

# INDUSTRY TRANSFORMATION CENTER 4.0

Industrial Promotion Center Region 1  
Department of Industrial Promotion, Ministry of Industry



COLLABORATE  
FOR THE FUTURE



Industry Transformation Center 4.0



กรมส่งเสริมอุตสาหกรรม  
DEPARTMENT OF INDUSTRIAL PROMOTION



## INDUSTRY TRANSFORMATION CENTER 4.0 INDUSTRIAL PROMOTION CENTER REGION 1

This center has been established to support and develop entrepreneurs in eight provinces in the upper northern region of Thailand, namely Chiang Mai, Lamphun, Lampang, Chiang Rai, Phayao, Phrae, Nan, and Mae Hong Son, giving them access to cutting-edge technology that will allow them to create innovation and high-value-added commercial products. Equipped with a team of specialists who can provide consultation on commercial research, design, manufacturing matching, standard testing and accreditation, and financial services, the center aims to enable entrepreneurs to efficiently apply what they have learned to their business and product development. In addition, the center provides machines contributed by a network of governmental agencies to help

entrepreneurs reduce their production costs in early phases. It also serves as a one-stop hub that brings together organizations that play a vital role in various local industries and connect them with entrepreneurs.

Applying the management model of the main ITC to the unique potential of regional industries, the Industrial Promotion Center Region 1 in Chiang Mai offers three main services, divided by the types of industries in the region.

1. **UNIT Pilot Plant (UNIT PP)** : Agricultural and food processing industries
2. **UNIT OX (UNIT Oil Extractor)** : Cold oil press unit
3. **UNIT One Connection (UNIT 1C)** : Creative industries





# UNIT ONE CONNECTION (UNIT 1C)

for creative industries

Born out of the IDEA HOUSE Project, this service operates under ITC and caters to creative industries. The highlight of this unit lies in the design counseling service team, which comprises designers who offer preliminary consultation on four areas of design, namely product design, fashion design, graphic design, and packaging design, to help SME entrepreneurs and community enterprises develop their prototypes and add value to their products. Equipped with a wide range of machines and tools, the center also offers 3D printing, 3D scanning, and product photography services for e-commerce as well as creative venues for seminars and exhibitions at no charge. Also offered is a consultation service on business development and access to capital in collaboration with various affiliated organizations, such as the Thailand Textile Institute, the Federation of Chiang Mai SMEs, the Chaing Mai Bankers Club, and the Association of Metal Machinery Part Manufacturers.



# UNIT 1C



## UNIT ONE CONNECTION OR UNIT 1C

Creative services and facilities

- A wide range of equipment and tools available for service, including 3D printers, 3D scanners, and large format printers; product photography services; and various kinds of sewing machines
- Library that inspires fresh design ideas, contributed by TCDC Chiang Mai
- Working space for product development and prototyping
- Venues for exhibitions and showcases of design works
- Venues for meetings, seminars, and training sessions





# UNIT PP and UNIT OX

## UNIT PP (UNIT Pilot Plant)

Geared towards agricultural and food processing industries, this unit gives entrepreneurs and interested individuals in the region support and access to services and machines which they can develop new and innovative products as well as add value to agricultural and food processing products. In addition, the unit also offers prototyping services as well as food safety and nutrition testing services to entrepreneurs.

Those interested can also visit the unit to learn more about high-technology machines.

## UNIT OX (UNIT Oil Extractor)

features an cold oil press unit, which provides a vegetable oil pressing service for agricultural and food processing industries

**Currently, there are a total of eight machines in UNIT PP and UNIT OX available for service, as follows:**

## UNIT PP (UNIT Pilot Plant)



• **HI-SPEED EXTRACTOR**  
 with a 10-liter tank

• **FALLING FILM EVAPORATOR**  
 with a capacity to evaporate 10 liters of water per hour while preserving the quality of the raw material

