

178. AUTOMIZING AND IMPROVIZING THE STEAM REFORMER BASED HYDROGEN PLANT USING PLC

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This proposal is based on the safety factors and quality based improvement of hydrogen plant in refineries. Basically in refineries hydrogen requirement is high and so, demand also comparatively high. We are proposing the new hydrogen plant with HT shifter, large number of pressure swing adsorption (PSA) unit with many heat exchangers and amine treatment also. But many of the refineries are not using hydrogen plant on their refineries. Some of the refineries do not use this plant effectively. By our proposal hydrogen reproduced will be more pure and by products of crude oil is also be more pure this increase the market rate of their byproducts and standard of that company. Till now many refineries had made into automation but on relay logic. So, loss of current and relay damage leads to risk of good production rate. We decided to go PLC based automation of the hydrogen plant. It has more advance one when compare to relay logic. This paper expresses the techniques used to improve safety factors as well as efficiency on quality.

Keywords: - HT shifter, PSA unit, Auto cut, PLC.

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