

AMERICAN INDUSTRIAL PARTNERS (SHAPE TECHNOLOGIES GROUP) STRATEGIC ASSESSMENT OF FOOD INDUSTRY APPLICATIONS TO WATERJET TECHNOLOGY

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SHAPE Technologies Group, Inc. (SHAPE), owned by private equity firm American Industrial Partners, is the parent organization for a growing portfolio of companies that provide manufacturing process solutions across a broad spectrum of industries. Although SHAPE's ultra-high pressure technology has multiple uses in the food and beverage industry — such as high pressure processing (HPP) and waterjet cutting — penetration into the market remains minimal. The Tauber team was tasked with delivering a thorough industry analysis and providing a strategic roadmap to increase SHAPE's revenue in the food and beverage industry.

High pressure processing, a food safety and preservation technique, is currently in its infancy with less than 1% of all applicable foods utilizing the technology. Consumer trends towards more natural foods, heightened industry awareness around food safety, and decreasing costs of HPP equipment lead to a projected five-year CAGR of 17.5% for the equipment industry. SHAPE currently supplies high pressure pumps and parts to one of the major players in the HPP equipment market. The team recommended two paths for increasing revenue in this space. First, SHAPE should develop pump technologies specific to the HPP process to accelerate the growth of the industry. SHAPE's expertise in ultra-high pressure combined with a customer partnership could provide 140% growth in annual revenue by 2021. Second, with significant investment, acquisition of one of the two primary HPP equipment companies could lead to 2021 revenues of over \$200M and direct influence on the growth of HPP.

Waterjet cutting is most prevalent in two food markets: proteins and produce. For the protein cutting space, the team recommended developing strong partnerships with SHAPE's biggest portioning customers by optimizing technology currently in development to their needs. The team also recommended selling complete pump solutions and additional engineering services to meat processors and focusing efforts on the relatively untapped fish portioning market. These recommendations could result in a 61% increase in annual revenue from the protein market by 2021. In produce, the team projected fresh cut produce market growth of 10% CAGR from 2016-2021, attributed mainly to consumer preference for healthy, nutritional, and convenient products. Additionally, heightened food standards have created regulatory pressure that has forced retailers to adopt safer processes, such as a waterjet, for fruits and vegetables. This waterjet processing results in longer shelf life, operational cost savings, and reduced risk of food recall. The team recommended maintaining current practices; SHAPE's annual revenue in the produce segment is projected to rise 120% by 2021. In total, our recommendations could increase SHAPE's annual revenue in the food and beverage industry 101% by 2021.