

ABSTRACT

In this paper a literature review concerning practical applications for mobile platforms based on special wheels (in this case, Mecanum wheel) is presented. Vehicle equipped with four Mecanum wheels have the omnidirectional property, which means, they have the ability to move instantaneously in any direction, from any configuration. Therefore, compared to conventional platforms, these vehicles possess multiple advantages in terms of their mobility in narrow spaces or crowded environments. They have the ability to easily perform certain tasks in congested environments foreseen with static obstacles, dynamic obstacles or narrow areas. Usually, such environments are found in factory workshops, warehouses, hospitals, etc. Hence the resulting needs to create this kind of vehicle to satisfy the requirements of various fields, such as: industrial, military, naval, medical and last but not least, the educational field.

5.1.2 Battery 12V

5.1.3 Motor and Gears

5.1.4 Arduino

5.1.5 Mecanum Wheel

5.1.6 Motor Drive

WORKING PRINCIPLE

1.1 INTRODUCTION

6.2 ADVANTAGES OF MULTIDIRECTIONAL WHEEL LOADERS

MULTIDIRECTIONAL WHEEL LOADERS

CONCLUSION