

High-duty machine Fomm-Prof for foam concrete production including built foam generators

- Purpose:** the machine is aimed for foam concrete production by means of mixing manufactured foam with concrete mixture.
- Composition and principle of operating:** the machine consists of a foam generator and a mixer, assembled on one frame connected with hoses. Foam generator produces foam, which is delivered to a mixer through piping, where foam is mixed with cement mixture. This foam concrete is delivered to a falsework or forms through a hose. The plant automatically produces foam concrete of definite density. After once-only adjusting the plant (digital display) it is possible to get foam concrete of definite density by pressing a single button. All necessary taps open and close automatically.

This plant does not have analogues by its level of automation. Nowadays it is the only plant that produces foam concrete of definite density without skilled personnel assisting and long adjusting before every batch.

Specifications of the machine:

	Fomm-Prof 500	Fomm-Prof 1000
Maintaining personnel	3 persons	3 persons
Weight in unloaded condition	960kg	1100kg
Capacity, cubic meter of foam concrete	3 cubic meter per hour	6 cubic meter per hour
Dimensions	2000x1000x1500mm	2500x1200x1700mm
Volume of operating reservoir of a mixer	500 litres	1000 litres
Model of a built-in foam generator	Fomm-PGM	Fomm-PGM
Operational air pressure of a mixer	0.8 atm.	0.8 atm.
Operational air pressure of a foam generator	6 atm.	6 atm.
Power voltage	380V	380V
Density rank of foam concrete	350-1200 kg\cubic meter	350-1200 kg\cubic meter
Ratio of foam generating is not less than	15	15
Rank of foam density adjusting within limits	20-200 gr\litre	20-200 gr\litre
Consumed power KWh	10 KWh (with a compressor)	12 KWh (with a compressor)

4. Competitive advantages of the machine:

- the machine consists of 3 components, made according to German technologies. Every part of a machine is sold separately and is a competitive and reliable product. It guarantees uninterrupted operation of the whole machine.
 - It is provided all necessary information about foam concrete production.
 - It is provided the possibility to free-paying train at a working production.
- 5. Necessary additional equipment:** compressor with productivity not less than 0.5 cubic meter per minute and of pressure being not less than 6 atm.

Further there are descriptions of a mixer and a foam generator, used in the machine:



Foam generator Fomm-PGM – a high-duty and high-head foam generator for foam concrete production (made according to German technologies)

- Purpose:** the machine is aimed for foam concrete production for further manufacturing foam concrete in any Mortar-mixing machine (mixing node).

2. **Composition and principle of operating:** the foam generator consists of a block, taking mixer of the foam generator from any vessel, inlet and regulating valves and an inlet pipe, generating foam. Eduction hose of the foam generator is sunk into any vessel filled with mixture of the foam generator (it is recommended Arecom foam generator, but it is possible to use any other foam generator, even made by yourselves). Then the compressor feeds pressure and foam comes out of he pipe, generating foam. Valves regular foam texture – from small closed pores (less than 0.1 mm) to large pores of foam.
3. **Competitive advantages of the foam generator Fomm-PGM:**
 - high capacity, up to 500 litres per minute
 - operation at any type of foam generators (it is recommended Arecom foam generator, but it is possible to use any other foam generator, even made by yourselves. Technological regulations of producing foam generators are applied)
 - for foam concrete production it is possible to use cement of grade 400
 - it is possible to regulate foam density
 - it is simple to use and very reliable
 - possibility to operate without water running

Mixer of positive type SM500, SM1000– a high-duty, mobile mixer for using with a foam generator, not required a gerotor type pump

1. **Purpose:** the machine is aimed for foam concrete producing and mixing it with foam produced in a foam generator. Then produced foam mass may be fed through a hose to a required place without gerotor type pump, under pressure. Mixer SM500 (SM1000) is mobile, on wheels; it is to be moved around factory or constructional grounds. Mixer may be used for foam concrete production, as a plaster station, or for production of high quality mixture.
2. **Composition and principle of operating:** the mixer consists of a motor block, a tank with a special mixing mechanism inside, valves for feeding pressure and a tap for discharging foam concrete mixture.
3. **Competitive advantages of the mixer SM500 (SM1000):**
 - capacity is up to 3 cubic meter per hour (up to 6 cubic meter per hour)
 - gerotor type pump is not required, mixture can be fed at the distance up to 10 meter horizontally and up to 5 meter vertically under redundant pressure
 - universalise– it is possible to produce foam concrete, mixture for plaster and laying.
 - it is possible to produce foam concrete of any density at 400-m cement (using the foam generator)
 - it is simple to use and very reliable (COMPLETE GUARANTEE is 1 year)
4. **System of the mixing part and its advantages:**

Mixing mechanism consists of two multidirectional worn. It completely mixes Mortar-mixing machine and foam for 15-30 seconds. Standard Mortar-mixing machines with blades do not mix uniformly, so they are impossible to produce uniform foam concrete mass.



View of internal part of the mixer through the loading nose section.