

Harley launches the Livewire: an electric 'hog'

✘ Harley Davidson has recently unveiled a new model, one that is bound to generate waves and controversy. It would appear as a contradiction, but Harley Davidson is planning to launch its first electric motorcycle: The 'Livewire'. This new 'hog' is called – is a prototype, which Harley-Davidson ('Harley') has launched to gauge reactions of its traditional customers with a view to mass production. The Livewire is driven by a 74 hp three-phase motor producing 70 Nm of torque, capable of accelerating from 0 to 100 km/h in less than four seconds and a top speed of about 150 km/h (or 90 mph). Despite these interesting performance figures, better than those of a current production Sportster model, it is unlikely that Jack Nicholson and Peter Fonda would have chosen it to tour California in 'Easy Rider', given that it has a claimed range of about 80 km in mixed highway and city use. Nevertheless, the iconic Milwaukee motorcycle manufacturer is serious about what its customers think. It is offering demonstration laps with the prototype before deciding whether or not to proceed with mass production. This year, Harley will launch a tour, along the famous Route 66, hitting 30 Harley-Davidson dealerships by the end of the year; in 2015, the Project, known as 'LiveWire Experience' will also be launched in Canada and Europe.

The 'Livewire' represents a real challenge; it lacks one of the main features that Harley customers and fans demand: the classic 'potato, potato, potato' engine noise. Yet, it is inevitable that even the legendary Harley, symbol of the open road and freedom, will have to convert to green technologies. Before the hardcore fans start writing letters to Harley management to complain, the Company is not yet sure that this model will ever reach the dealership. The launch and the Route

66 roadshow will serve as an opportunity to learn, and see where the electric motorcycle market can go.

Harley has learned from Tesla, BMW and Lexus (among others) that there is demand for niche electric automotive products. However, motorcycles are an even more 'niche' market, and Harley's customers are a loyal bunch. Harley knows it is going to be difficult for many to accept the move toward electric power and it has decided to see what they think is needed to build a great electric bike. An electric motorcycle, to be honest, as someone who rides and who loves the soundtrack of a finely tuned engine, sounds a bit like a toy for children that Santa Claus might leave under the Christmas tree. However, the 'Livewire' is a sign of the times. If Harley-Davidson, which makes some of the noisiest bikes in the world, has started to test electric power, then the world is definitely changing and forcing the most well established myths and icons to adapt. So, while old Harley customers may frown over the turbine like 'woosh' of the 'Livewire', younger buyers, those of the so-called Y Generation, may be more willing to give Harley a try.

Younger riders are more interested in sustainability and environmental trends, incorporating this as part of their lifestyle than the thunder of the classic Harley. Electric motorcycles are somewhere iconoclastic. Say goodbye to the noise, the familiar mix of exhaust and fuel smells and welcome silence, cleanliness, sobriety, ecology, and eventually lighter machines. So if some will certainly see the 'Livewire' as a gourmet dinner without wine, for others it will represent progress. However, battery technology will have to advance considerably, because the high mileage of gas powered motorcycles, keeps running costs relatively low compared to cars; range is an important factor as is size and weight. Advanced materials from graphite to lithium and eventually graphene will have to be used in batteries to achieve the power storage and charging-speed improvements that will make electric motorcycles a reality. In the long term, electric

bikes have the potential to compete with motorcycles engine, but it will require a network of charging stations, like the one Tesla has set up for its cars. Unfortunately, a Tesla-like charging system that would allow the charging of a bike in less than 30 minutes is not yet compatible with available electric motorcycle technology. Several hours are needed to charge the motorcycle batteries being used now. Until that day comes, electric motorcycles will be convenient for local travel, while thermal/gas powered motorcycles will be used for cross country or to travel long distances. So, lovers of Harley' traditional hogs will be able to listen to their beloved engine music for many more years to come.