DIK

SUPERIOR QUALITY FURNACES

DAIKI ENGINEERING THAI CO., LTD.

บริษัท ไดกิเอ็นจิเนียริ่ง ไทย จำกัด

ISO 9001 : 2015 TICA Thai International Certified Assessment Co.,Ltd.

NSC-TISI-TIS 17021-1 QMS 014

ISO 14001 : 2015 TICA Thai International Certified Assessment Co.,Ltd.

NSC-TISI-TIS 17021-1 EMS 012

ISO45001: 2018 TICA Thai International Certified Assessment Co.,Ltd.

SUSTAINABLE DEVELOPMENT GOALS

ABOUT COMPANY

DAIKI ENGINEERING THAI CO., LTD.

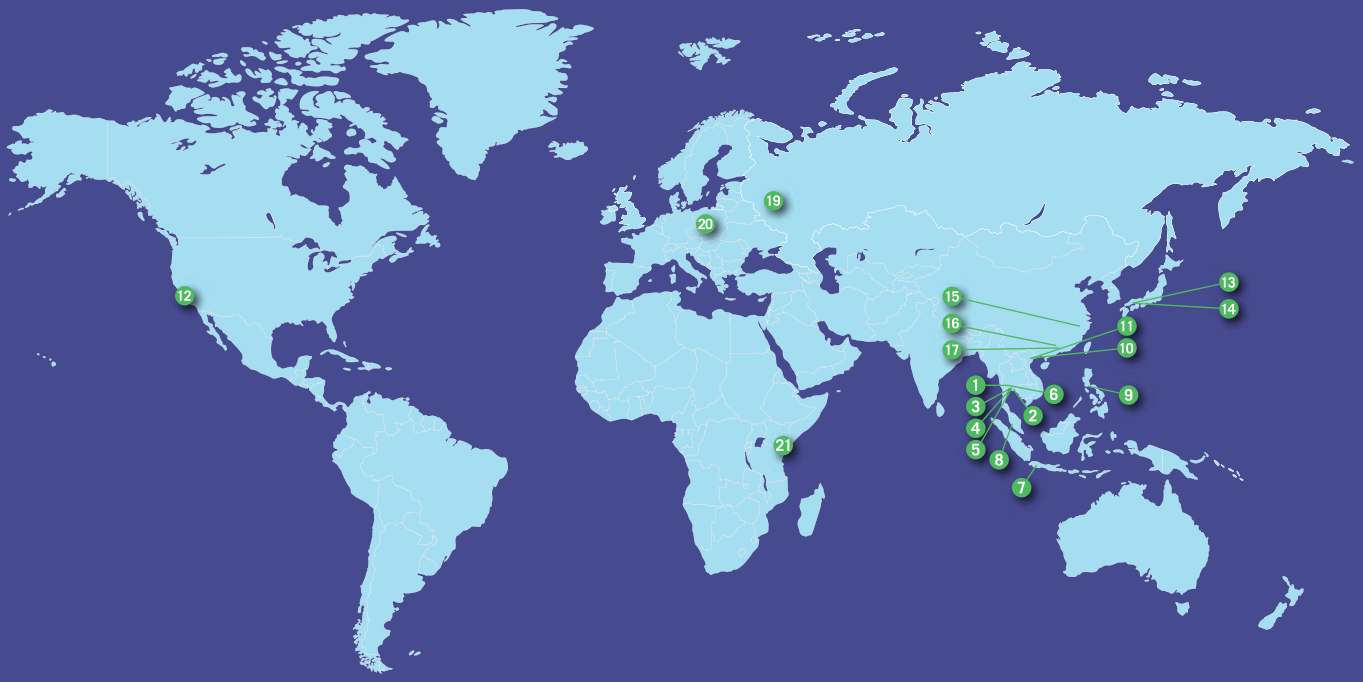
บริษัท ไดกิเอ็นจิเนียริ่ง ไทย จำกัด

WORLD-CLASS QUALITY AND GLOBAL FURNACE DOMINANCE

Once a local player in the field of aluminium secondary alloys, **Daiki Aluminium industry Co.,Ltd.** has established itself as a premier manufacturer renowned for its exceptional products. As the proud parent company of Daiki Engineering Thai Co., Ltd., we have inherited the legacy of excellence and innovation in the industry. Global marketing is not merely a venture for us; it is a testament to our confidence in our products. We believe that every corner of the world deserves access to our top-of-the-line furnaces, and we are determined to make it a reality. Through strategic partnerships, targeted advertising, and effective distribution channels, we aim to penetrate new markets and establish ourselves as a global leader in the furnace industry.

