

EFFICIENCY OF METHANE GAS FUEL FOR AUTOMOTIVES

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Abstract:	Keywords
This is covered in the article Cars for Methane Gas Balloons Working Exit Technology, Security Issues, and Work Release Processes about Information Place. Also, methane gas properties from its use are covered and bypassed.	CNG, gas cylinder, 34CrMo 4, certification, carbon dioxide, nitrogen oxide.

Introduction

Daily in our lives people themselves far distances close to do for personal or public from transports uses. From this, it is clear that cars use different kinds of fuels and electricity on account of moves. Gasoline and diesel from fuels when cars the environment one-row harmful gases These gases into the air spread, global climate change and people to your health serious damage delivers. Gasoline and diesel from fuels outgoing harmful substances the following :

- Carbon dioxide: This is a gas climate change the biggest cause is considered. Because gasoline and diesel fuels burning CO₂ are released as a result, ozone in the layer accumulates and heat keeps global warming reason will be.
- Nitrogen oxides: Diesel engines and gasoline engines have relatively more nitrogen oxides These gases in the air react when entering, smog and oxygen deficiency (ozone) layer damage) making the release possible. Nitrogen oxides people breathe cause problems, especially asthma and bronchitis such as diseases strengthen. Gasoline and diesel fuels outgoing gases environment and human to your health negative impact This problem. Eliminate to grow for to these than harmless to the means transition, fuel efficiency increase and other ecological clean technologies develop necessary.

In cars methane from gas of use importance

Natural gas (CNG) in cars alternative fuel as the most widespread energy source of methane gas following advantages him/in cars use make it ideal:

Methane of gas combustion, gasoline or diesel burns less carbonate dioxide (CO₂) and other harmful substances emitted. This environment cleanliness storage problems to relieve help give. The methane of gas price gasoline and diesel is relatively lower, this car to the owner's expenses to reduce opportunity. Currently at the time world according to natural gas reserves 175 billion what organization will. In Uzbekistan and 1476-1979 million. Gaseous

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fuel combustible (CO, N₂, CH₄, CmHn) and from non-combustible gases (N₂, O₂, CO₂) and many in quantity impossible water from steam (H₂O) organization found. 1m³ gaseous fuel complete in the fire separated came out heat to the amount fuel burning heat It is called. Fuel-burning heat high QYU (kJ/kg) and lower Qq (kJ/kg). Gaseous fuel lower burning heat (kJ/nm³):

$$Qq=108H_2+126CO+234H_2S+358CH_4+591C_2H_4+638C_2H_6+7860C_3H_6+913C_5H_8+1135C_4H_8+1187C_4H_{10}+1461C_5H_{12}+1403C_6H_6$$

Here: H₂, CO, H₂C, CH₄, C₂H₄ and other gaseous fuel to the composition incoming of gases volumetric quantity. Natural gas working release and delivery to be given gasoline and diesel than cheaper and more stable.

Methane gas balloons following from materials are prepared :

Steel: Steel-prepared balloons high to pressure resistant are long to work for a fixed term (i.e. 15 years) They provide 34CrMo₄ branded seamless steel from pipes that are prepared. Their thickness is 356 diameter of 7.7 mm, and 406 diameters of 8.8 mm. Now in our country from 30 liters to 150 liters methane gas balloons are being released.

Pressure and volume: Methane gas balloons usually 150 bar to 200 bar at least pressure resistant will be. The balloon size of the car to the needs suitable accordingly is selected. For example as a rule, if we are in our country working removable light cars most 65 to 90 litres of methane balloons are released.

Cars for methane gas balloons working exit process

Methane gas balloons working release process one-row technological stages own inside takes. Home stages of the following consist of :

Material Selection

The methane of gas high under pressure preservation provides for above said steel brand quality big attention These steels every one his/her own advantages and shortcomings.

Production exit process

Quality Control: Balloons working from issuing before them ultrasonic through from the test This process is carried out by the product safety, strength and far-term performance to provide focus.

Shape Give: Seamless steel from the pipe gas balloon for necessary in-size plasma using cut is taken. Then he/her below (at 1170 degrees) and heated to 1350 degrees Celsius bent is taken. Then to beat in the oven The balloon was heated (at 900 degrees). After cooling the thread opens. In stages, some balloons in the forest crack appearance This is the product unsuitable for the state take comes. If this gas balloon is for sale if he leaves whose is it for life point puts? The cracks appear to be reasons for bending in the process worker's bending point said the temperature take does not come out or pass sends. Another reason oxygen shown at the time is not open. That is worker to oneself attached to the task attention does

not give. Therefore for work in the process, the level of responsibility and attention demand will be. Since opening after gas balloons to the test is held.

Reinforcement and from the test Transfer: Balloons high-pressure air (20 MPa) and water (30 MPa) quality control and from the test are held. From the test, successful past digitization will be sent. Then internal and external surfaces are cleaned cracking the process goes. Kraska thickness laboratory employees by checked to pack permission is given.

Certification: Anyone balloon security requirements answer to give provider certificate is given. Then basically balloon litre, kilogram and series number will be.

Cars for methane gas balloons working emission, ecological clean and effective fuel systems development important part is considered. The methane of gas advantages: the rest of the fuels are relatively cheap and the surroundings to the environment harmless. With that one in line also a threat to the climate. Balloons working release process, safety, materials and technologies innovative approaches with improvement, future this of the system efficiency further increase opportunity gives.

Conclusion

Currently the day world according to the most dangerous from factors one this the environment This is pollution . of people his life danger under is putting. That's why for us possible as much as possible ecology to protect movement let's do need. To nature less damage caused by fuels our use is important. This is the matter above As mentioned, we are talking about gasoline and diesel. Then less poisonous gas issued compressed from gas our use Methane gas balloons far term are, are high good quality steel from pipes would be prepared That's it.

References

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