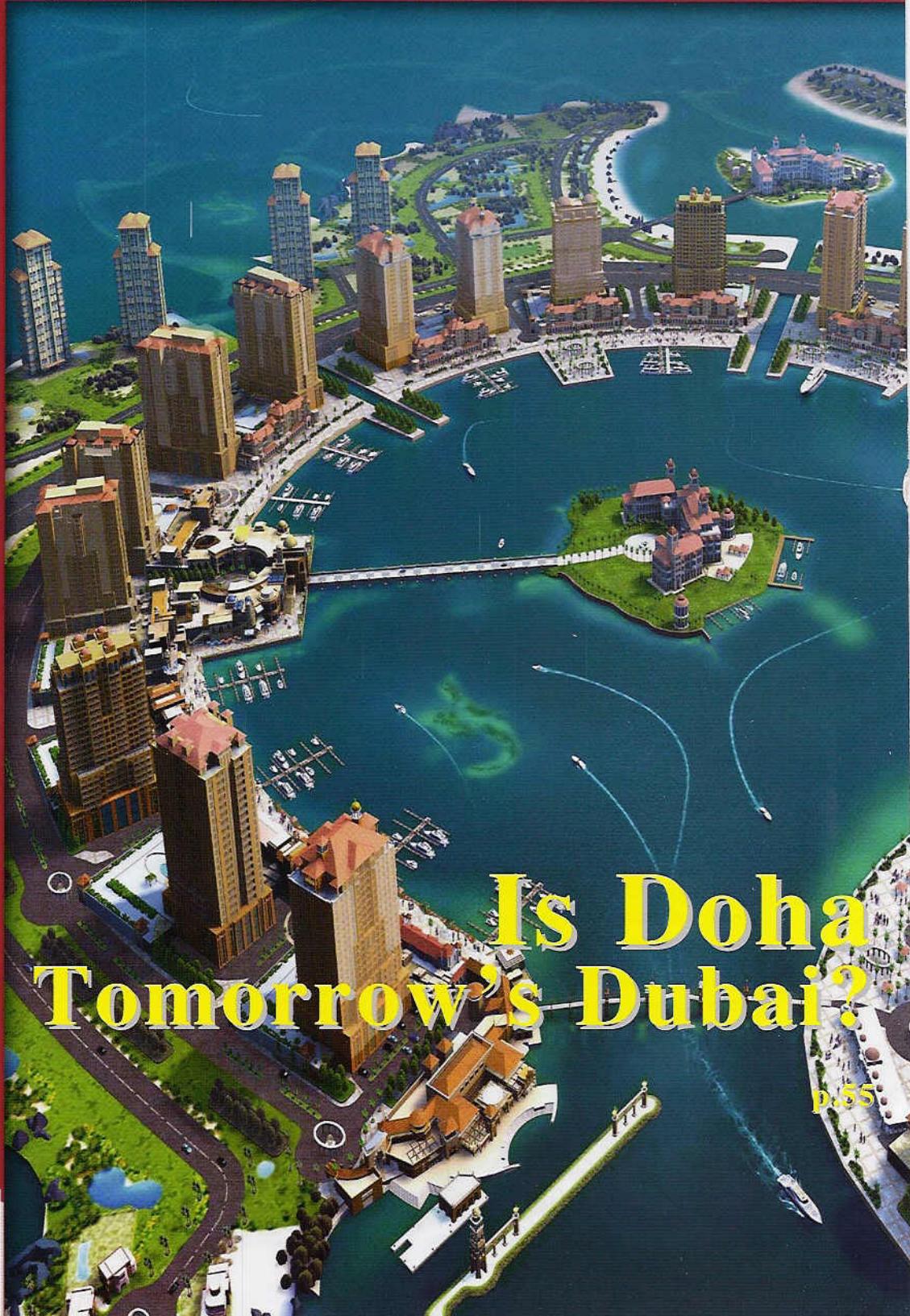
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Is Doha
Tomorrow's Dubai?