Our production bases are in the following five countries : Thailand, Japan, Malaysia, Indonesia and China. With the support Daiki Group, we are poised to revolutionize the furnace industry and cement our position as an unrivaled provider of exceptional products worldwide.

DIK GLOBAL NETWORK



COMPANY OUTLINE

Company Name
Daiki Engineering Thai Co.,Ltd.

Location
**No.333/33 Soi Project TIP 8,
Moo.6 T.Bangpla, A.Bangplee,
Samutprakarn 10540**

Established date **6 August 2002**

Capital Fund **4,000,000 Baht**

Product
**Aluminum Furnace, Service,
Parts for furnace, Other**

Shareholder
Daiki Aluminium Industry Co.,Ltd. 49%
MUFG Holding (Thailand) Co.,Ltd. 31%
Mr. Thanaphon Ruaisawangbun 20%

Managing Director
Mr. Thanaphon Ruaisawangbun

Executive Director
Mr. Takamitsu Morikawa
Mr. Norio Nishi
Mr.Tomohiro Yoneda
Mr. Kazushi Goto
Mr. Somphol Ruaisawangbun

Exporting Market
Indonesia, India, Vietnam, Philippine, Cambodia, Japan

1. Daiki Engineering Thai Co.,Ltd.
2. Kyowa Casting (Thailand) Co.,Ltd.
3. Seishin (Thailand) Co.,Ltd.
4. Daiki Aluminium Industry (Thailand) Co., Ltd.
5. Daiki Aluminium Industry (Thailand) Co., Ltd. Amata City Factory
6. Delta Daiki Metal (Thailand) Co., Ltd.
7. PT. Daiki Aluminium Industry Indonesia
   PT. Daiki Trading Indonesia
8. Daiki Aluminium Industry (Malaysia) Sdn. Bhd.
9. Daiki Om Aluminum Industry (Philippines), Inc.
10. Daiki Aluminium Vietnam Co., Ltd.
11. Nguyet Minh 2 Vinh Phuc Tse Co., Ltd.
12. Daiki International Trading Corporation Atlanta Office
13. Daiki Engineering Co., Ltd.
14. Daiki Aluminium Industry Co., Ltd.
15. Daiki Engineering (China) Inc.
16. Delta Metal (Holdings) Limited
17. Daiki (Foshan) Trading Ltd.
19. Russia Representative Office
20. Poland Smelting Technologies Sp. z. o. o.
21. Daiki Aluminium Industry India Pvt. Ltd.

DIK

ALUMINIUM MELTING & HOLDING FURNACE

LCM SERIES

SPECIFICATIONS

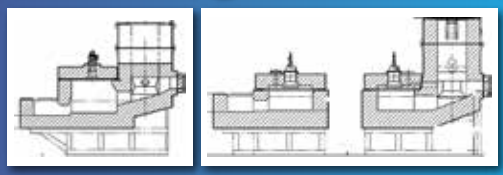
Fuels
Gas (Melting and Holding)

Melting rate
150 - 700 kg/hr

Holding capacity
600 - 2,000 kg

FROM CONVENTIONAL FURNACE TO LCM FURNACE

COMMON FURNACE ⏩ LCM FURNACE



Main qualification is that the ceilling wall of Holding room is Lower and it becomes very compact

Comparative Information	LCM-150	SER-150
Total Aluminium Melting	600 kg	600 kg
Total Gas Consumption	11.7 m^3	14 m^3
Diff	2.3 m^3	
% Diff	16.40%	

The beginning of LCM furnace

We have been supplying aluminum melting furnaces to the die-casting industry for decades, consistently striving to meet our customers' evolving needs. Through extensive research, we have identified the key factors that are crucial for an optimal melting furnace. Based on our findings, we have compiled the following essential requirements.

1 Fuel Efficiency Enhancement

- By designing a smaller holding room space, we can achieve rapid temperature rises.
- Minimizing the intrusion of outside air into the holding room to prevent excessive cooling of the molten metal.
- Utilizing a combustion burner directly for material melting to expedite the melting process.
- Implementing intermittent control of the burner combustion, preventing wasteful combustion through regular ON-OFF cycles based on material input frequency.

