

Can Robots Fill Up Your Car?

Imagine a world where you don't even have to bother leaving your car to manually fill it with fuel; instead, a robot covers the hard yards for you. That's the reality of the situation in Abu Dhabi National Oil Company (ADNOC) Distribution's flagship service station. In addition to automatic fuelling, the facility is equipped with a range of other AI bells and whistles, too.

A 21st-century car wash tunnel, a click-and-collect delivery service and an automated checkout are just some of the advanced features offered in what may well be the most futuristic service station in the world. Though it remains to be seen whether the rest of the planet will follow suit, the UAE is certainly setting a high benchmark when it comes to combining technological wizardry and exemplary levels of customer service in the refuelling experience.

Robotic fuelling arm

The headline attraction at the ADNOC Distribution service station is the robotic fuelling arm, which does not require the presence of an attendant at all. Instead, the driver pulls up to the pump and a camera installed on the pillar recognises its particulars, cross-referencing them against those stored in its database.

Based upon this information, the robot knows what type of fuel you require without the need for the driver to do anything. The robot then opens the fuel cover, analyses the cap to understand what type it is, then seamlessly removes it before inserting the nozzle of the fuel of your choice. Once filled, the robot removes the nozzle, replaces the cap and closes the cover and away you go!

Humans and robots working in harmony

For those customers who prefer the human touch when filling up, the ADNOC Distribution facility has tweaked this timeless formula to bring it into the modern age, too. Upon arrival, your vehicle will once again be recognised by the array of cameras and machine learning models built into the station's infrastructure, informing the attendant which fuel to use without a word passing between you and them.

Feeling peckish while you wait? Or perhaps you want to buy some supplies for home and don't have time to swing by a convenience store? If so, you can use ADNOC's Click & Collect service, which allows you to pre-order items on the app and have them hand-delivered to the window of your car as your vehicle is being fuelled.

A classy car wash and an automated checkout

If that wasn't enough, ADNOC have also introduced ground-breaking technology into their car washing service. Employing 80% recycled water, the Car Wash Tunnel is an efficient and environmentally friendly option for making your wheels look as good as new. It can handle up to four vehicles at once and each wash takes between seven and eight minutes on average.

If you do find yourself drawn into the onsite mini-mart to do some in-person browsing, you can still benefit from AI marvels. After filling your basket with the items you need, it's simply a case of placing them on the self-checkout counter. A multitude of cameras and scanners analyse your purchases, inform the computer of your total bill and facilitate the payment process. What could be easier? It's the service station of tomorrow, today.