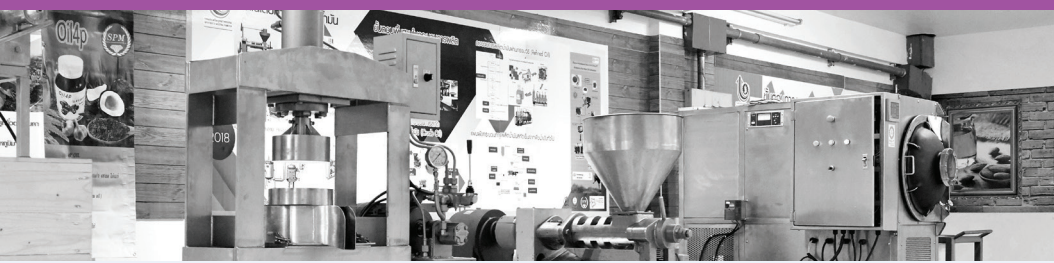
• **ESSENTIAL OIL DISTILLER**  
 with a capacity to evaporate 10 liters of water per hour

• **SPRAY DRYER**  
 with a capacity to evaporate five liters of water per hour and produce a maximum of 90% of dry powder

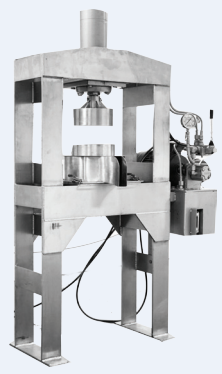
• **HOT AIR OVEN**



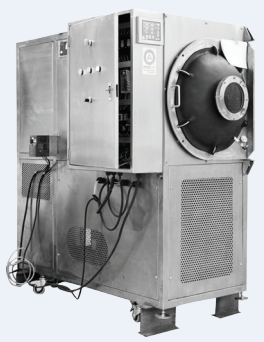
## UNIT OX (UNIT Oil Extractor)



• SCREW COLD OIL PRESS



• HYDRAULIC COLD OIL PRESS



• FREEZE DRYER



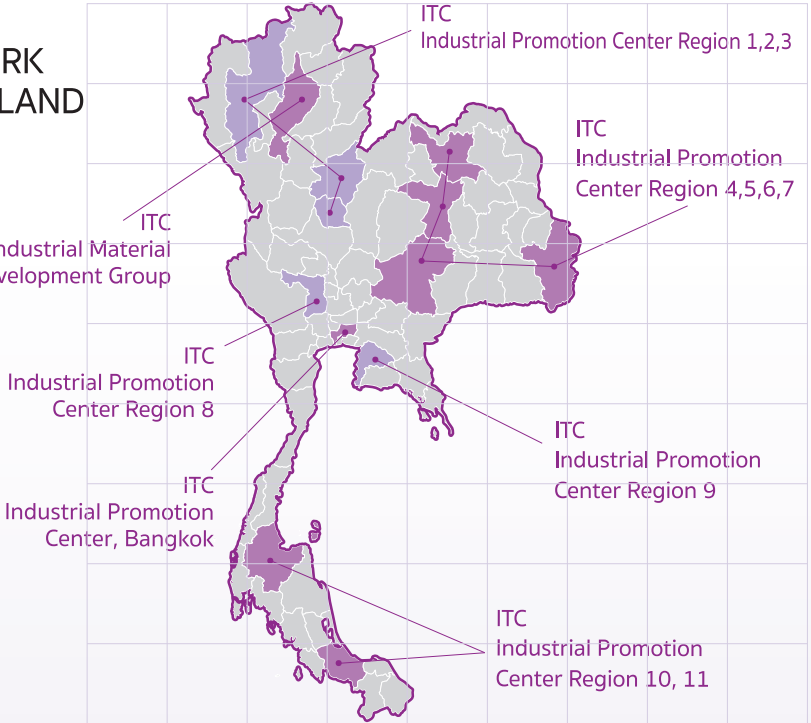
# INDUSTRY TRANSFORMATION CENTER 4.0



## ITC NETWORK IN THAILAND



Ceramic and Industrial Material Development Group



The Industry Transformation Center is an integrated service center that aims to develop three main dimensions of Thailand's industries, namely their products, processes, and people, in order to be launch Thai SMEs into industries of the future and realize their dreams. The center achieves its goal by connecting private manufacturers and SME entrepreneurs with innovation and research and creating opportunities for them to share their knowledge on product development and business management and develop innovation that will result in high-value-added commercial products, which will ultimately enable Thai entrepreneurs to enhance their competitiveness to be on par with others on a global level.

