

## ECONOMIC GROUNDING FOR THE PROFITABILITY OF COMPRESSOR METHANE STATION WITH A BRAND **BRC** INTENDED FOR FILLING OF MOTOR VEHICLES WITH COMPRESSED NATURAL GAS – METHANE

Dear Sirs,

My name is Lubo Ganev – manager of Remix Bulgaria LTD, which is exclusive agent for Bulgaria of the Italian company **BRC** for modular methane stations for motor vehicles with compressed natural gas (methane) for Bulgaria. I would like to offer you economic grounding of a complete assembly of a modular methane-station for input pressure of the gas 4-55 bar/g. First, I would like to specify the proportion of each characteristics of the compressed natural gas at 200 bar/g:

### 1. Delivery price from Bulgargaz – 496,16 lv with VAT per 1000 normal m<sup>3</sup> methane

1 m<sup>3</sup> methane = 4 liters methane = 0,71 kg methane = 0,496 lv with VAT (delivery price from Bulgargaz )  
1 kg methane = 5,6 liters methane = 1,4 m<sup>3</sup> methane = 0,694 lv with VAT (delivery price from Bulgargaz )  
1 liter methane = 0,25 m<sup>3</sup> methane = 0,178 kg methane = 0,124 lv with VAT (delivery price from Bulgargaz )  
The proportion methane – gasoline and methane - propane-butane is as follows:  
3,2 liters methane= 0,571 kg methane = 1 liter gasoline = 0,396 lv with VAT (delivery price from Bulgargaz)

3 liters methane = 0,535 kg methane = 1 liter propane-butane= 0,371 lv with VAT (delivery price from Bulgargaz )  
1 kg methane = 5,6 liters methane = 1,750 liters gasoline = 0,694 lv with VAT (delivery price from Bulgargaz)  
1 kg methane = 5,6 liters methane = 1,867 liters propane-butane = 0,694 lv with VAT (delivery price from Bulgargaz )

### 2. Delivery price from Overgas – 534.40 lv with VAT per 1000 normal m<sup>3</sup> methane

1 m<sup>3</sup> methane = 4 liters methane = 0,71 kg methane = 0,534 lv with VAT (delivery price from Overgas)  
1 kg methane = 5,6 liters methane = 1,4 m<sup>3</sup> methane = 0,747 lv with VAT (delivery price from Overgas)  
1 liter methane = 0,25 m<sup>3</sup> methane = 0,178 kg methane = 0,133 lv with VAT (delivery price from Overgas)  
The proportion methane – gasoline and methane - propane-butane is as follows:  
3,2 liters methane = 0,571 kg methane = 1 liter gasoline = 0,426 lv with VAT (delivery price from Overgas)  
3 liters methane = 0,535 kg methane = 1 liter propane-butane = 0,399 lv with VAT (delivery price from Overgas)  
1 kg methane = 5,6 liters methane = 1,750 liters gasoline = 0,747 lv with VAT (delivery price from Overgas)  
1 kg methane = 5,6 liters methane = 1,867 liters propane-butane = 0,747 lv with VAT (delivery price from Overgas)

### 3. Selling price of an end customer at a gas filling station – 1,30 lv/kg

1 m<sup>3</sup> methane = 4 liters methane = 0,71 kg methane = 0,923 lv with VAT (selling price at a gas filling station)  
 1 kg methane = 5,6 liters methane = 1,4 m<sup>3</sup> methane = 1,30 lv with VAT (selling price at a gas filling station)  
 1 liter methane = 0,25 m<sup>3</sup> methane = 0,178 kg methane = 0,231 lv with VAT (selling price at a gas filling station)  
 The proportion methane – gasoline and methane - propane-butane is as follows:  
 3,2 liters methane = 0,571 kg methane = 1 liter gasoline = 0,742 lv with VAT (selling price at a gas filling station)  
 3 liters methane = 0,535 kg methane = 1 liter propane-butane = 0,695 lv with VAT (selling price at a gas filling station)  
 1 kg methane = 5,6 liters methane = 1,750 liters gasoline = 1,30 lv with VAT (selling price at a gas filling station)  
 1 kg methane = 5,6 liters methane = 1,867 liters propane-butane = 1,30 lv with VAT (selling price at a gas filling station)

