



Robert Summers – owner
robert@fishbonetechnical.com
(720) 388-9275

Rich Kuechenmeister – owner
rich@fishbonetechnical.com
(612) 590-9531

We are a technical services firm focused on client's needs, good communication, and helping others. We represent clients in an Engineering and Logistical capacity to plan, organize, and execute projects. Our specialties are Capital Projects, Project Management, Line Optimization, and Industrial Automation.

Capital Projects

- Feasibility Studies
- Specification Documentation
- Capacity Analysis
- Design Basis, Heat and Mass Balances
- Utility Requirements
- Equipment Identification and Preliminary Specifications
- Equipment Arrangements
- Budget Cost Estimates and Schedule Development
- PFDs and P&IDs
- Equipment Supports and Operator Platform Design
- As-Built Documentation

Project Management

- Bid Specifications & Bid Drawings
- Contractor Selection
- Contractor Management
- Installation & Startup

Line Optimization

- Mass Flow Calculations
- Continuous Improvements

Industrial Automation

- Feasibility Studies
- Systems Engineering
- Specification Documentation
- UL 508A / UL 698A Control System Design
- Hardware and Instrumentation Specification
- PLC/HMI/SCADA/MES/OEE Programming
- Testing & Quality
- As-Built Documentation

Experience

- **Bakery:** loss-in-weight ingredient addition, pneumatic transfer, mixing, sheeting, oven, spiral freezer, stacker, wrapper and metal detection, equipment procurement, installation, startup, optimization
- **Milk Receiving:** RO for milk condensing, spray dryer upgrades, packaging and waste treatment
- **Drinkable Yogurt:** Copacker selection, existing equipment evaluation, process and pack equipment selection, procurement, installation, startup, optimization
- **Cheese Grinding:** Sanitary FFS, Case packing, Robotic palletizer and building expansion
- **Smoked Meats:** RTE, line layout, equipment selection, procurement, Robotic Palletizer, installation and startup
- **Egg Processing Line Addition:** raw material receiving, cooking, control system specification & design, programming, commissioning and optimization
- **Bakery Line Upgrade:** Robotic palletizer control system specification & design, programming, commissioning, optimization
- **Canning Line Upgrade:** conveyor control, accumulation, palletizing, aseptic processing, control system specification & design, programming, commissioning, optimization
- **Assembly & Test:** 31 servo axis machine control, control system specification & design, programming, commissioning, optimization
- **Snack Food Packaging Addition:** robotic packaging & inkjet labelling