Let Smart Surface™





Let Smart Surface™

Set your imagination free and create unique user experiences with the help of sustainable smart molded structures.

We offer a more intelligent, efficient, and sustainable way to develop unique user experiences with IMSE® (in-mold structural electronics) technology.

Let's turn conventional structures into smart, natural, and interactive surfaces with captivating illumination features.

Overcome design barriers

Revolutionizing how human-machine interfaces are designed, manufactured, and experienced.

Create brand differentiation through innovative design.



Improve your environmental performance

Meet your sustainability goals by reducing complexity, saving resources, and eliminating unnecessary waste.

Embrace a more environmentally conscious lifecycle.

Imagine intelligence on any surface

Turn conventional structures into smart, natural, and interactive surfaces.

Discover how to improve user experiences with invisible intelligence and seamlessly integrated technology.



Introducing IMSE® technology

Smart surfaces will change the way we design, create, and experience the future.

Our patented IMSE technology (in-mold structural electronics) makes structural surfaces smart and turns them into interactive experiences.



How it works

IMSE® technology makes surfaces thinner, lighter, and more durable while maintaining all the aesthetic and tactile qualities through plastic, wood, and other materials.

It integrates printed circuitry and discrete electronic components within 3D injection molded plastics, creating a seamless structure.

Elevate the user experience with exceptional illumination features, bringing your design life.

The manufacturing process

IMSE® manufacturing has four main process steps. We combine cosmetics, structure, and function into single injection-molded 3D designs, reducing assembly and integration challenges compared with conventional electronics.

Existing mass-production manufacturing equipment can be used in the process.





Its benefits

Better user experiences with significantly improved environmental performance - we transform the way electronics are designed and built. The benefits of IMSE®:

- Superior illumination performance
- Ultra-thin and lightweight structures
- An environmentally conscious lifecycle
 and reduced emissions
- Reduced total cost of ownership
- Brand differentiation through innovative designs and delighting user experience

How TactoTek® can help

IMSE® Trainer

The IMSE® Trainer is an interactive learning platform that fast-tracks your ability to design with In-Mold Structural Electronics. It offers a comprehensive library of educational videos and enables you to engage in discussions with fellow users and TactoTek experts.

IMSE® Digital Tools

IMSE® Digital Tools are essential for successfully creating new IMSE parts. They assist you in analyzing the feasibility of your IMSE solutions and guide you in utilizing existing CAD software. Feature Library Items are a way to kick off your design work by using ready-made IMSE feature blocks.

IMSE[®] Reference Designs

Application-specific IMSE Reference Designs give real-world examples of the technology's potential and showcase how to build new solutions based on In-Mold Structural Electronics (IMSE) technology. Reference Designs also enable third parties to enhance or modify ready-made IMSE designs and speed up their innovation process toward market entry.

IMSE[®] Knowledge Base

The IMSE® Knowledge Base is your go-to resource for comprehensive intellectual property packages and expert know-how. It covers everything you need to design and manufacture IMSE parts using IMSE-verified components and materials.

tactotek.com

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