

BATTERIES INCLUDED

Christine Van speaks to Patrick Joynt, the motorman behind Vietnam's first electric Vespa and Lambretta.

Photos by Mads Monsen



How did this idea form?

About a year ago a good friend of mine, William Sikes, contacted me about the idea of an electric powered, two-wheeled scooter. He had been researching bikes on the internet for some time and I had heard of a couple of early, very basic prototypes that never got further than the drawing board.

We always liked the idea of an electric scooter, but the ones available for sale inside and outside Vietnam are underpowered and were not attractive to us at all. The V-Tronic was born and a partnership was formed.

How were you able to convert the bikes to electric?

By taking an empty chassis and putting in an electric system opposed to the traditional petrol system. After a lot of research we found suitable components that we could utilise and which were suitable for the project but yet did not alter the traditional look of both models and still enabled us to retain that classic look. The fabrication work is extensive but we think the end result was worth the work, research and development problems.

If riders need to recharge, will there be charge points around the city?

Unlike cars, they do not need a special charge station, the batteries can be charged on any 220V outlet. As long as there is an outlet that has power, you can charge the batteries.

Will you be converting existing Vespas and Lambrettas to electric or build them from scratch?

The restoration to electric will be done on Vespa chassis, but we are custom building the Lambretta versions from scratch though to a similar design.

Will you be able to turn bikes like Nuovos and Waves to electric power?

It is possible to take the chassis of a Nuovo or Wave and make an electric bike, but the cost to do this may cause people to hesitate. We are using high quality parts to ensure that the bike will be constant and consistent in quality over a long period. We are using a lithium iron phosphate battery (LiFePO₄), which are the best available, but it means that you will not have to change the battery until you have travelled 30,000km or 1,500 charges.

The cheaper lead acid batteries will lose quality after 1,000 charges, usually less. Plus the LiFePO₄ batteries are smaller and lighter. At this time, however, we are concentrating on our two main models — the Ebretra and the V-Tronic.

What are the cost factors in owning an electric Vespa? What are the advantages of this over the petro-based bikes?

As long as you have electricity, you can charge your bike. So you don't have to worry about the gas station being open or the quality of gas. We have done some rough maths, but we estimate the cost of running an electric Vespa is VND200 per

kilometre. Also add to that the fact that you don't need to change oil, worry about filters, seals, dirty petrol or fluids. The maintenance cost is low. There should be a few checks, but nothing as complicated or costly as a petrol-based scooter.

On a safety note, in Europe electric cars are noiseless and have caused many accidents because other drivers can't hear them, do you think this will be the case here as well?

Our bikes are noiseless also, motorbike drivers use noise to judge if there is a person behind or beside them. Driving an electric in Saigon means you have to give a greater space bubble to minimise incidents. But we are developing accessories that can be integrated into the scooter to provide sound for the bike. But unlike your petrol bike, you can turn the sound up or off.

Will all your bikes be handmade or will they go into factory production?

All our bikes will be custom made to fit the order of our customers. It fits with our two core ideals: the best quality available and giving our customers exactly what they want. We also have demo scooters that are available to test drive that will show our base model specifications.

Another reason behind this is due to the fact that this technology is developing so rapidly it means we can constantly offer the latest high spec products rather than having out-of-date stock.

During the rainy season, will the engine be affected by water getting into the bike? What precautions have you set up for this?

The motor can run underwater with no problems as it is a sealed unit, but if the other components get wet, the system will possibly short out. We put the components in water tight compartments and in the upper parts of the chassis.

We suggest that you don't ride your bike through more than 10 to 12 centimeters of water. But it will not have any problems in a downpour. The main battery assemblies are covered by the original style side panels and are well-protected. The central battery compartments and controller and battery management systems are fully enclosed below the modified seat base offering maximum protection.

If they break down, how will riders fix them as all bike repair places in the country only know how to fix fuel bikes?

The V-Tronic and the Ebretra have fewer moving parts than their petrol

counterparts. So they are less likely to break as easily. The reason why the bike would stop is because either: A) you run out of power, B) a wire is loose or C) a system failure.

Problems A and B are easy to solve (no mechanic needed), but problem C is a problem that we minimise by getting good components and testing the system before we allow any customer to ride a scooter they have purchased. But to minimise this problem further, we highly suggest having your V-Tronic or Ebretra serviced on a regular basis. This is similar to a petrol bike, but it will be serviced by an electrician, not a mechanic.

If the bikes are electric does it mean they don't require a licence plate or a driver's licence to ride?

Not sure! Looking into this at the moment. They 'should' be classified as electric bicycles but maybe because of the increased power they may be re-categorised here. In certain countries they are unlicensed up to a certain power

output. This varies from country to country.

What other features are there?

The power is supplied by a brushless 13" motor that generates 3kW. This will generate a torque of 180 Nm, which translates to a top speed of over 60 kmph, ideal for riding around town and commuting, with the engine having enough torque to accelerate uphill and carry a 'larger person'.

The charge time is approximately three hours and the run time, which will vary due to driving conditions, easily exceeds 40km, which most drivers don't exceed on a daily basis.

We are looking into adding accessories that allow you to charge your phone, tablet, or laptop while you drive. Our first production models will be available in August this year.

What will be the average cost?

The cost will be from VND95 million.

For more info, visit www.saigonscootercentre.com