

A diagram showing two cylindrical components, likely mold halves, with a series of green triangles representing magnetic field lines or inductive coupling between them. The background is a blue and white abstract pattern.

ARISO CONTACTLESS CONNECTIVITY CHANGES THE GAME.

INNOVATIVE TECHNOLOGY CREATES A NEW WORLD OF POSSIBILITIES WHEN MANUFACTURING WITH INJECTION MOLDING.

Injection Molding can be used to manufacture everything from bottle caps to automobile hoods. Popular since the 1940's, injection molding has become integral to the production of a variety of components for the automotive, aerospace, medical, and consumer products industries. Despite its widespread adoption, the process has mechanical limitations. Making a game-changing impact on this long-standing manufacturing process requires true innovation.

With the introduction of TE Connectivity's ARISO, contactless connectivity platform, dramatic improvements to injection molding applications are now possible—innovations that improve productivity, minimize waste, and reduce the total cost of ownership.

SIMPLE IDEA, COMPLEX TECHNOLOGY.

The basic principles of injection molding are straightforward; however, the actual technology can be fairly complex. Typically constructed of two symmetrical or asymmetrical halves, a mold is injected with molten plastic materials which then cool and solidify to the configuration of the cavity, ultimately releasing the formed product or part. With molds moving repeatedly to mix materials, sensors gauging temperature and pressure, and cooling systems finishing the process, many potential failure points must be monitored and addressed.

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During the process, one half of the mold remains fixed while the other half moves either horizontally or vertically. The movements—sometimes millions in a single manufacturing process—are enabled by physical cables which experience significant wear and tear, and require time-consuming and costly maintenance or replacement. Contactless couplers eliminate the need for mechanical connections, replacing them with inductively coupled devices that transmit power and data across small distances without contact.

Furthermore, molds often need to be replaced, either due to wear, or sometimes simply to accommodate the production of another product or part. In a traditional mechanical design, molds must be carefully disconnected from the cables. The process takes the time and requires the skills of a trained operator to perform the replacement. With TE's contactless connectivity platform, molds can be replaced simply and quickly.

SO, WHAT IS POSSIBLE?

With so many limitations removed, we have only begun to see what may be possible. Certainly the injection molding process will be more efficient and less costly. So much power and imagination lay in future applications of the ARISO platform. So much power lies in what's possible.

EXPERIENCE THE ARISO PLATFORM FOR YOURSELF. ORDER YOUR EVALUATION KIT TODAY.

These evaluation kits give you the freedom to experiment with this technology in your own environment. Integrate TE's Contactless Connectivity technology into current, real-world scenarios of your own or share it with your customers. You never know what possibilities may develop with ARISO contactless connectivity at your fingertips. Contact us today at ARISO@TE.com.

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