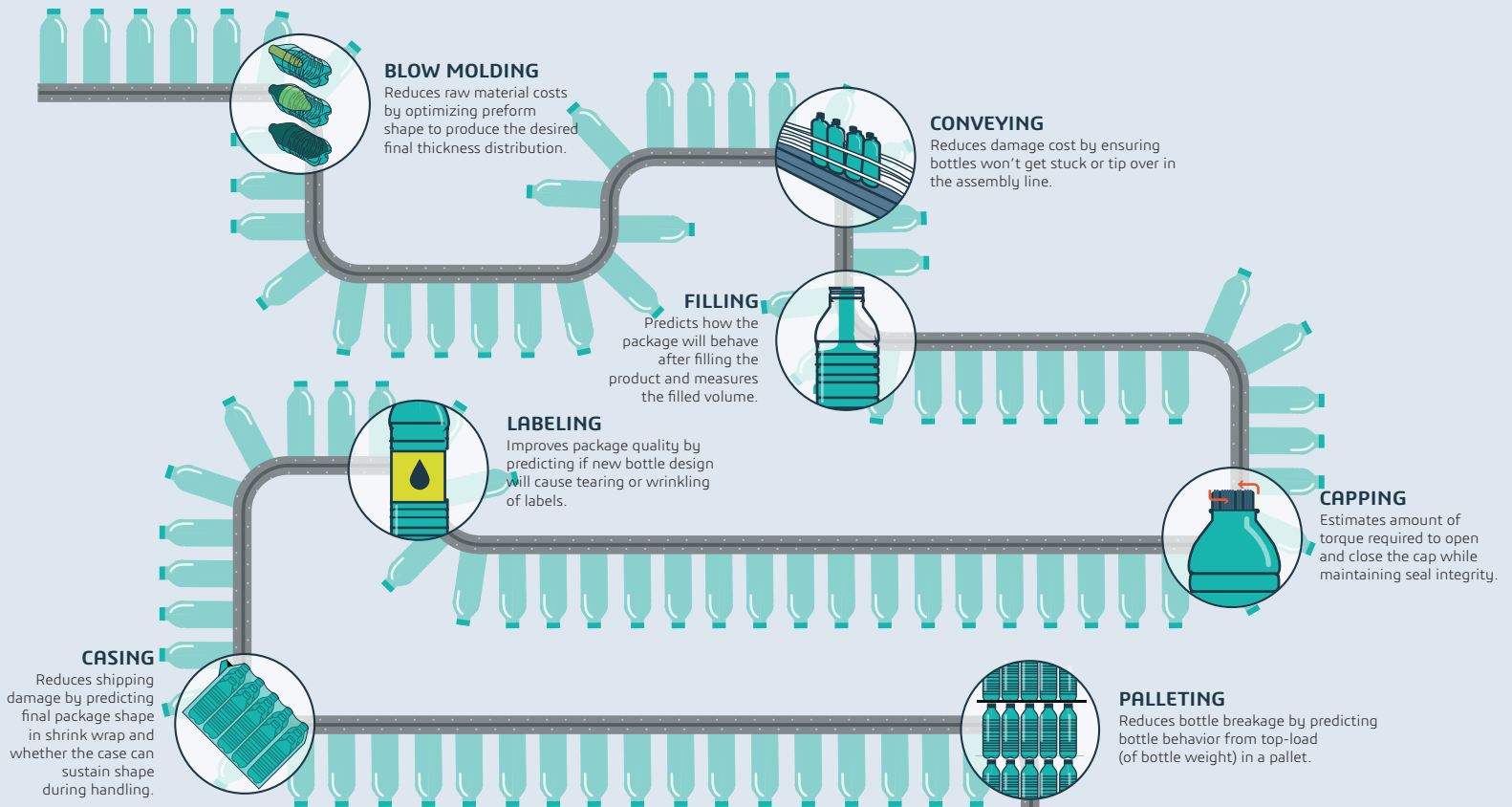


JOURNEY TO THE SHELF

HOW VIRTUAL TESTING CUTS TIME AND COSTS IN HALF TO MAKE, FILL, AND SHIP NEW PACKAGING

Bottle designers often create beautiful, innovative concepts, but retreat to conventional square, cylindrical, or rectangular shapes if the bottle can't move efficiently through the filling and shipping process.

Virtual Testing enables designers to simulate how a new bottle design will behave at every stage of its lifecycle, lowering costs, improving sustainability and driving consumers to put their products in shopping baskets.



THE BENEFITS OF VIRTUAL TESTING

18 > 9 MONTHS

Reduction in design cycle when you reduce the need for physical prototypes through virtual testing.¹

1 WEEK > 1 HOUR

Amount of time by which process automation can reduce design iteration.²

75%

Reduction of package development time and effort.³

27%

Reduction of raw materials experienced by some manufacturers using virtual testing.¹

3-6 MONTHS

Amount of time saved due to simulation during palleting design phase.⁴

50%

Amount of time saved in redesign cycle by running a capping simulation.⁵

MILLIONS

Dollars saved by shaving off just a few grams from packaging when billions of units are produced.¹

Go to www.3ds.com/process-mfg to learn more.

1. Amcor designs reduced-plastic bottles with Dassault Systèmes PLM Amcor, Customer Story, 2011

2. Keeping Carbonation Bottled Up with FEA Saint-Gobain, SIMULIA Community News, 2013

3. Aluminum Bottle Forming Simulation with Abaqus The Coca-Cola Company and Dassault Systèmes, SIMULIA Community Conference Paper, 2009

4. Silgan Containers Uses State-of-the-Art Simulation Software for Predicting Can Performance Silgan Containers, Realistic Simulation News, May 2009

5. Closure System Bottle Cap Redesign Closure Systems International