2 Prevention of Outside Air Intrusion

- Preventing the ingress of outside air into the holding room to suppress molten metal oxidation.
- Transitioning from direct heating to indirect heating methods (indirect heating involves directing the burner flame away from the molten metal) to mitigate oxidation.
- Employing intermittent melting burner control to minimize aluminum oxidation during the melting process.

3 Enhanced Maintainability

- Designing a holding room with reduced height to facilitate cleaning of blind spots within the furnace.
- Enhancing maintainability by relocating devices to lower positions, making them easily accessible for cleansing.

4 Extended lifespan

- Selecting reliable burners exclusively made in Japan, ensuring suitability for indirect heating of molten metal and fast melting speed.
- In-house production with rigorous quality management practices to ensure stable and flawless manufacturing.
- Providing comprehensive after-sales support to customers, ensuring their needs are addressed even after delivery.

CONTINUOUS ALUMINIUM MELTING & HOLDING FURNACE
SER MODEL

The furnace is designed for continuous operation, making it suitable for industries that require a constant supply of molten metal. This allows for uninterrupted production and eliminates the need for frequent shutdowns and restarts.

Super Low Speed Luminous Flame Burners: These burners are designed to provide a highly efficient and controlled combustion process. The low speed of the flame helps in achieving better temperature uniformity within the furnace, ensuring consistent quality of the molten metal.

1. SUPERIOR ALUMINIUM MELT QUALITY
2. MELTING OF ALUMINIUM ALLOYS
3. LOW NOISE POLLUTION
4. LOW ENERGY COST
5. GOOD TEMPERATURE CONTROL
6. CHOICE OF FUELS
7. LOW MAINTENANCE COST
8. FAST INSTALLATION AND SHORT START-UP TIME
9. EASE OF CLEANING
10. AUTOMATIC SYSTEM (OPTIONAL)

SPECIFICATIONS

Fuels	**Gas, Oil (Melting and Holding)**
Melting rate	**100 kg/hr - 700 kg/hr**
Holding capacity	**400 - 2,500 kg**

IMMERSED-TYPE HEATER CONTINUOUS ALUMINIUM MELTING & HOLDING FURNACE
SEH MODEL

The Melting and Holding Furnace you described is specifically designed for continuous operation and is suitable for processes such as aluminium die-casting and aluminium melting.

It features **"Super Low Speed Luminous Flame Burners"** in the Melting Chamber, which contribute to its improved performance compared to conventional furnaces.

Additionally, the Holding Chamber is equipped with electric heaters. This combination of burners and electric heaters helps achieve **good temperature uniformity in the molten metal, ensuring consistent heat distribution throughout the furnace**. As a result, this furnace offers excellent energy savings compared to traditional furnaces.

SPECIFICATIONS

Fuel	
Mellting	**Gas ,Oil**
Holding	**Immersed Electric Heter**
Melting rate	**100 kg/hr - 700 kg/hr**
Holding capacity	**400 - 2,500 kg**

RAPID MELTING ENERGY SAVING ALUMINIUM MELTING FURNACE

ER MODEL

The central melting furnace is designed to handle large quantities of metal, offering high melting capacities to meet the production demands of the facility.

It provides a controlled environment for the melting process, ensuring that the metal reaches the desired temperature and consistency for downstream operations.

1. SUPERIOR ALUMINIUM MELT QUALITY
2. CALM SURFACE OF MOLTEN METAL AND LOW OXIDATION LOSSE
3. LOW NOISE POLLUTIONS
4. EASE OF CLEANING
5. LOW MAINTENANCE COST
6. LOW ENERGY COST (DURING OPERATION)
7. CHOICE OF FUELS

SPECIFICATIONS

Gas	**Town/City gas, Natural gas, Propane, Butane**
Oil	**Heavy oil grade A, Diesel oil, Kerosene, etc.**
Melting rate	**500-2,500 kg**
Holding capacity	**1,500-6,000 kg**

IMMERSED TYPE ALUMINIUM HOLDING FURNACE

SH MODEL

The furnace is developed to eliminate all weak points of the conventional radiation type electric heating holding furnace. Because it is made up of high strength casted refractory chamber and highly insulating materials it becomes one of the most energy-saving, space saving holding furnaces.

