

Roel Van De Velde

Mr. Van De Velde graduated in 2001 from Eindhoven University of Technology in The Netherlands with a MS degree in Mechanical Engineering. After graduation, he joined TNO-MADYMO North America where he developed MADYMO dummy models. He was contracted as a TNO consultant to Ford Motor Company to develop rollover CAE methodologies and assist in the development of a new rollover dynamic test fixture. This effort was awarded by the Society of Automotive Engineers with the Arch T. Colwell Merit Award. After that, he got promoted to Engineering Manager at TNO-MADYMO North America. In that capacity, he led several benchmarks for the industry using computational fluid dynamics for passenger airbag out-of-position deployment analysis. He managed a large scale project for the Federal Aviation Administration to develop neck injury criteria for side facing passengers, which involved post mortem human subject tests, dummy sled tests and analytical modeling. In 2007 he became a research scientist at George Washington University's National Crash Analysis Center where he used LS-DYNA to simulate full vehicle crashes to support NHTSA's vehicle compatibility program. In 2008 he joined First Technology Safety Systems responsible for customer relations, sales and marketing and business development of the Finite Element Analysis department.