

Automatic siphon installation

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Authors: Popa Gabriel Nicolae, Popa Iosif

Description: The invention relates to a hydraulic installation which can be used to transfer a liquid between two basins, the first for storage and the second for feeding consumers, located at different levels at which the route of the supply pipe must pass, due to natural causes, over the water level in the accumulation basin. The hydraulic flow pump is used for a short time, and the principle of the siphon is used to transfer the liquid. The proposed installation has the role of transferring the liquid between two basins by achieving a significant saving of electricity. The hydraulic installation is connected between three basins: two main basins and one for filling and aeration of small capacity (Fig.1.a). The control of the siphon system can be done with microcontroller or PLC (Figs.1.b,c).

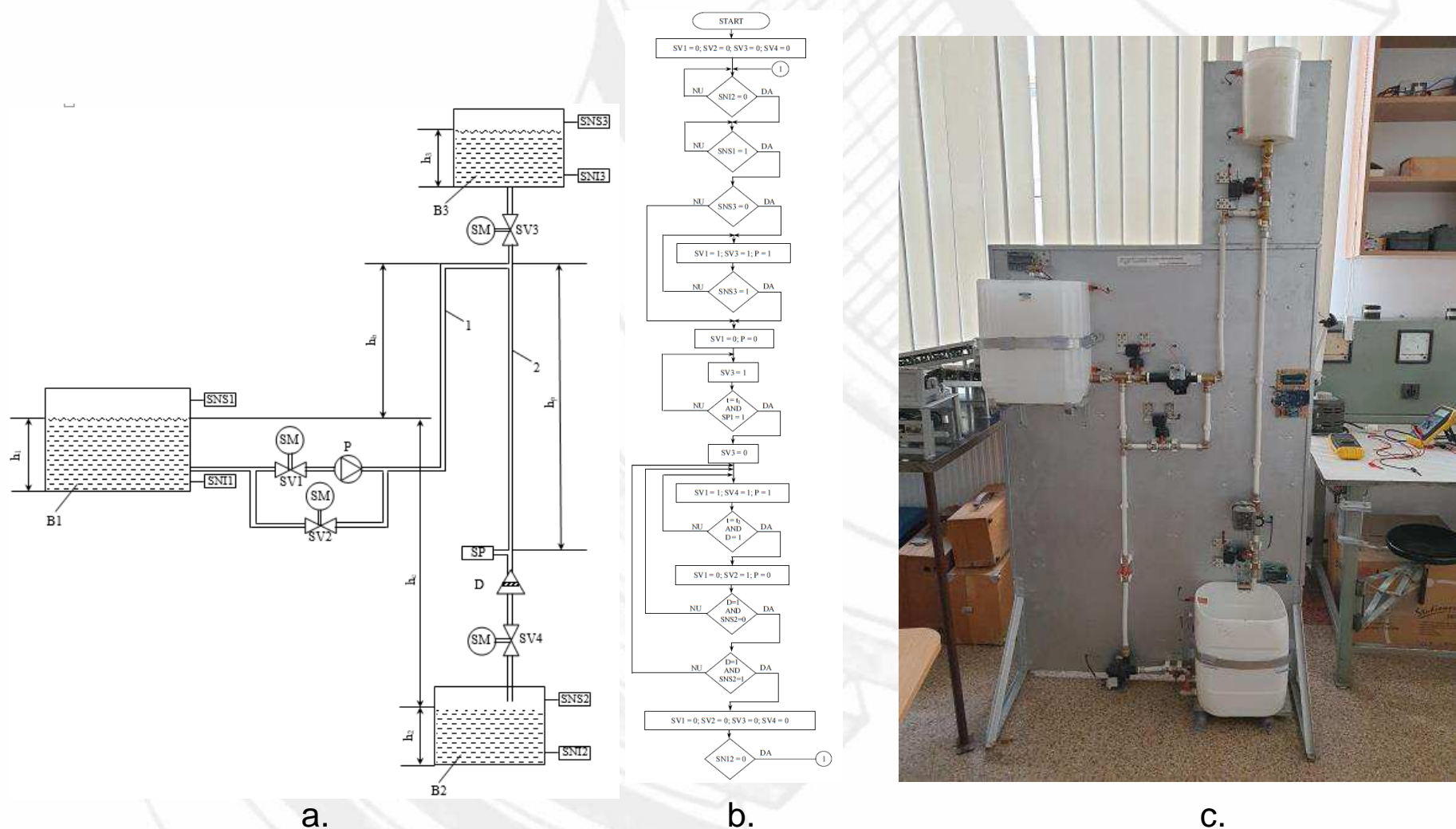


Fig.1. a. Block diagram of the automatic siphon system can have various fields of use; b. The flowchart of the program; c. Picture of the laboratory stand.

The automatic siphon system can have various fields of use:

- at the drinking water supply installations of the localities;
- in mining operations;
- other industrial branches;
- in agriculture.

Contact: Popa Gabriel Nicolae, e-mail: gabriel.popa@fih.upt.ro, tel. 0040254207541