

ABSTRACT

Industrial process increasingly involves the use & manufacture of highly dangerous substances, particularly flammable, toxic and oxygen gases. Inevitably, occasional escapes of gas occur, which creates potential hazards to the industrial plant, its employees and peoples living nearby. Similar effects also occur in case of household kitchen. Worldwide incidents, involving asphyxiation, explosions and loss of life are a constant reminder of this problem.

We purpose to make a system which will help in detecting LPG leakage in our industries as well as household kitchens and other places where LPG is used & there is potential risk of LPG leakage. Many tried & proven methods of detecting gas leakage are available also method related depends upon a variety of factors such as accuracy, cost&ease of use. We introduce” GAS LEAKAGE DETECTOR WITH AUTOMATIC VALVE CLOSING SYSTEM”. This system is easy to install maintain which provides improved security among kitchen and industry than the existing system.

This system will detect any chances for a gas leakage from cylinder-based appliances (eg:LPG cylinder).By using a gas sensor, the above reason can be detected in advance .This unit can be easily incorporated with an alarm unit , to sound an alarm and give visual indication of the LPG detected, so the user can be alerted about this . If gas leakage occurs by means of closing the gas outlet valve we can control it. This work design is one of an embedded application. Automatic valve closing and alarm unit are the main features of this system.

CHAPTER 2

BLOCK DIAGRAM

