



Business Plan Summary

Innovating Quality Control Technologies

Executive Summary

In the year 2021, Paraclete Solutions was organized as a wholly owned subsidiary of the Focus Forward limited liability company in the State of Texas. The mission of the company is to offer products which provide robust, reliable, and relevant data to support process control and product certifications for virgin plastics producers. The long-term company vision is to develop an integrated process analytical platform focused on sampling, testing (spectroscopic analysis), and improving (defect detection /removal) for product quality control.

Industry Analysis

The global virgin plastics manufacturing industry produces a wide variety of polymers used in many consumer goods in housing, food, medicine, clothes, infrastructure, and transportation, and continues to grow in size and breadth. The annual gross sales of the virgin plastics industry are currently around \$450 billion and is expected to grow to more than \$640 billion by 2029. The global process analyzer market size reached US\$ 6.7 Billion in 2022 and is expected to grow to US\$ 9.4 billion by 2028, representing a CAGR of 5.6% during 2023-2028, while the global plastics testing market is expected to grow at a significant CAGR of 12.6% between 2023 and 2033. Paraclete Solutions intends to participate in the migration of quality control technologies from the lab (off-line) to the process (on-line).

Product/Service Analysis

Paraclete Solutions will focus on developing a portfolio of products to support each step of the quality control cycle (sample, process, measure, evaluate, report, respond) in the area of process sampling, FTIR chemometric analysis, and pellet defect/morphology sorting. The company will leverage its extensive experience and expertise to develop off the shelf integrated analytical solutions which can be quickly implemented and leverage across multiple geographies. The initial lab-based solutions will be expanded to accommodate the at-line environment and ultimately integrated into a multi-functional process analytical platform. The objective is to develop QC support technologies where gaps currently exist or are not optimal and offer integrated solutions that provide robust, reliable results. End to end integration is currently left to the customer to develop customized solutions leading to wide variations between labs and is currently a sparsely populated market domain space which also has leveraging potential for other industries besides virgin plastics.

Business Operations

Paraclete Solutions operations will initially be focused around contract manufacturing while aggressively pursuing strategic acquisitions that can facilitate an accelerated development and production functional expertise growth with a focus developing a robust IP portfolio that provides significant competitive advantage and opportunities for licensing in other industries. In addition, the intent is to engage external experts to support as many operational activities as possible not related to customer sales, service and support in order to scale at the speed of sales growth. All customer facing sales, service, and support will be directed by company employees.

Company Leadership

- Mark Alpeter: (President) With more than 31 years of industry experience in research and development (Global Analytical Leader, Associate R&D Director, and Technology Fellow) at Dow and a PHD in analytical chemistry.
- Mike Cheatham: (Development) With more than 31 years of industry experience in research and development (Global Analytical Leader, Associate R&D Director, and Technology Fellow) at Dow and a PHD in analytical chemistry.
- Enric Comas: (Technology) With more than 17 years of industry experience in research and development for multiple chemical companies (Dow, DSM/UCB) and a PHD in chemometrics.
- Gary Smitherman: (Engineering) With more than 35 years of industry experience in process operations (Technology Lead, Global Reliability Engineer, and Technology Associate) for Dow/Union Carbide and a BS in mechanical engineering.
- Bill Powers: (Manufacturing) With more than 37 years of industry experience in global process operations for multiple chemical companies (Dow, DSM, Fibrant, Anchor Glass Container Co., TriVista, and Vantage Specialty Chemicals) and a BS in chemical engineering.
- Kim Simmons (Industrial Design) With more than 35 years of experience engaging a wide range of people groups as well as extensive international travel and a BS in Industrial Design with a PHD in Theology.

Market Strategy

The initial target market for Paraclete Solutions will be North/South America, which will be expanded to Europe and then finally to Asia. Our marketing and sales plans will be focused on print (brochures, trade magazines), technical journals, industry conferences, industry associations and the internet.

Financial Plans

Revenue projections for Paraclete Solutions range from ~\$65,000 in 2023 to ~\$8,000,000 in 2027 with expectations for profitability by 2026. Expenses from acquisitions, marketing, development, production, and ongoing business operations are expected to range from ~\$150,000 in 2023 to ~\$7,000,000 in 2027. There is an expectation that 4 rounds of capital fundraising will be needed:

- \$200K (2023) – Round 1 from family, friends, colleagues
- \$400K (2024) – Round 2 from family, friends, colleagues expanded network
- \$600K (2025) – Round 3 from private equity / venture capital
- \$800K (2026) – Round 4 from institutional investors