

ABSTRACT

Electric vehicles are currently increasingly popular. Electric vehicles are also being intensively developed. The government is also accelerating the battery-based electric vehicle program with the aim of reducing environmental pollution and saving energy in the future. People are now starting to take an interest in electric vehicles amidst the increasingly expensive fuel prices. The increase in the use of electric vehicles occurs mostly in two-wheeled vehicles or electric motorbikes. In Indonesia itself, there are several charging stations, namely Public Electricity Supply Stations (SPLU), Public Electric Vehicle Charging Stations (SPKLU), and Public Electric Vehicle Battery Exchange Stations (SPBKLU). The concept of an electric vehicle charging station based on automatic hydraulic docking and a special motorbike for charging, namely the adventure electric motorbike, was created as an alternative to make it easier for electric motorbike users to charge the battery and provide a place for charging the battery in the future.

Keyword : charging stations, electric vehicles, automatic hydraulic docking