SCHOOL OF ENGINEERING

PROJECT TITLE :DESIGN A PICK AND PLACE ROBOTIC ARM FOR INDUSTRY

FINAL REPORT

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Abstract

The report presents the design of an industrial pick and place robotic arm. The robotic arm consists of 3-axis (X, Y and Z), a base and also a gripper. The Z-axis and the gripper of the robotic arm are controlled by pneumatic. This project consists of electronic, electrical, mechanical and software engineering knowledge.

The aim of this project is to create a robotic arm that can help industries. Which means the precision of the arm must be very precise. With that, the hardware of the projects includes sensors, motors, aluminium metals and so on.

The Robotic arm is controlled via computer by using software called "Visual C++". The program allows the user to define different pick-up point and different method of picking up the object. Other then that, a lead screw is used to make the precision of the robotic arm more precise.