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Manitowoc Crane Group Tower Cranes Build New Bay Bridge

Fourteen Potain MD 560-40 tower cranes built by **Manitowoc Crane Group** are helping construct the San Francisco to Oakland Bay Bridge in what has become the largest tower crane project currently taking place in North America. The MD 560-40 Potain tower cranes are helping build a bridge that can handle more than 270,000 vehicles per day and be capable of handling an earthquake up to 8.2 on the Richter scale.

The Potain MDTs are being used to build the "Skyway" viaduct, a 2.5 km (1.5 mile) long segment of the bridge. Each crane stands on 28 piers, 50 m (164 ft) high in 15 m (50 ft) of water. The Potain towers sit on bespoke pile-supported concrete pads adjacent to the piers and are helping with form and rebar placement, along with a range of general lifting duties.



These 560 ton-meter machines - erected and serviced by SI Equipment - have jib lengths of up to 80 m (262 ft) and a tip capacity at maximum radius of 3.4 t (4 USt). The 14 units at work at the Bay Bridge have all been set up with differing configurations, depending on the specific requirements at each pier.

One of the MD 560-40 tower cranes is based at KFM's pre-cast concrete yard, where roadway sections are being made. A total of 452 sections are needed for the Skyway viaduct, each up to 9m (30 ft) high, 27 m (90 ft) wide and 8 m (25 ft) long - and weighing up to 708 t (780 USt). These sections are then floated into the Bay by barges and connected, like huge building blocks, to form the bridge deck. These sections are designed to sway and slide during an earthquake. This is accomplished through a hinge beam system of expansion joints that use steel tubes placed in the deck segments. ■

Manitowoc هي واحدة من أكبر المصانعين والموزعين لمعدات الرفع ومعدات أجهزة حفظ المأكولات. إضافة إلى ذلك تقدم الشركة خدمات بناء السفن وإصلاحها للحكومة والقوات العسكرية. حالياً تستخدم رافعة MD560-40 في عملية إنشاء الجسر الذي يصل بين سان فرانسيسكو وأوكلاند الذي يبعد عن أكبر المشاريع الذي يتم تنفيذه في شمالي أمريكا.

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Kryton's Krystol Waterstop System Streamlines Joint Design Process, Saves Construction Time & Costs

Innovative concrete waterstop application is changing the way concrete construction joints are waterproofed. Known as the Krystol Waterstop System (or KWS), the application replaces conventional physical waterstop barriers, saving construction time and costs while providing more reliable waterproofing protection for construction joints. A worldwide patent for the application is currently pending.



"When it comes to waterproofing, the joints between concrete pours are particularly vulnerable," said *Leo Connell*, Marketing Manager for **Kryton International**.

Krystol is an integral crystalline waterproofing compound that is proven to waterproof concrete from the inside out, replacing conventional external membranes or physical barrier systems. When mixed with or applied to concrete, Krystol chemicals form crystals that seal the spaces between concrete particles and permanently block water penetration from all directions. These crystals also react with incoming water to self-seal small cracks that develop over the life of the structure.

The Krystol Waterstop System uses two Krystol-based products: Krystol Waterstop Treatment and Krystol Waterstop Grout. A 5-cm wide, 3-cm high triangle-shaped strip of Krystol Waterstop Grout is created along the edge of a concrete slab or wall at the site where a new wall is to be poured. Once the grout has cured, Krystol Waterstop Treatment is applied and the concrete wall can be poured as normal.

The Krystol Waterstop System offers a number of benefits over conventional barrier systems:

- It's easier and faster to install, saving construction time and labour costs and reducing the requirement for skilled trades.
- Unlike many physical barriers, Krystol won't deteriorate over time - its waterproofing protection lasts the lifetime of the structure.
- Unlike many barrier systems, the Krystol Waterstop System can be used on curved, rough or irregular surfaces.
- Krystol is non-toxic and certified safe for use in potable water containment. ■

تعتبر Kryton جزء من مجموعة شركات Kryton المتخصصة بتطوير وتصنيع وتوزيع معدات عزل المياه وإصلاح وحماية طبقات الخرسانة. استخدمت معدات الشركة في العديد من المشاريع الهامة في العالم من وضع أساسات منازل وجسور ومشاريع معالجة المياه. مؤخراً وضعت الشركة في الأسواق جهاز عزل مياه تحت إسم Krystol. من فوائده توفير الوقت والمال.

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