ITC provides a comprehensive array of services, ranging from business consultation, commercial research, product design, production development, and engineering services to manufacturer matching, accreditation, market testing, and financial consultation, in order to incubate and enhance entrepreneurs' product development capacity and their ability to adapt to the business landscape in the digital era and Thailand 4.0. The center also features a

co-working space with cutting-edge machinery contributed by various large organization, which SME entrepreneurs can use and learn from in order to create innovative products and enhance their production. The ultimate goal is to equip Thailand's human resources with knowledge and adaptability that will transform and enable them to achieve security, prosperity, and sustainability.

Currently, the ITC network consists of 23 centers in across the country, with ITC in Kluaynamthai, Bangkok as the headquarters. Among these are 11 regional industrial promotion centers and a ceramic industry reform center in Lampang, which have been established to extend the network's service to all the regions. While modeled after ITC, they have also been adjusted to ensure that they operate in correspondence with local industries and can support regional SMEs fully. The ten remaining centers are smaller centers in industrial estates that are attached to provincial industrial offices. Their main functions are to introduce the services of ITC and screen requests from entrepreneurs to pass on to regional centers for further in-depth consultation.

# ITC 4.0 SERVICE



## DEMONSTRATION

ITC serves as a hub that connects domestic and overseas industrial leaders and large companies to give entrepreneurs access to the demonstrations and sharing of knowledge and cutting-edge innovation, so that they can select appropriate technology for strengthening their business development.



## PILOT PLANTS

ITC provides services related to machines and pilot plants. It offers equipment, machinery, production tools, and state-of-the-art software for use at no charge to give entrepreneurs a head start in developing their products in early stages.

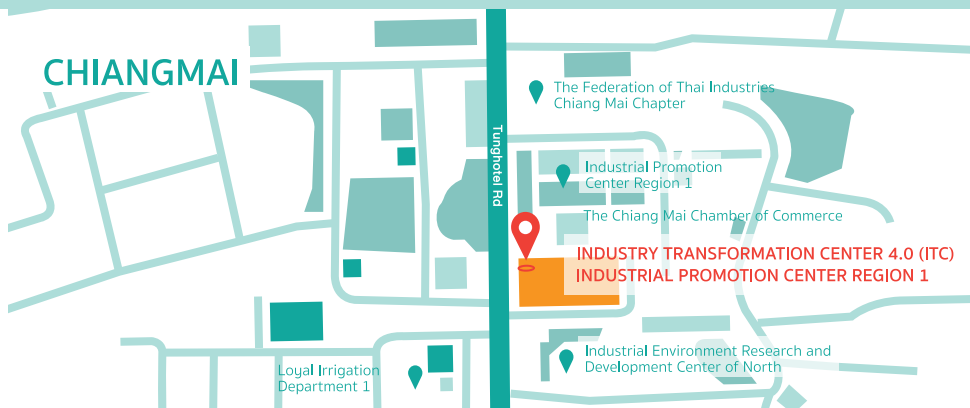


## DESIGN

Specialized in engineering design and product design, ITC is the epicenter of innovation for the future and provides a wide range of technologies for entrepreneurs to experiment with, all under the guidance of experts from the center's domestic and overseas industrial networks.



Furthermore, ITC also gives entrepreneurs consultation on financial benefits and connects them with domestic and overseas investors to further enhance their competitive capacity in the market.



## INDUSTRY TRANSFORMATION CENTER 4.0 (ITC) INDUSTRIAL PROMOTION CENTER REGION 1

**WEBSITE:**  
[https:// ipc1.dip.go.th](https://ipc1.dip.go.th)

**FACEBOOK:**  
Industrial Promotion Center Region 1 ipc1

**FACEBOOK:**  
ideahouse.ipc1

**TEL:**  
053-245361-2

158 Tunghotel Road, Wat Ked, Amphoe Muang Chiang Mai,  
Chiang Mai, Thailand 50000