### 4. The profit of selling at a gas filling station at a price of 1,30 lv/kg with supplier Bulgargaz with a surplus charge 87%

Parameters	Delivery price	Selling price	Profit	Expenses 7%	End profit
M <sup>3</sup> methane	0,496 lv with VAT	0,923 lv with VAT	0,427	0,034 lv with VAT	<b>0,393 lv with VAT</b>
KG methane	0,694 lv with VAT	1,30 lv with VAT	0,606	0,048 lv with VAT	<b>0,558 lv with VAT</b>
Liter methane	0,124 lv with VAT	0,231 lv with VAT	0,107	0,008 lv with VAT	<b>0,099 lv with VAT</b>

A) The profit of a station at average one filling of the motor vehicle with 70 liters - 12,5 kg methane at a price 1,30 lv/kg while the number of motor vehicles filled within a day is changeable.

Number of motor vehicles	Daily turnover for 1 motor vehicle	Daily turnover number of motor vehicles	Daily end profit	Month profit lv	Annual profit lv
20	16,25 lv with VAT	325,00 lv with VAT	139,50 lv with VAT	<b>4185</b>	50917
50	16,25 lv with VAT	812,50 lv with VAT	348,75 lv with VAT	<b>10462</b>	127294
100	16,25 lv with VAT	1625,00 lv with VAT	697,50 lv with VAT	<b>20925</b>	254587
150	16,25 lv with VAT	2437,50 lv with VAT	1046,25 lv with VAT	<b>31387</b>	381882
200	16,25 lv with VAT	3250,00 lv with VAT	1395,00 lv with VAT	<b>41850</b>	509175
300	16,25 lv with VAT	4875,00 lv with VAT	2092,50 lv with VAT	<b>62775</b>	763764
500	16,25 lv with VAT	8125,00 lv with VAT	3487,50 lv with VAT	<b>104625</b>	1272937
1000	16,25 lv with VAT	16250,00 lv with VAT	6975,00 lv with VAT	<b>209250</b>	2545875

### 5. The profit of selling at a gas filling station at a price of 1,30 lv/kg with a supplier Overgas with a surplus charge 74%

Parameters	Delivery price	Selling price	Profit	Expenses 7%	End profit
M <sup>3</sup> methane	0,534 lv with VAT	0,923 lv with VAT	0,389	0,037 lv with VAT	<b>0,352 lv with VAT</b>
kg methane	0,747 lv with VAT	1,30 lv with VAT	0,553	0,052 lv with VAT	<b>0,501 lv with VAT</b>
liter methane	0,133 lv with VAT	0,231 lv with VAT	0,098	0,009 lv with VAT	<b>0,089 lv with VAT</b>

A) The profit of a station at average onetime filling of the motor vehicle with 70 liters- 12,5 kg methane at a price of 1,30 lv/kg with a changing number of motor vehicles per day.

Number of motor vehicles	Daily turnover for 1 motor vehicle	Daily turnover number of motor vehicles	Daily end profit	Month profit lv	Annual profit lv
20	16,25 lv with VAT	325,00 lv with VAT	125,25 lv with VAT	3757	45716
50	16,25 lv with VAT	812,50 lv with VAT	313,12 lv with VAT	9392	114290
100	16,25 lv with VAT	1625,00 lv with VAT	626,25 lv with VAT	18785	228580
150	16,25 lv with VAT	2437,50 lv with VAT	939,38 lv with VAT	28177	342870
200	16,25 lv with VAT	3250,00 lv with VAT	1252,50 lv with VAT	37570	457160
300	16,25 lv with VAT	4875,00 lv with VAT	1878,75 lv with VAT	56355	685740
500	16,25 lv with VAT	8125,00 lv with VAT	3131,25 lv with VAT	93925	1142900
1000	16,25 lv with VAT	16250,00 lv with VAT	6262,50 lv with VAT	187850	2285800

**Пример 1:** Компресорна станция модел W132 с капацитет 850 м<sup>3</sup>/час при входящо налягане 5-6 bar/g с 2 двойнозареждащи колонки може да компресира 3400 литра метан за 1 час или 81600 литра метан за 24 часа с които могат да се заредят 1166 автомобили с бутилки от 70 литра – 12,5 кг газ.

