

A method for increase of volumes of continuous supply of compressed gas to intermediate stage of pump includes formation of gas-liquid flow of discharge pipeline of pump of a separate high-pressure gas-liquid flow. To provide volumes of continuous supply of compressed gas to intermediate stage of pump one preliminarily sets value of flow rate of compressed gas supplied, one feeds low pressure gas to gas-liquid accumulator, additionally compresses, with high-pressure liquid flow, low pressure gas localized in gas-liquid accumulator to pressure in intermediate stage of pump, compressed gas is fed to intermediate stage of pump, one controls value of flow rate of supply of compressed high pressure gas to intermediate stage of pump, with comparing controlled value to given one and coming to correspondence of those. To realize the method one uses system that includes multi-stage pump, supercharger of compressed gas, additional pipeline – bypass through which discharge pipeline of the pump is connected to intermediate stage, accumulator, discharge tank, indicator of flow rate of compressed gas, gas-liquid accumulator, liquid level indicators.