



TURN-KEY
MODULAR SYSTEMS



TKMS employs a staff of highly qualified in-house engineers, management professionals, technicians & stainless steel craftsmen.

Corporate Trust

To meet the modular needs of the Biopharmaceutical, Cosmeceutical and Food Industries, Turn-Key Modular Systems Inc. offers customized process systems that are engineered, manufactured and tested in our facility to provide a **“Speed to Market”** advantage for our clients. Each system is designed to meet or exceed the regulatory conditions that govern each industry.

Because the systems are fabricated in our factory, we manage and control the quality of manufacturing by utilizing our experienced craftsmen in a clean room environment. We ensure that a safe workplace is maintained while meeting our client’s expectations for schedule and cost.

Once manufacturing has been completed, we test the systems in our factory using protocols developed to help save valuable site start-up and validation time.

Our experience in dealing with the logistics of both small and large modular systems helps us transport them to our client’s construction site in a safe and timely manner.

At Turn-Key Modular Systems Inc. our team offers over three decades of experience in providing process solutions and system integration.

Whether you have a small project or a green field site, we can assist you to develop an **Integrated Turn-Key Approach**.

Engineering & Design

Our design capabilities in providing modular systems can begin at the conceptual engineering stage and develop through detail design, fabrication, testing, installation and start-up.

Our engineering design services include the following:

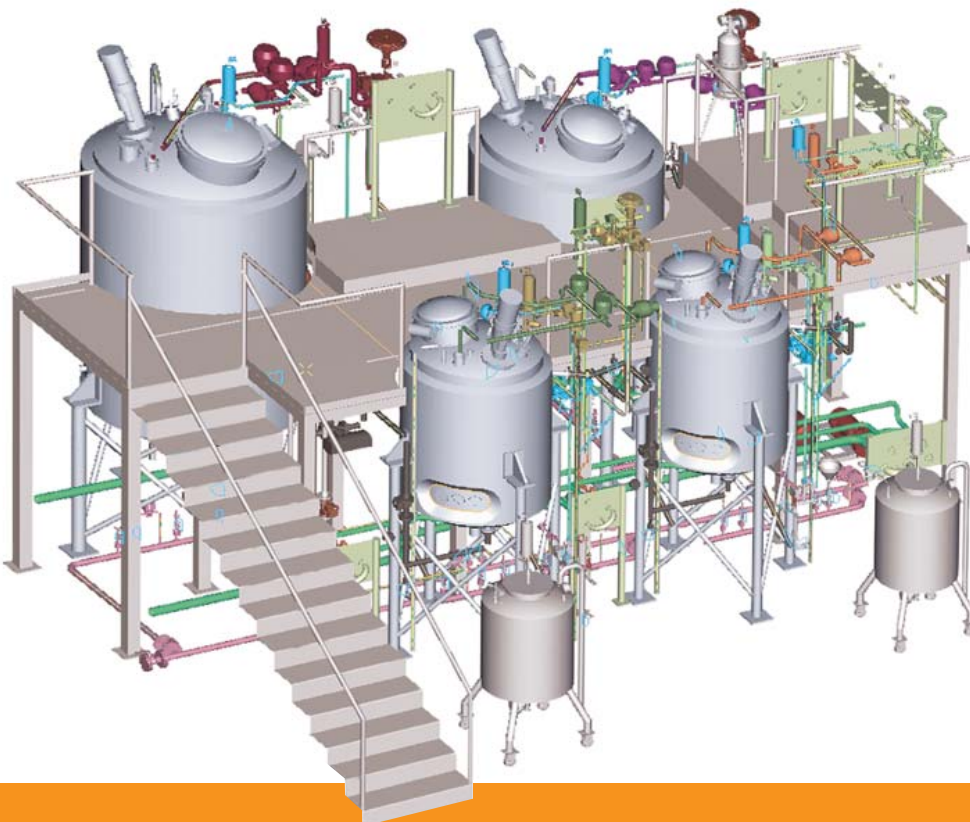
- Custom Modular System Design
- Process Design including P & ID's
- 3D Design for high purity piping
- Mechanical Engineering
- Electrical Engineering
- Instrumentation & Loop Design
- Plant & Equipment Layout
- Project Management



