

PEDAL POWER

Dickon Ross tries out a mad but fun electric bicycle with the inventor in Berlin



Battery

316 lithium-ion phosphate cells housed in carbon fibre casing. These are imported from America and account for half the cost of the bike but give maximum power for their weight. They are top-of-the-range batteries, the same type used by the McLaren F1 team for the car's Kinetic Energy Recovery System, in which they store some of the energy that would otherwise be wasted during braking.

I CLIMB ON, flick the switch to turn on the juice and start pedalling...very slowly at first because I don't know what to expect here...a little tiny bit faster and - woah! I can really feel the motor kick in. I'm not going fast but it's the acceleration that surprises: I have to hold on tight or the bike will leave me behind...

I am riding one prototype and sitting on another one next to me is Stefan Gulas of eRockit - the

company that builds these extraordinary machines. We cruise out of the driveway of the eRockit garage in a suburb of Berlin, and pick up speed down the road. The controls are simple - on, off, pedal faster to go faster, stop pedalling to slow down and brake to stop. It's not really very different to a bicycle, but the batteries make it a lot heavier and although I'm a keen cyclist it takes a bit of getting

used to. And I'd really like to get used to it because it is pure fun - which is exactly what Stefan says it's meant to be.

Speed is relative, he points out. So 20mph seems a reasonable cruise on a bicycle and 30 seems quite fast, but in a car it's nothing. The kind of electric bike your granny might ride to the shops has a top speed of around 20mph. Stefan shows me what the eRockit

can do with a little practice by riding it up and down the road. He's pedalling gently but the bike is shooting along at its top speed of about 50mph. That would seem slow on a motorway but this is a suburb. He's weaving around traffic because it's nippy like a bicycle, but he's also easily leaving cars behind at traffic lights because it's got the power of a motorbike - and all with a qi

PLUS

All you need to know

Top speed	50mph
Range	40-50 miles on one charge
Weight	110kg
Wheelbase	1465mm
Charging time	3 hours
Typical fuel running cost	£5-10 per month
CO ₂ emissions (at German power plant)	33g / km (125cc motorbike is 88g/km)

rumming noise. The effect is leadturning – everyone does a double take and then an open-mouthed gape, which turns into a broad smile. 'Awesome,' says one passer-by in a thick German accent.

What exactly is the eRockit? Is it an electric motorbike with pedals instead of a throttle? Or is it a bicycle with a motorbike motor? Well, it's made mostly from motorcycle parts rather than bicycle parts (they tried it first with bicycle parts but they weren't built to take the stresses and strains). But you have to pedal to get anywhere. Stefan calls it a human-electric hybrid motorcycle. I think the best way to describe it is as a supercharged bicycle. You're not boxed in inside a car but you're out in the open and getting some exercise. It feels like the bike is multiplying your own pedalling and turning it into something superhuman. And that's what makes it fun.

Stefan argues that machines like the eRockit are the vehicles of the future. Yes, they're environmentally friendly in terms of energy consumption. But it's more than that. The appeal, he says, is emotional. 'The gasoline engine is a living thing,' he says, 'with hundreds of moving parts. It's exciting.' But it's also well over a century old and it's time it moved over for something else.

The eRockit though is not about to provide the answer to all our polluting transport problems because there is one big issue: the cost. Stefan only hopes to sell around 15 this year, but the price for each eRockit is €28,900, which is nearly £25,000. Stefan is looking to sell it to seriously rich people; the kind of people, he says, who already have a Ferrari and a Harley-Davidson in the garage and are looking for something a bit different. ■



The need for speed – A top speed of 50mph could lead to some serious knee scrapes if you take a corner too fast



Schizo cycle – The eRockit had to be made out of motorbike parts because bicycle parts just couldn't take the strain