

CLIENT: Internal R&D Project

PROJECT SCOPE: Design and engineering of Record-Breaking electric motorcycle

PROJECT TARGET: Drag Racing

RESULTS: The quickest electric motorcycle in the UK (2011)

In 2011 we started to get involved in the emerging world of electric vehicles in no small way. No, we thought we'd make a splash by jumping right in at the highest level and following our passion for motorcycles and motorsport.

Following a good look at the market we were attracted to Alternative Energy Racing (AER) and noticed that Kingston University were currently the quickest bike in the UK with a time of 14.99 seconds for the standing-start ¼ mile run. So there was our target...

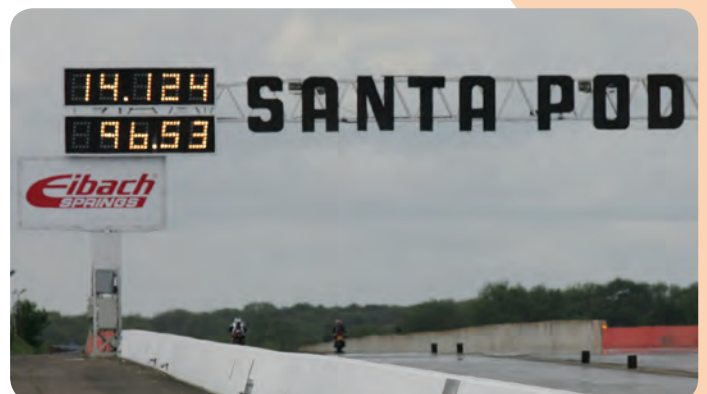
February 2010 saw the strip down of the bike commence, and by November that year we had a bike on the dyno. Once winter had cleared and it was getting a bit warmer the bike hit the test track for the first time in March 2011. We ran a few test days – mostly focussing on the bike/rider set-up as the electric powertrain ran faultlessly from day one – and we set off to Santa Pod Raceway for AER2011 to see how we would fare.

Our test track wouldn't allow a full ¼ mile run, but with the data available we knew we were on the pace we'd need; but only on the day would we know for sure.

On the first run we set a new record of 14.192 then during the day we worked on improving the drive to hit 14.133 seconds; and ultimately best time of the day at 14.124 at a terminal speed of 96.53mph. The UK record was ours!

The project was a great success gaining a lot of publicity including 14,000 YouTube hits, 40 press articles, and dozens of online articles, six radio interviews, and one appearance on TV. It was awarded the 'Gold Award for Engineering' at the 2011 Green Apple Environmental Improvement Awards.

The bike spent the 2014 season on display at The National Motor Museum, Beaulieu.



Weald Technology Ltd has won awards for engineering and innovation in low-carbon and sustainable transport. Our collaborative design and engineering projects are used to generate industry-relevant STEM activities that inspire the UK's next generation of engineers and scientists.

For further information please call

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