Experience

TKMS expertise includes

- Pharmaceutical Process
- Custom Modular Systems
- Pharmaceutical Modules
- Biotech Modules
- Food Process Systems
- Sterile Process Applications
- Pasteurizing & UHT Systems
- CIP System Applications
- Batching & Blending Systems
- Heating & Cooling Applications
- Process Design & Engineering





Modularization decouples the building and facility construction from the process systems offering a “Speed to Market” advantage. This affords the client an improved return on investment by achieving a faster completion date.

Biotech & Pharmaceutical

Turn-Key Modular Systems Inc. provides total solutions for modular applications within the Life Science Industry. Whether we’re providing a single process “Plug and Play” skid, or a large scale custom modular system, we bring value to our clients with over three decades of knowledge and experience.

In an industry where “Quality and Speed to Market” are essential, TKMS can help design a modular process and deliver your project from Factory to Finish.

We provide the following as a standard for each project:

- P&ID's, Vessel Drawings & Weld Maps
- Detailed Process Design Package
- 3D Design Piping Models
- Detailed Automation Design Package
- Qualification and Turnover Package including Material Certification & Welding Documentation
- Comprehensive Factory Acceptance Testing prior to shipment



Food & Cosmeceutical

Whether it is a simple application in a cosmetic plant or a sophisticated engineering application in a food facility, Turn-Key Modular Systems Inc. has the expertise to provide a broad spectrum of services to our clients. Our products and capabilities cover the complete range of equipment from holding tanks, through the heating and cooling process to the filling and packaging stages.

Cosmeceutical:

- Shampoo Process & Cream Preparation
- Modular Process System Applications
- Clean in Place Systems
- Utility Process Systems including Water Systems & Gas modules

Food & Dairy:

- Modular Applications for Fluid Milk, Cultured Products & Ice Cream
- Aseptic Processing for Low & High acid applications
- Sauces, Fruit based products, Liquid Sugar, Puddings & Particulate Products
- Liquid process applications, including batching & blending
- Candy preparation, Sugar Handling Systems & Coating Systems
- Soft Drinks, Brewing, Juice processing & Flavored Drinks



Our unique approach to the modularization of equipment is a proven benefit to our clients because we can offer them a single point of contact for their entire project.



Modular Design

The TKMS modular approach improves schedule and quality by reducing field trade stacking issues, eliminating labor shortages and reducing site disruptions.

All custom systems are configured to suit our client's requirements while maximizing the modular approach. Our experience with 3D design, fabrication and installation of process modules helps us to ensure that our systems include compact design features that afford trouble-free access for service and maintenance.

Components and controls for the systems are located within the module and all utilities are incorporated for single point field tie-ins.



Modular Construction

System applications include:

- Custom Modular Process Systems
- Custom Filtration & Purification Modules
- Formulation & Compounding Modules
- Bio-Waste Hold, Kill & Neutralization Modules
- Clean in Place Modules
- Custom Fermentation & Bioreactor Systems
- Utility Piping & Gas Distribution Modules
- WFI / PW Heating, Cooling & Pumping Modules
- Buffer & Media Prep Systems
- Custom Chromatography Systems
- Temperature Control Modules
- Batching & Blending Systems





Biotech
Pharmaceutical
Cosmeceutical
Food

Modular System Design
Valves, Pumps, Fittings
Heat Exchangers

CIP Systems
Bio Waste Kill Systems
Purification Systems
Utility Process Modules
Formulation Systems
Buffer/Media Systems
Bioreactor & Fermenter Systems



Turn-Key Modular Systems Inc.
8-4090 Ridgeway Drive,
Mississauga, ON, Canada L5L 5X5

Toll Free: 1-866-MODULE-1
Sales@TKmodular.com
www.TKmodular.com