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‘ The cooperation with DELTA helped us develop a high tech, high quality product and achieve a fast time-to-market. eTensor represents a huge business potential and sales are rapidly growing. ’

Flemming Bruhn, AWS Technology ApS founder and CEO



High-tech eTensor bike

We help ideas meet the real world



High-tech eTensor bike is leading the race

Huge business potential

The eTensor Bike from AWS Technology sets new standards for indoor cycling making group cycling far more effective and fun than ever before..

AWS Technology is a high-tech company developing technologies and concepts based on the patented, robust and versatile E-core Transverse Flux Machine (ETFM) technology.



Using the ETFM technology as variable load the eTensor Bike offers a unique realistic feeling of riding an outdoor cycle. Precise electronic reproductive control of the load gives a number of new unique training possibilities – e.g. riding realistic stages of major bicycle races.

Shortening time-to-market the DELTA way

AWS Technology chose DELTA as development consultant on the entire process of turning research results from ETFM inventor Aalborg University and prototype design into a market-ready product.



DELTA development services reduced eTensor time-to-market by more than one year based on profound knowledge on development processes as well as electronic and mechanical construction. The efficient and fast development process strongly improved the business possibilities and was paramount for the rapidly growing AWS Technology market success.

Improving reliability

Professional training bikes are objects of many hours of heavy use and supposed to function flawlessly for years.

Based on extensive design knowledge and testing expertise the DELTA reliability team succeeded in product improvements outstandingly increasing eTensor reliability and expected lifetime.



The test suite comprised mechanical and climatic testing services verifying that the development process did indeed lead to a highly reliable spinning bike well suited for the real and complex life in e.g. fitness centres.

Product development – DELTA services

eTensor features

- Unique maintenance free load system, based on an electronically controlled generator.
- Built-in test based on pulse monitoring which determines your handicap. Is used for correct set-up of load level at subsequent training sessions.
- Synergy exercise system - see www.etenzor.dk/synergy.htm
- Built-in individual training programs.
- Real-time performance feedback - cadence, RPM, pulse, Watt, etc.

DELTA helped AWS Technology ApS with the following services

- Specification phase. Consultancy on relevant norms and standards.
- Test plan
- Software system design - coaching.
- Hardware - design of RF receiver circuit in the display unit.
- Development of synchronised music play back on PC for the Synergy concept.
- Product qualification: temperature test, vibration, HASS & HALT, EMC
- Material consultancy: adhesive, surface treatment of prints, etc.