

DESIGN AND IMPLEMENTATION OF AN EDUCATIONAL MATERIAL BASED ON ELECTRO-PNEUMATIC SYSTEM

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Abstract

Hydraulic-pneumatic systems are preferred in industrial area where requested especially linear motion in comparing to electrical motors in terms of designs and implementations. Pneumatic systems may be used instead of hydraulic systems demanded through relatively low power and high speed. Electro-pneumatic systems are developed by means of inductive sensors which sense metal materials on conveyor belts in industrial automation systems.

In this study electro-pneumatic educational material were designed and implemented which is metal materials moving on a conveyor belt are detected by an inductive sensor and separated from other materials by a pneumatic cylinder for the course of hydraulic-pneumatic which available in curriculums in engineering departments such as electrical and electronics, mechatronic.

Keywords: Pneumatic system, inductive sensor, conveyor belt.