State of the Art Process and Process Controls for Production of Concentrates for Haemodialysis

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As the industrial requirements change at a rapid pace due to the drastic evolution of technology, the necessity of a more efficient manufacturing system arises more intensely than ever.

The concentrates for haemodialysis are alkaline and acidic solutions of inorganic salts with or without glucose and are used to treat patients with kidney insufficiency or failure (acute and chronic). The concentrates for haemodialysis in Alkaloid AD Skopje are manufactured in a closed system for production of concentrates for haemodialysis.[1] The system is operated automatically using PLC control system with SCADA application. This research work presents the performance qualification of the system for production of concentrates for haemodialysis at the defined ranges for the critical process parameters: temperature of solution, mixing time and dosed quantities of raw materials.[2,3]

According to the results from the performed tests on the production of the first validation batch on the system for production of concentrates for haemodialysis it can be concluded that the process of production is capable of producing a product with reproducible quality in accordance with accepted quality criteria.

Keywords: manufacturing; process; parameters; SCADA; concentrates; haemodialysis.

References

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