**Пример 2:** Компресорна станция модел W90 с капацитет 550 м<sup>3</sup>/час при входящо налягане 5-6 bar/g с 1 двойнозареждаща колонка може да компресира 2200 литра метан за 1 час или 52800 литра метан за 24 часа с които могат да се заредят 755 автомобили с бутилки от 70 литра – 12,5 кг газ.

**Example 1:** Compressor station model W132 with capacity 850 м<sup>3</sup>/h at input pressure 5-6 bar/g with 2 double filling gas station can compress 3400 liters methane per 1 hour or 81600 liters methane per 24 hours with which can be filled 1166 motor vehicles with cylinders from 70 liters– 12,5 kg gas.

**Example 2:** Compressor station model W90 with capacity 550 м<sup>3</sup>/h at input pressure 5-6 bar/g with 1 double filling gas station can compress 2200 liters methane per 1 hour or 52800 liters methane per 24 hours with which 755 motor vehicles can be filled with cylinders of 70 liters– 12,5 kg gas.

The main advantages of methane stations with the brand BRC are:

- By its modern technologies and high quality of the production, the company has built nets of filling stations in many countries all over the world and it has ambitions to build 30-40 stations on the territory of Bulgaria by 2009 year, offering the most attractive and special conditions and a full range of services for the Bulgarian
- The BRC compressor stations are with great capacity and low expense of energy, which can be achieved by using the most modern technologies in the production of such equipment. The electricity expenses are reduced to 3-4% from the delivery price of the methane
- Only BRC has patented the use of “Buster” (additional smaller hydraulic compressor with power 15 kW and 18 kW) for faster filling from the storehouse to the filling station and lowering the expenses for electricity. The life of the main compressor is made longer by the use of the “Buster”, because it is less used and the replacement of its elements is rare and it has less wearing out of its components
- they can operate at wide range of input pressure (3-60 bar/g)
- the lowest price at the Bulgarian market (the difference between a complete assembly to the other manufacturers, presented in Bulgaria, is over 40 000 euro)
- Only BRC supply with a complete assembly of methane stations, fixed in special containers, which are not additionally paid and the clients have no other expenses on the equipment completion of the station, except for transport, load handling operations, customs and bank expenses. Separately Remix Bulgaria LTD are paid for the work for the installation and the starting of the compressor station, in accordance with the requirements of BRC, as Remix Bulgaria LTD take at their expense the full guarantee service and maintenance in a period of 1 (one) year of the date of putting the modular station in operation, but not later than 18 months from the buying date. Separately Remix Bulgaria LTD is paid only the components used during the guarantee period (oils, filters, cylinder gaskets and others). After this period, the conditions for service and maintenance of the delivered technology are negotiable by a individual contract between your company and Remix Bulgaria LTD.

**The compressor station is delivered attached in an explosion-proof steel container with all connecting inner manifolds, electric system, gas signaling apparatus, air compressor for pneumatic systems, air tube and scavenging tank at the entrance of the gas. The installation and the connecting of each module and components of the station are made by educated and high qualified specialists of Remix Bulgaria LTD in the factory of BRC in Italy, where all necessary tests for correctly functioning of the station are made. The price for the whole installation amounts to 9000 lv to 16000 lv no VAT added, depending on the type of the compressor and the number of the stations.**

**Remix Bulgaria LTD can offer a lease plan or bank credit for buying a station on request of its clients, meanwhile it guarantees before the respective authorities for the correct technical maintenance and the possibility for buy-back of the facilities before the payment period at a previously negotiated price has passed.**

For any further information you can contact me at tel. **0888-330053** or at my office tel/fax: **02-8629057**.

E-mail: **remix@datacom.bg**

**www.remixbg.com**

Yours faithfully:

Lubo Ganev