

## Takasago Chemical Corporation Accelerates Development of Continuous Production Facility "iFactory"

Takasago Chemical Corporation, an affiliated company of Takasago Group, is leading a joint development program as part of a consortium comprising eight firms and one institute: Mitsubishi Tanabe Pharma Corporation, Konica Minolta Chemical Co., Ltd., Yokogawa Solution Service Corporation, TEC Project Services Corporation, Taisei Corporation, Shimadzu Corporation, Mitsubishi Kakoki Kaisha, Ltd., and the National Institute of Advanced Industrial Science and Technology.

This five-year program was adopted in 2018 to be among one of the programs for innovating the strategic energy conservation technologies put forward by the New Energy and Industrial Technology Development Organization (NEDO).

Dubbed "iFactory", this program will bring about continuous production of pharmaceutical ingredients and highly functional chemical products. The resulting system is the world's first fully operational modular facility of its kind, capable of producing low volumes of multiple product types while saving energy and human labor. Its purpose is to help build an energy-efficient economy and society while contributing to enhanced industrial competitiveness. Quantitative energy conservation target is to reduce energy consumption equivalent of 100,000 kiloliters of crude oil by the year 2030.

The iFactory is a system factory with some design similarities to a built-in kitchen unit. Manufacturing lines can be reconfigured by changing the component units and their positions according to changes in basic ingredients and production items. This enables the facility to perform flexible on-demand production of just the products needed in just the quantities needed. It is also compact, taking up only the space equivalent of two convenience stores. This has led to anticipation of the potential for mobile factories.

# NEDO Project Role Assignment Chart

