



### Developing Liquids Packaging Design Solutions to Eliminate E-Commerce Leakage

Stress Engineering Services, Inc. (SES), a global leader in computer simulation-based design, analysis, and testing of consumer packages, has focused significant attention on solutions to e-commerce challenges. In support of clients struggling with leakage issues in e-commerce, SES has revisited the fundamental performance metrics we developed for industry years ago for conventional sealing bottle and closure systems and applied those fundamentals to a typical e-commerce parcel distribution channel.

Read more about the e-commerce liquids packaging science and the solutions developed by SES [here](#).

### Be on the lookout for these future topics!

Consumer IoT  
Applications

Cold Chain Packaging  
Solutions

Package Design for  
Non-Thermal  
Pasteurization Process

**Dr. Jay Yuan, a Principal at Stress Engineering Services will be presenting on In-Silico (predictive computational methods) Package Transit Testing for E-Commerce at the [ISTA China Packaging Symposium](#).**

September 20-22, 2017  
Ningbo, Zhejiang Province  
China

The Census Bureau of the U.S. Department of Commerce announced that the first quarter 2017 e-Commerce estimate (\$106 billion) increased 14.7 percent from the first quarter of 2016. The e-commerce distribution channels become increasingly important for the brand owners. Compared with the traditional distribution channels, the e-commerce channels have four times as many touch points and the loading conditions are much more harsh and un-predictable. The current remedy is to add protective tertiary packaging (bubble wrap, air pillows, over-boxing cartons, etc.). The tertiary packaging materials not only increase the product cost, but also create heavy environmental burdens.

The presentation proposes an In-Silico package transit testing platform that challenges the traditional build-and-test package development process. The objective is to stimulate and verify potential break-through innovations at an early stage of the packaging development process. Case studies on In-Silico consumer unit (primary package) testing, sale unit (tray or corrugated box) testing and transit unit (pallet load) testing are presented.