## **Petrol**

## Mepsan's vision: new generation products and technologies

Mepsan has developed a range of high-tech products that answer the increasing demand for natural gas fueling.





The increase in carbon emission rate caused by the CO2 emission of exhaust-gas to the atmosphere is one of the most noteworthy air pollution issues of recent years in many standards, including those applied by the European Union.

The CO2 emitted from fuel is 40% more than CO2 emitted from the CNG. Even more important is that while generating CO2 emissions, Petrol needs 1.6 times more energy than CNG.

The increased use of natural gas in industry and transport, aiming to minimize the negative effects of motor vehicles to the environment and therefore to human health in European countries and in all around the world, has led to an increase in the demand for natural gas.

Due to the fact that CNG as a fuel has a high energy value thanks to the high methane gas in it, more clean burn compared to petroleum based fuels, polluting less the soil, adequate reserves and lower price compared to other fuels, thus these environmental and economic advantages have led the energy sector to develop products and projects in the CNG market.

As a result of its innovative product development processes, MEPSAN offers high-tech dispensers and CNG compressors for its customers, which are specially developed for the use of CNG as an alternative fuel.

Mepsan CNG fuel dispenser, developed for CNG market having the "Future of the Station" vision, offers many features such as specially manufactured panel top touch keypad, backlight LCD display

with scrolling lines, 7 digit electromechanical totalizers, multi language menu option and optional installable POS / cash register. The cladded frame system allowing the change of claddings on the site, the nozzle set, the column components, the adapter plastics and the column ventilation inlets constitute the advantages of the design.

Environmentally friendly, economical and safe CNG fuel provides fast and high performance delivery to both light and heavy vehicles. Accurate measurement of coriolis meter, maximum flow rate of 50 kg/min, single and double hose with NGV1 and NGV2 nozzle options in the range of 200-275 bar functioning pressure, apart from providing fast fuel transfer increases also the number of customers to be served.

ATEX certificated modular hydraulic units, body and interior chassis built with corrosion-resistant materials, anti-impact panel side sheets and dispensers are increasingly durable and longevity. All integration processes such as customer, vehicle identification system or cash register processes in the stations can be realized with the protocol options that provide communication in various automation options in different regions all over the world.

Safety is maximized in the CNG dispensers. In the dispenser system which can go up to 3 pressure lines, safe pressure adjustment can be realized with pneumatic or electronic valve options. Safety is enhanced by using excessive current valve and pressure transmitters for possible leakage. It is also used as a break away on filling and return lines against the risk of rupture that may occur due to misuse of the hoses. By using a separating particle filter to clean unknown materials in the CNG fuel, both the dispenser and the supplied clean fuel are protected. Thanks to the warning light which is functioning on the unexpected risky situations both the dispenser and the station security are maximized.

Mepcogas CNG compressor is another innovative solution aiming to increase the global competition, accelerating technological developments and using environmentally friendly products to differentiate at stations where Mepsan is focused on creating loyalty to customers. Mepcogas CNG compressor cylinders are produced as non-lubricated cylinders and produced as vertical piston compressors specially designed for CNG delivery.

Vertical compression design provide the best facility solutions for our customers in terms of energy efficiency (low functioning costs) and easy installation, durability and performance. 1 to 4 steps Mepcogas CNG compressors have 275 bar outlet pressure and have increased strengths, low noise levels, reduced vibration levels, low oil rates, easy operation even under extreme conditions and low rotation.

Mepsan is presenting new generation products and technologies developed for future fuel station for CNG (Compressed Natural Gas) market, which is an alternative fuel that comes to the agenda as a solution to the decrease of energy resources in the last years and the increasing fuel prices. Mepsan is having one more step further aiming to reach the summit in the world markets with its

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