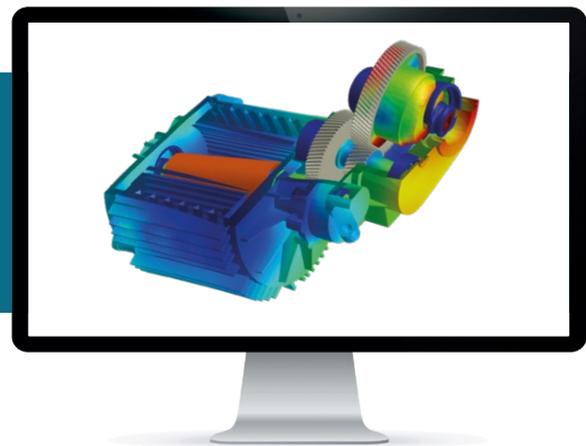


Romax Enduro

Structural design, analysis & optimisation of electro-mechanical drive systems



Design for durability is a cornerstone of driveline development. For many years Romax Technology have delivered CAE tools which enable simulation-led design. Today the shift towards electric drivetrains has created unprecedented demand for new transmission architectures across numerous vehicle platforms, at a time when subject matter expertise is at a premium.

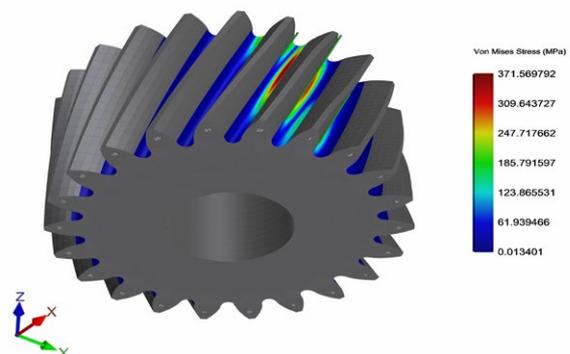
Building on our existing industry standard CAE software, Romax Enduro is a sophisticated, yet easy to use structural design, analysis and optimisation solution for the development of Right First Time, durable electro-mechanical drivetrain systems. Validated time and again by customers and research projects, Romax Enduro is the trusted solution for durability analysis across multiple industries.

Benefits

- Unparalleled accuracy - full system structural analysis, state of the art component contact simulation and the latest standards and stress-based life calculations
- CAE-led design - accurate, easy to learn parametric modelling; fast simulation and post-processing for engineering insight from first concept through to final optimised design
- Process automation, optimisation and integration - works seamlessly with other Romax products and partner software to offer true multi-attribute optimisation via a repeatable, automatable process

“To meet increasing customer expectation and faster development cycles, GKN Driveline has to get ‘Right First Time’ to the required product performance, and Romax helps us achieve that.”

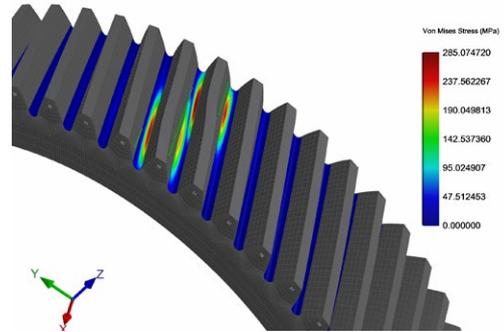
GKN



Romax Enduro: the industry standard for electro-mechanical drivetrain systems

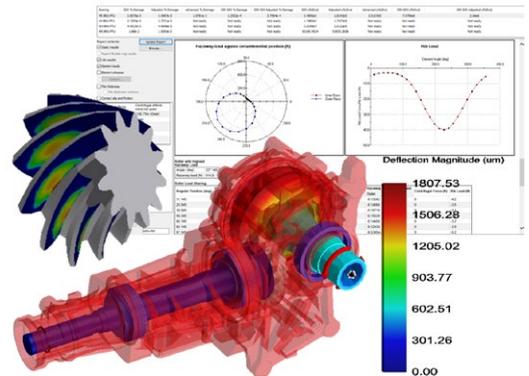
Dedicated, component-level modelling within a whole system:

- Rapid, accurate & parametric component models
- Comprehensive bearing catalogues
- Gear design & optimisation tools
- Import/create and condense FE components
- Import/export geometry with CAD tools
- XML and batch interface for model building and modification



Reporting:

- Full system and component static results including deflections, loads and stresses
- Detailed gear and spline contact results
- Load case and duty cycle durability reports
- Customised reporting

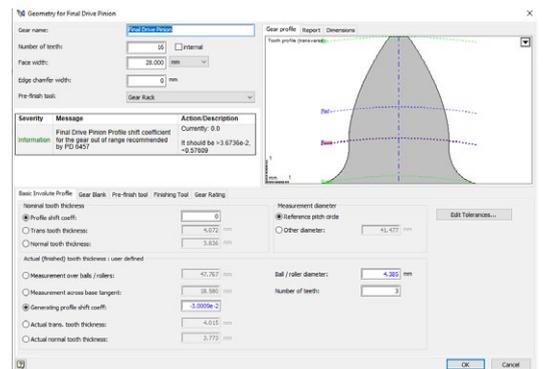


Component and system-level structural analysis:

- Fast, parallelised static analysis of full driveline
- World-class gear and bearing contact models
- Flexible FE bearings & gear blanks
- Gear root stress analysis
- Batch running and parametric study
- Electric machine unbalanced magnetic pull

Durability analysis:

- DIN, ISO and AGMA rating
 - Gear safety factors
 - Bearing life
 - Shaft fatigue
 - Splines
- Synchroniser sizing
- Duty cycles generation from measured data
- Effect of manufacturing tolerances



Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Romax, part of Hexagon's Manufacturing Intelligence division, provides world-leading solutions for the design, analysis, testing and manufacture of gearboxes, drivetrains and bearings. Learn more at romaxtech.com. Hexagon's Manufacturing Intelligence division provides solutions that utilise data from design and engineering, production and metrology to make manufacturing smarter.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us [@HexagonAB](https://twitter.com/HexagonAB).