

Message

**From:** SAE International [editors@sae.org]  
**Sent:** 3/5/2018 6:28:29 PM  
**To:** Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]  
**Subject:** SAE Vehicle Engineering Technology eNewsletter March



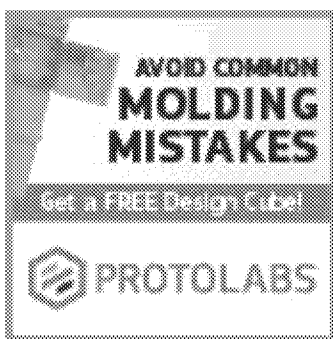
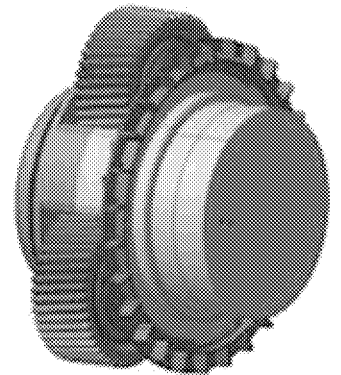
**ABLE** METAL FINISHING FOR THE **AUTOMOTIVE INDUSTRY** Download the Guide

**SAE VEHICLE ENGINEERING TECHNOLOGY ENEWSLETTER**

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### Saving EV transmission energy and costs

A transmission engineering consultancy has a new lubrication analysis technique it believes can improve electric-driveline efficiency.  
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### Design Cube

We've found that one of the best ways to learn about our injection molding process is to have an actual plastic part in your hands to explore. That's why we created the Design Cube, which demonstrates part features that are too thin or too thick, bad bosses, right and wrong ribs, and other considerations to be mindful of while designing parts for injection molding. Get a free Design Cube today!  
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### Disruptive flight control technology on trial

The Magma UAV is being used to test fly a series of flapless flight technologies—such as fluidic thrust vectoring—that will help inform the development of next-gen, high-performance, adaptable air vehicles without the need for conventional control surfaces.

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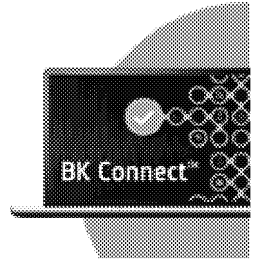


### Mercedes-Benz bills 3rd-gen Sprinter as first holistic mobility solution

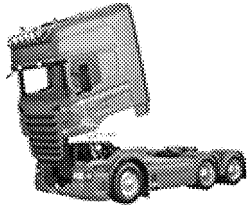
The third-generation Sprinter light commercial vehicle features new drivetrains, including an EV version, onboard internet connectivity and a host of driver-assistance systems, designed to boost safety and to reduce total cost of ownership.

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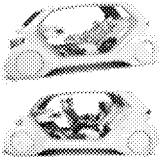


### Truck Cabin Simulation



Did you know that you can simulate truck cabin dynamics easily with simulation models? You can perform realistic simulations of truck cabin dynamics for comfort and active safety functions.

[Learn more >>](#)



### Adient rethinks interior technology for autonomous vehicles

New seating functionality, materials and connectivity, including 'tele-health' are in development for the self-driving, ride-sharing future.

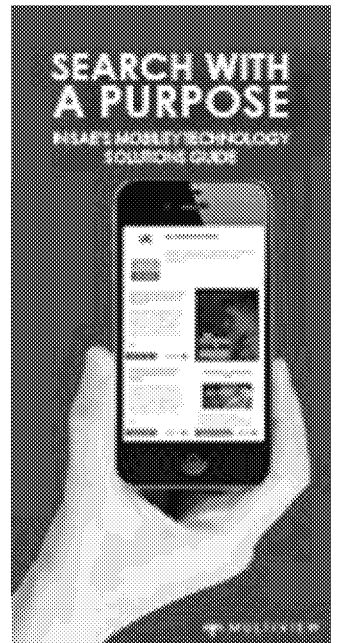
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### NASA nears testing on fission reactor for missions to Moon, Mars

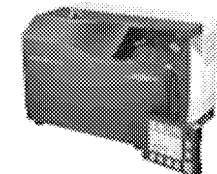


NASA's Kilopower project is a near-term technology effort to develop preliminary concepts and technologies for an affordable fission power system that could provide safe, efficient, and plentiful energy for future robotic and human space exploration missions to the Moon, Mars, and other destinations.

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### Fast, Sensitive, Reliable Leak Detection



The Pfeiffer Vacuum ASM 340 performs helium or hydrogen leak detection in vacuum and sniffer modes. It detects leaks to  $5 \times 10^{-12}$  mbar l/s in vacuum mode and  $5 \times 10^{-9}$  mbar l/s in sniffing mode. This durable, high performance leak detector offers I/O interface, SD memory card and wireless remote operation up to 100 meters.

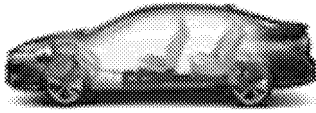
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### TARDEC pursues advanced power generation

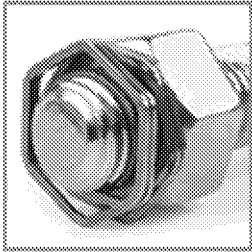
The SURUS platform includes two advanced electric drive units, four-wheel steering, advanced propulsion power electronics, a lithium-ion battery system, a fuel cell system and a hydrogen storage system.

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### Plug-in Hybrid Brings Honda into Sharper Clarity

Honda's Clarity plug-in hybrid sedan is the third variant for the company's revitalized electrified nameplate.  
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### KATO LockOne — Superior Locking for Unified & Metric Sizes

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### Designing composite engine cowling for improved heat resistance



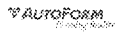
Extended helicopter hover operations can cause excessive heat to accumulate in the engine compartment, which cause degradation of surrounding materials. This SAE technical paper describes three techniques to alleviate or eliminate the effect.  
Read the full story >>

### Danfoss employs ADCs to accelerate product development



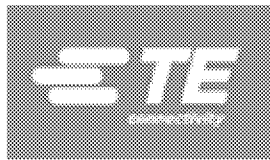
Danfoss has machines outfitted with its latest systems running at three Application Development Centers worldwide.  
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## WEBCAST ALERTS



**Stamping Engineering Methods for Product Design**  
Sponsored by AutoForm  
Coming on Wednesday, March 14, 2018

The need for simultaneous engineering makes it vital for part designers to understand new technologies and methods. Imagine a stamped metal component is being designed. Considerations for manufacturability and quality must be investigated. This 30-minute Webinar examines an engineering method that understands the relationship between designed features and manufacturing cost and quality.  
Register now >>



**Anti-Whisker Press-Fit Plating Technology for the Automotive Industry**  
Sponsored by TE Connectivity  
Coming on Wednesday, March 21, 2018

This 60-minute Webinar discusses the engineering of a Bismuth-based coating for press-fit connectors and pins that drastically reduces whisker risk while still using safe, sustainable materials.  
Register now >>



**Modeling Capacity Fade of Lithium-Ion Cells**  
Sponsored by COMSOL  
Coming on Thursday, March 29, 2018

This Webinar discusses creating a mathematical model of a lithium-ion cell. The presentation focuses on the development of the equations used to produce a physics-based model of a lithium-ion cell that includes capacity fade due to the formation of the solid-electrolyte interface and lithium metal plating on the anode.  
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2018 SAE Vehicle Engineering Technology eNewsletter schedule: March, April, May, June, August, September, October and November.

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