

"The past we inherit, the future we build ourselves"



"TramTrain does it Greener and Cheaper on lightly used railway lines and in the streets"

Qatar Rail reveals horse-inspired metro and dhow-style tram designs



18 Apr 2016

QATAR: The designs for the future Doha Metro cars and Lusail Light Rail Transit vehicles were unveiled by national railway project promoter Qatar Railways Co. The styling aims to combine Qatari heritage and culture with modern technology. 'Across our projects, our build and design stages have been guided by the powerful coming together of tradition with modernity', said Qatar Rail's Managing Director Abdulla Al Subaie on April 17. 'Deeply entrenched in Qatari culture and heritage, the Lusail Tram and Doha Metro designs celebrate the convergence of our country's history with groundbreaking technologies and cutting-edge solutions.'

Al Faras metro trains

The metro train sets are branded AI Faras, after the Arabian mares which have been prized for war or for racing since ancient times. Qatar Rail said the name symbolises intelligence and speed, representing the advanced technology used on what will be 'one of the fastest driverless trains in the world' with speeds of 100 km/h.

The 'dynamic shape' of the horses inspired the front ends of the vehicles, which are 'powerful yet slender and elegant' with the shape of the windows resembling a horse's eyes.





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Each of the 75 train sets will have two standard class cars with 88 seats and one car split between Gold class with 16 seats and Family class with 26 seats. The interiors will be 'inspired by the progressive architecture present in Doha skyline, combining traditional and modern elements.'

Kinki Sharyo is to design and build the metro train sets its Osaka factory in Japan, as part of the metro's railway systems consortium which is led by Mitsubishi Heavy Industries.

The styling is the result of 'close co-ordination with Qatar Rail and our aesthetic design team', according to Thierry Boussillon, Deputy Programme Director at Mitsubishi Heavy Industries. 'It combines the most modern technology with a unique yet elegant shape, and Qatari culture and heritage.'

Al Mehmel light rail vehicles

The trams for the Lusail LRT network are branded AI Mehmel, and inspired by a type of traditional dhow used for pearl fishing. The design concept focuses on the sea, with 'calm, cool, elegant and tranquil elements of that medium'.

The 33 km tramway is being built by a consortium led by Alstom and the QDVC 51:49 joint venture of Qatari Diar and Vinci Construction Grands Projets. The 28 Citadis trams will be 32 m long 100% low-floor vehicles offering 'high-end passenger comfort' and designed for extreme weather conditions.

They will use the APS ground-level power supply system.

'There are currently more than I 800 Alstom light rail vehicles in operation throughout the world', said Gian Luca Erbacci, Alstom Senior Vice-President, Middle East & Africa. 'Each Citadis has its own specific design and is customised to reflect its city's image and culture. We are very happy to have partnered with Qatar Rail to come up with a unique design that will certainly please the passengers and residents of Lusail.'

Construction progress

Qatar Rail reported that 99 km out of 111 km of tunnelling for the Doha Metro had been completed as of the first week of April, and 35% of construction works for the Lusail LRT were complete. The first phase of the metro is expected to be completed in 2019-20, with the tramway following in 2020. Completion of the metro, four-line tram network and a long-distance railway linking Qatar with the GCC Rail network is expected by 2030.

'The official unveiling of the Doha Metro and Lusail Tram designs is an occasion for us to look at how close we've come to bringing our vision to life', said Saad Ahmed Al Muhannadi, CEO of Qatar Rail. 'This new milestone is an opportunity for us to bring the progress of our projects back to the future of transport in Qatar; one that is designed and built to world-class standards of modernity and innovation but, most importantly, that remains deeply rooted in our country's history and community.'

Under a separate project, an 11.5 km catenary-free tramway is being built to serve the Education City development. This will be operated using a fleet of Siemens Avenio trams with onboard capacitor and battery energy storage





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Doha metro tunnel breakthrough



24 Mar 2016

QATAR: Qatar Rail celebrated the completion of tunnelling on the Red Line North section of the metro when a TBM broke through between Legtaifiya and Qatar University stations on March 21.

Boring of the 11.3 km tunnel started on July 19 2014 and used four earth pressure balance TBMs. They achieved an average of 30 m per day at their peak, with the best daily rate of 42 m set by Lebretha on March 29 2015.

Work on the Red Line North package is being carried out by the ISG joint venture of Impregilo, SK E&C and Galfar Al Misnad. Covering the section from Msheireb to Lusail, it includes seven underground stations and two above ground. QR reports that this section is more than 70% complete.

'We and our colleagues in ISG have had to overcome some significant challenges', said Qatar Rail Managing Director Abdulla Al Subaie. 'It is well know that one of our TBMs was flooded one year ago and the achievement today shows how effective our recovery operations were and that overall project progress was not affected.'

The north-south Red Line will link Lusail to Al Wakra, with a branch to Hamad International Airport.

There will be 18 stations on the 41 km route. Construction is split into two packages, with a further five TBMs working on the southern section.





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Tunnelling for the first phase of the metro is now 85% finished, with completion expected in the autumn. Six TBMs are being deployed on the Gold Line and 10 on the Green Line. QR reports that the project is 37% complete. Opening of the first three lines is expected in the fourth quarter of 2019.

Fujita Corp, which is building the Red and Green line depots, has awarded Drake & Scull Rail a 340m riyal contract for mechanical, electrical and public health building services.

Courtesy: Railway Gazette

