

Ingenuity – Engineering Ground Breaker Episodic Synopsis

Episode 1: Burj Dubai

The Burj Dubai holds the title as the tallest man-made structure ever built. Pushing the technological envelope, it is the benchmark all future record-breaking skyscrapers will be based upon. Near India's capital Delhi, the Qutub Minar reigns supreme for almost a thousand years as the world's tallest brick minaret. Trace the history of two towers, two eras, both governed by the same principles of Islamic architecture.

Burj Dubai 是世界上最高的人工建筑，是以突破性的科技建造，在建筑界里创下一个新的标准。在印度首都新德里，Qutub Minar 是世界最高的叫拜楼，已拥有一千年的历史。这一集的节日将会了解两座建筑背后的历史与文化，进一步了解伊斯兰建筑。

Episode 2: Marina Barrage

On a fully urbanised island the size of Singapore, water scarcity is a dire issue. The solution is the construction of an urban reservoir, the first of its kind in the world. Together with cutting edge technology, Singapore is on its way to water sufficiency, just like how the city of Constantinople had the foresight to build massive underground cisterns in the 6th century to become one of the greatest cities in the ancient world.

新加坡是一个水源严重稀少的国家，为了增加水源，市区重建局建立了蓄水池，以科技创造出更多的水源。这一集的节日还会探讨君士坦丁堡王国，看看这个 6 世纪的古城是如何建造出地下水厂，以突破性的建筑概念成为世界最有名的古城。

Episode 3: Korean Tankers

Tankers are the workhorses of our modern economy and the largest of these are built in Korea. Features like double-hulls and multiple tanks have pushed the cargo and safety capacity of tankers to new heights, making them the mainstay of the oil industry. It's also the same principle that centuries-old Phinisi ships remain the transport backbone of the Indonesian archipelago. Two different ships, one success story.

液货船是现代经济中最重要的运输媒介。这一集的节日将会探讨韩国液货船，这些船只拥有着先进的设备，让它们成为石油工业的最佳首选。这一集的节日也会探讨印度尼西亚运输船 Phinisi。这类型的船只有着一百年的历史，是印度尼西亚群岛的主要运输媒介之一。

Episode 4: Mumbai Highway

For years, the roads of Mumbai were a hotbed of congestion and overcrowding. Now, a dynamic link road promises to ease the city's traffic woes. But the construction of Mumbai's first double-tiered flyover has been anything but easy, with resettlement and land acquisition proving a logistic nightmare. Yet a thousand years ago, the Khmer rulers of Cambodia moved a nation with a complex network of roads and rivers that linked their empire across four countries.

印度孟买的交通繁忙又拥挤，新推出的计划会不会改变这个棘手的问题？一千年前，高棉帝国（今日的柬埔寨）以复杂却有效的交通系统连接了四个国家，这个系统背后有着怎么样的科学原理呢？

Episode 5: Beijing Airport

The largest airport terminal in the world in Beijing is an engineering marvel that nonetheless pays strict adherence to the principles of Chinese fengshui, and marks a new footnote in an age-old tradition of building big. To understand how far that tradition has progressed, we explore the Todai-ji temple in Nara, designed and built by a Chinese monk, which today remains the world's largest wooden building.

北京机场是世界上最大的机场，讲究的是风水以及传统概念。还有，节目也会来到日本奈良，了解东大寺的历史，探索这个世界最大的木建筑物。

Episode 6: Marmaray Project

It is the world's deepest immersed tunnel. Spanning across Asia and Europe, the Marmaray Project promises to ease Istanbul's decades-old traffic woes. Located in an earthquake zone, it is an engineer feat that is only rivalled by the discovery of a nearby ancient port that hinted at how the early Greeks made the maritime traverse between the two continents several thousand years ago.

这是世界上最深的地下隧道，穿越亚洲以及欧洲，马尔马拉铁路工程的主要目的就是为减轻伊斯坦布尔交通拥挤的问题。在希腊王国，人们已开始以科技来开拓海上输运系统，穿越了两个州。

Episode 7: Palm Islands

Self declared 8th Wonder of the World, the Palm trilogy are the largest man-made islands in the world and a credible testimony of human mastery over nature. Employing technology like satellite positioning, it has broken new records and engineering milestones, recalling the heydays of the Harrapan civilisation in Dholavira, a city built to be an oasis on the salt flats of Gujarat in India over two millennia ago

被迪拜自称是“世界八大奇迹”的朱美拉棕榈岛是世界上最大的人工岛屿，也可见证了科技的力量。在两千年前的印度，一个古城成功以当时的科技来建造出一个人造绿洲。

Episode 8: Three Gorges Dam

The Three Gorges Dam is the largest hydro-electric dam in the world. That it is a sheer engineering marvel cannot be denied. Yet questions abound over environmental and social issues, not to mention logistics problems of moving ships up and down river. An ingenious system of shiplocks has gone towards solving that problem, echoing the techniques of Banaue farmers in the Philippines who mastered the art of managing water over two thousand years ago.

中国的三峡大坝是世界上规模最大的水电站，也是世界上有史以来建设的最大的水壩。在两千年前，菲律宾也采用了同样的科技与构思，掌握了管理水源的技巧。