

TECHNICAL SOLUTIONS REGARDING THE REHABILITATION OF THE IRRIGATION SYSTEM UNDER THE OUAI "AQUA" NORTH SOLONEȚ BIVOLARI

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Abstract

The pumping and pressurization SPP 1.b, situated on the Tabăra - Trifești – Sculeni (Iasy County) arrangement of irrigation has been put into operation in 1983 and it serves an area of 1428 ha. Being nearly 30 years old, the hydro mechanical installations and the related electrical installations have accumulated a high degree of wear. The technical rehabilitation and modernization of the structural and functional elements of the hydrotechnical works performed for water pumping aims to reduce them to the initial operating parameters, but also to modernize them, according to the current location requirements, modern technology in the field of execution technologies currently used. It was necessary to redesign some basic parameters for the hydromechanical technological lines, but also for the auxiliary technological lines. Thus, it was decided to replace the electric pumps, with some new generation, with higher efficiencies, the introduction on each pumping stage of 1-2 pumps with variable speed, to reduce energy consumption and modernize the pumping process. The fittings (water tapss, valves) have been replaced with modern variants, facilitating the optimal operation with a high hydraulic efficiency. The pipes on the internal network have been replaced, the measuring and control equipment has been rehabilitated. A monitoring and automation system has been introduced to monitor the operating process.

Key words: rehabilitation, irrigation systems, E.U. funds
