



## Software Motor Company And Ansys Speed Development Of Advanced Motors Using Automated Workflow To Help Reduce Climate Change

April 29, 2020

Leading-edge simulation solutions and cloud-based technology develop motors with significantly reduced energy consumption and noise levels

PITTSBURGH, April 29, 2020 /PRNewswire/ -- [Software Motor Company](#) (SMC) and [Ansys](#) (NASDAQ: ANSS) are collaborating to accelerate the development of ultra-efficient switched reluctance motors (SRMs) that solve critical noise vibration and harshness (NVH) issues. This will spur adoption of SMC's advanced motors across many industries, slashing global energy demand via increased efficiency and helping reduce climate change.

ansys\_\_inc\_\_logo

Traditional alternating current induction motors drive most of today's power-hungry machines, which consume over 45% of the world's electricity. SRMs are much more energy efficient, reliable and durable, but to drive industry adoption, these advanced motors must overcome critical NVH challenges — requiring months of prototype testing and weeks of simulation. An enhanced workflow can greatly compress that development time, ensuring motors run silently, increasing energy efficiencies and decreasing carbon impact.

SMC and Ansys are building an automated, optimized and repeatable workflow for rapid design and analysis of SMC's Q-series SRMs, engineered for commercial adoption with radically reduced NVH. Leveraging Ansys workflow technologies — including cutting-edge multiphysics simulation and [Ansys® Cloud™](#) — will enable global implementation and adoption of SMC's advanced motors by companies across numerous industries. As seen in the HVAC industry, this will reduce traditional motors' energy consumption by up to 64%, helping SMC's customers save millions of dollars and enabling them to achieve a zero or net-zero carbon footprint.

"With the electrification revolution in full swing, this new state-of-the-art workflow will help us create a highly innovative next-generation SRM — the most sophisticated electric motor design in the world — and deploy it with minimal NVH effects," said Mark Johnston, president and CEO of SMC. "SMC's advanced motor adoption across commercial real estate, HVAC, industrial equipment, agriculture, vehicle traction, aerospace and many other industries will play a major role in reducing global energy consumption and improving the environment."

"Together with SMC, we are rapidly developing SRMs, delivering unprecedented reduced noise levels and enabling wide commercial adoption of these highly efficient motors for the first time," said Prith Banerjee, chief technology officer, Ansys. "This automated, optimized and cloud-based motor design and analysis platform significantly speeds SMC's development of next-generation SRMs which promises to disrupt a \$100 billion-plus industry and alter how the world consumes energy."

### About Ansys

If you've ever seen a rocket launch, flown on an airplane, driven a car, used a computer, touched a mobile device, crossed a bridge or put on wearable technology, chances are you've used a product where Ansys software played a critical role in its creation. Ansys is the global leader in engineering simulation. Through our strategy of Pervasive Engineering Simulation, we help the world's most innovative companies deliver radically better products to their customers. By offering the best and broadest portfolio of engineering simulation software, we help them solve the most complex design challenges and create products limited only by imagination. Founded in 1970, Ansys is headquartered south of Pittsburgh, Pennsylvania, U.S.A., Visit [www.ansys.com](http://www.ansys.com) for more information.

Ansys and any and all ANSYS, Inc. brand, product, service and feature names, logos and slogans are registered trademarks or trademarks of ANSYS, Inc. or its subsidiaries in the United States or other countries. All other brand, product, service and feature names or trademarks are the property of their respective owners.

ANSS-T

**ContactMedia** Mary Kate Joyce  
724.820.4368  
[marykate.joyce@ansys.com](mailto:marykate.joyce@ansys.com)

InvestorsVirginea Gibson  
724.820.4225  
[virginea.gibson@ansys.com](mailto:virginea.gibson@ansys.com)

 View original content to download multimedia:<http://www.prnewswire.com/news-releases/software-motor-company-and-ansys-speed-development-of-advanced-motors-using-automated-workflow-to-help-reduce-climate-change-301048243.html>

SOURCE Ansys