

General Information

Q: What is the Cal Poly Dairy Products Technology Center (DPTC) Pilot Plant?

A: The DPTC Pilot Plant is a research-focused facility featuring scaled-down versions of commercial dairy processing equipment. It is designed to support R&D for the dairy industry and is not intended for commercial-scale production.

Access & Availability

Q: Who can use the pilot plant?

A: The facility is available for hire by companies, researchers, and entrepreneurs in the dairy industry seeking to conduct product or process development work.

Q: How do I get started with a project?

A: To initiate a project or inquire about capabilities, contact Dimitri Genard at dgenard@calpoly.edu or call 805-756-6104.

Capabilities & Equipment

Q: What processes can be carried out at the pilot plant?

A: The pilot plant supports a wide range of dairy processing activities, including:

UHT and HTST pasteurization

Spray drying

Evaporation

Membrane filtration (UF/RO/NF/MF) spiral & ceramic membranes (MF only)

Ice cream production (Continuous freezer)

Butter and cheese manufacture (batch & continuous)

Cheesemaking

Q: Is the equipment similar to what is found in commercial facilities?

A: Yes, for the most part. The pilot plant uses scaled-down versions of commercial equipment, enabling real-world simulations of production processes.

Q: What is the processing capacity of the pilot equipment?

A: Capacities vary by equipment. Examples include:

Microthermics UHT: 60 L/hr

HTST (PMS): 30 gal/hr

Spray Dryer (Niro Filterlab): 60 lb/hr water evaporation

Ice Cream Freezers: 100–150 gal/hr

Butter Churn: 1–2 lbs/min

Yogurt/Batch pasteurizer 50 L

Several Cheese vats (5lbs to 50 gallons)

Q: Is space available for custom or company-specific equipment?

A: Yes. Short-term placement of specialized equipment is supported within the 8,000 sq. ft. processing area.

Product Development Support

Q: What kind of product development support is offered?

A: Our team provides:

Compositional Analysis

Nutritional label

Technical assistance for dairy powders and concentrates (e.g., NFDM, MPC, WPC, lactose)

Support for food and product development

Advise on troubleshooting products

Training and technical documentation

Analytical Services

Q: Are analytical labs available?

A: Yes. The facility includes analytical labs for:

- Microbial analysis
- Physical and chemical testing
- Product quality evaluation

Logistics & Storage

Q: Are cold storage facilities available?

A: Yes. The facility offers cold storage with temperatures ranging from -15°F to -40°F (approx. 200 sq. ft.).

Q: Are Clean-In-Place (CIP) systems available?

A: Yes. CIP systems are in place for sanitary operations, if applicable.

Contact Still have questions or ready to schedule a consultation?

Reach out to: Dimitri Genard Email: dgenard@calpoly.edu

Phone: 805-756-6104