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Electric Scooters

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ABSTRACT

Electric scooters are plug-in electric vehicles with two wheels that can be recharged from any external source of electricity, and the electricity is stored in a rechargeable battery, which provides power to one or more electric motors to attain movement. Electric scooter, as differentiated from scooters, do not have a step-through frame. The electricity generated from an external source helps in acceleration of the motorcycle. The speed of this cycle is limited(45km/h). The electricity is stored using a battery and the locomotion and movement of the vehicle is hence propelled using an electric hub motor The electric scooter are not using an engine, becomes an effective way of road transport as it causes no pollution. It is eco-friendly and it definitely reduces human effort. In this project report, work concerning product design and manufacturing process making of an electric scooter is described, which was the outcome of a collaborative project for new product development. The final product was satisfactory, and was designed according to the aesthetic principle of golden section proportion, and subsequently outer housings were produced with carbon fiber. Not only the product appearance was created, but an electric scooter was also built using various traditional modeling and engineering techniques.

INTRODUCTION

An electric scooter is a battery-operated one-person capacity vehicle that is specially designed for people with low mobility. It is generally used by those who have difficulty walking or standing for long periods of time. Scooters are available in three common designs, those intended for indoor use, those for outdoor use, and those that are used for both. An electric scooter is different from a motorized wheelchair, in that the wheelchair is generally intended for indoor use and usually costs a great deal more. An electric scooter may have three wheels or four. Since it runs on battery power, it does not create pollution. A typical electric scooter requires a pair of batteries, but the batteries are rechargeable. The length of time an electric scooter can run on each charge depends significantly on its battery's type and capacity. The most common batteries are advertised to run for about eight hours, and between 20-30 miles, before needs to be charged. Some people are a little wary of purchasing an electric scooter because they fear it will be difficult to operate. In fact, the control console makes it quite simple once a person gets the feel for it. Electric scooters are also equipped with advanced brake systems, so stopping is simple and comfortable. The brake begins to engage as soon as the operator lets off the throttle, so there is little chance for abrupt or jarring stops. Most scooters also have a parking brake to keep the electric scooter from rolling when parked.

Types of Electric Scooters - Electric Kick Scooter

In most cases, there are two wheels, a standing deck and handlebars, which in most case are foldable and that's it. Simple as that. There is nothing you should have besides this.

The most basic type is electric standing scooters for adults. That is what you see most often in traffic. And, in most cases, it's good enough.

Maybe add a seat, in case you have problems standing or something like that. Everybody can ride it, it takes no time to learn at all.

Types of kick e-scooter based on the number of wheels:

Two-wheeled electric kick scooter

Three-wheeled electric kick scooter

Two-wheel Electric Scooters

Electric kick scooters with two wheels have a lot of advantages you can use in your everyday life. Owning one can help you a lot, and, at the same time, you can have some fun.

The advantages of TWO-WHEELED electric kick scooters:

1. It's lighter
2. More compact

3. More practical in crowds and traffic

These weren't built for doing tricks. If you try to learn tricks on one of these, you will be falling a lot, and those impacts can be terrible for the batteries and the motor.

A scooter can handle a bumpy ride and lousy roads, but strong impacts are harmful for electric components

Three-wheeled Electric Kick Scooters

These are not so common, but you can easily see that there is a lot of three-wheeled e-scooters on the market.

Some people love the stability these provide, but most people prefer classic two-wheel scooters. Here are some of the reasons below.

Electric Kick Scooters for Kids

You have a lot of choice if you want one of these. The main differences between these and types of electric scooters for adults is the weight limit and size.

Selection is based on speed and running time. You can choose some **electric scooter types** that can run for around 40 minutes, and after that, you have to charge them for 12 hours. Some of these are able to provide your child around 80 minutes of riding.

I can suggest a Razor e-scooters to you. They are great e-scooters for kids, although some scooters like the Razor E300 is strong enough for adults as well.

Three-wheeled Electric Kick Scooters for Kids

This type is an excellent choice for kids. It provides some extra support for less experienced kids and protects them in situations that they can't anticipate right now.

Provides some extra stability in corners and helps balance while a child is trying to change direction. And we all may agree on one thing — changing direction is all they're doing all day long.

Electric Kick Scooters for Adults

You have to look for the weight limit. You know that you are looking at types of electric scooters for adults if it can handle some serious weight.

Foldable Types of E-scooters

These are great for business people who commute to the office every day.

Nowadays, almost every kick e-scooter is foldable.

Like any other, this one is also fast and powerful, but practicality is the main thing.

People use an electric scooter because they are **traffic killers** and easy to ride and maintain.

However, when folded scooters came along, it was a game-changer. Not everybody needs crazy speed or range, but practicality in everyday life?

Why Having an Unicycle Is a Great Option?

An electric unicycle can provide you with the ability to hop onto a higher curb. You have to practice a bit, but it is possible. Remember, practice makes perfect. And sometimes, stitches…

This is my favorite because this may be the right choice for those who want to be fast in the crowd. When you ride it, you are narrow and agile. Perfect for crowded places.

Of course, that means that you already have some **riding skills** on a unicycle.

