AMERICAN INDUSTRIAL PARTNERS – AQUAFLOW
SCALING AQUAFLOW AND GROWING THE MARKET
FOR ULTRA-HIGH PRESSURE WATERJETS

Student Team:
Shrikant Chothave – Master of Supply Chain Management
Ray Gonzalez – Master of Business Administration
Zach Mandell – EGL (BSE/MSE Industrial & Operations Engineering)

Project Sponsors:
Sparsh Bhargava – Partner, American Industrial Partners & Managing Director, AquaFlow
Daniel Davis – Partner, American Industrial Partners
Dr. Mohamed Hashish – Senior Technology Fellow, Flow International
Rick Schmid – Global Market Manager, Flow International

Faculty Advisors:
Albert Shih – College of Engineering
Brian Wu – Ross School of Business

Created in 2014, AquaFlow is a merger of formerly competing waterjet manufacturers Flow International and KMT Aqua-Dyne, following their acquisition by private equity firm American Industrial Partners. AquaFlow is the leading developer of Ultra-High Pressure (55K PSI) waterjet technology and the market leader in water-based surface preparation. Despite being the leader, AquaFlow only captures a small fraction of the multi-billion dollar global surface preparation industry, which is dominated by abrasive blasting despite the numerous benefits of water in performance, impact to environment, safety, speed, and cost.

AquaFlow’s goal is to grow from $35MM to $70MM over the next 2-3 years through organic growth and acquisitions. In order to do so, AquaFlow’s leadership group challenged the Tauber team to create a detailed path for the company to better attack and expand the addressable market for water-based surface preparation. As part of their project, the team delved into market research and interviewed customers to more clearly articulate AF’s value proposition and to tie this to key segments within its addressable markets. The team also reassessed product design and supply chain strategy and worked with AquaFlow staff to develop the product road map for automation over the next 2-3 years – an area that had been historically neglected by the company and plagued by significant reliability issues, poor user friendliness, and high capital costs despite being a key driver for the future. The team identified changes that could reduce downtime by 50% and COGS by 25% with a plan to execute within 12 months and also helped guide the 3 year road map which would bring the product to an order of magnitude difference in performance and efficacy.

Overall, the team’s work has directly impacted both the short term and long term plans for AquaFlow and American Industrial Partners in investing and executing in this key market.