Unlike a hoverboard, you can jump onto a higher curb or even a higher step.

Depending on the weight, you just need to squeeze with your legs and lift as high as you can. After a while, you will learn it, and then you won't be able to get off the unicycle without feeling sad.

It simply provides so much fun.

Great Features of This Type of E-scooter

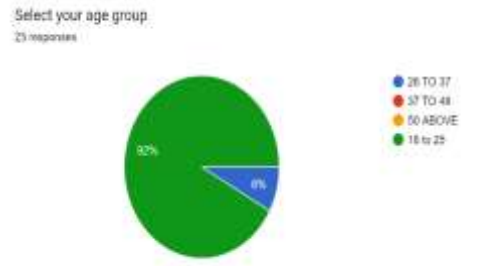
It has a handle, and when it's folded, you can carry it like a bag. It weighs only 30 pounds, so you can easily bring it to the office or into the market.

Another great feature is an app for you to view your daily ride. Also, you can lock your unicycle when you want to.

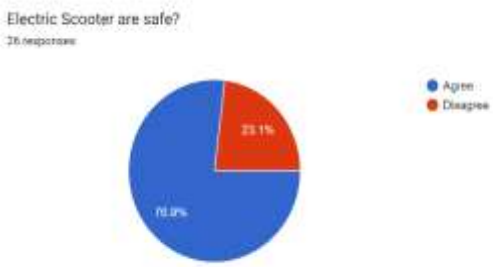
I think that a unicycle has everything that modern man or woman needs.

It is practical, safe, fast and a reliable way of commuting. Of course, if you're skilled.

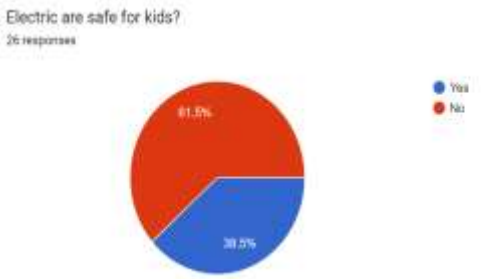
Figure and survey result



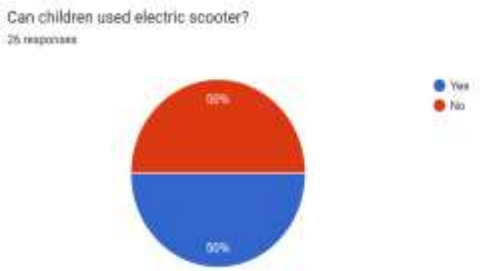
Electric Scooter is safe?



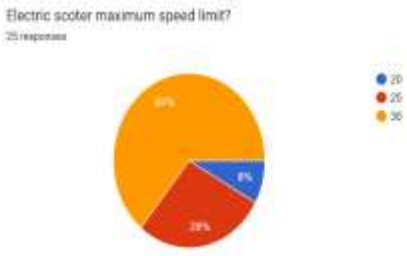
Electric scooter is safe for kids?



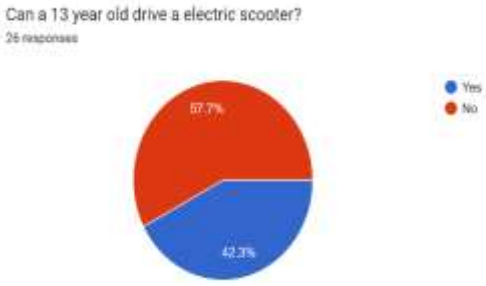
Can children have used electric scooter?



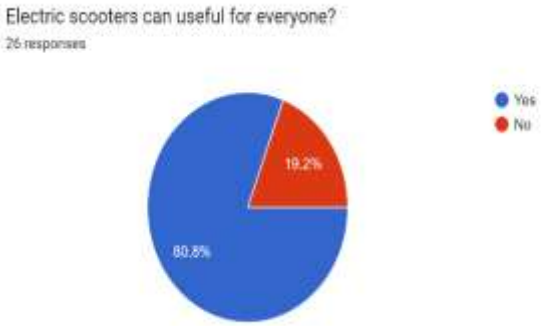
Electric scooter maximum speed limit?



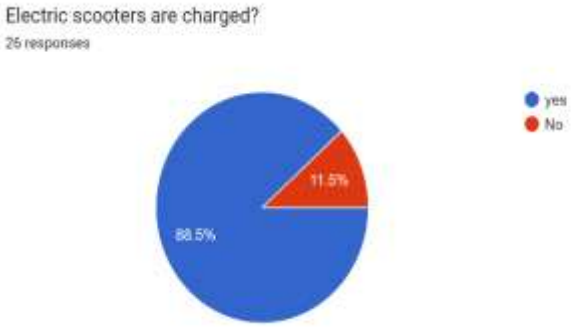
Can a 13-year-old drive a electric scooter?



Electric scooter can useful for everyone?



Electric scooter is charged?



CONCLUSION

They are practical, convenient and relatively cheap. I would definitely advise considering other means of transport, primarily bicycles. But if you are planning on buying an electric scooter, look for a good quality brand and model and be cautious. I explained the problems with steering and braking.

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