1. EXCELLENT MELT QUALITY
2. NO SURFACE SCUM FORMATION
3. LOW ENERGY COST
4. LONG LIFE HEATING TUBE
5. COMFORTABLE WORKING ENVIRONMENT
6. SAFETY

SPECIFICATIONS

Holding	**Immersive Heater**
Melting rate	**500 kg/hr - 2,500 kg/hr**
Holding capacity	**500 - 2,500 kg**

ANCILLARY EQUIPMENT

AK PORTER

Capacity 80 kg

AK Porter is an automatic metal distributor used for transferring metals, specifically aluminum (Al) and zinc (Zn), from a main furnace to holding furnaces.

The AK Porter system is designed to automate the distribution process, ensuring accurate and efficient delivery of the metals to the desired holding furnaces.

LADLE

Capacity 500 - 1,000 kg

Ladles or Transfer Pots: These are large containers specifically designed for holding and transporting molten aluminum.

They are made of heat-resistant materials and have handles or lifting mechanisms for easy maneuverability. Ladles come in various sizes to accommodate different volumes of molten metal.

MRM

Capacity 200 kg

A metal recovery machine, also known as a metal separator or metal recovery system, is a device used to separate and recover valuable aluminium from a mixture of dross.

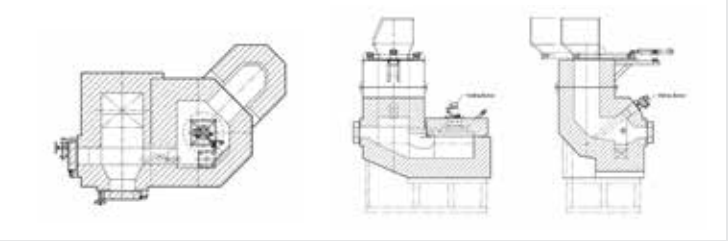
This machine is commonly used before disposing dross where the recovery of metals is essential for resource conservation and economic considerations.

MINI MRM

Same function as MRM but in smaller size Mini MRM is designed to be portable, allowing for easy transportation and relocation. They may have handles or wheels for convenient movement between different work areas or for field applications.

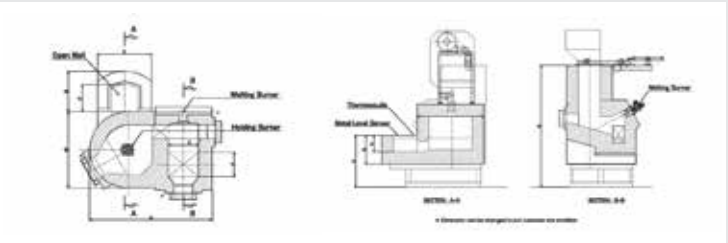
FURNACES SPECIFICATION

LCM FURNACE SPECIFICATION



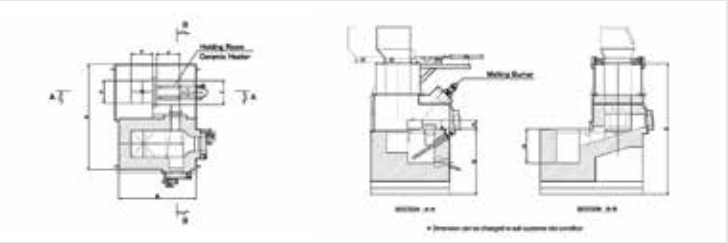
Type	Melting Rate (Kg/Hr)	Holding Capacity (Kg)	Melt. Burner Cap. (Kcal/Hr)	Hold. Burner Cap. (Kcal/Hr)
LCM-100	100	up to 450	80,000	50,000
LCM-150	150	up to 550	80,000	50,000
LCM-200	200	up to 700	120,000	50,000
LCM-250	250	up to 900	150,000	100,000
LCM-300	300	up to 1,100	150,000	100,000
LCM-400	400	up to 1,300	200,000	100,000
LCM-500	500	up to 1,500	350,000	200,000
LCM-600	600	up to 2,000	400,000	200,000
LCM-700	700	up to 2,500	400,000	200,000

SER FURNACE SPECIFICATION



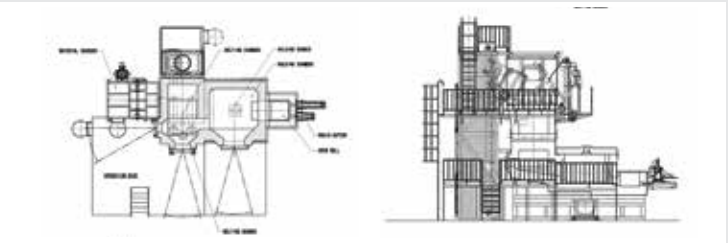
Type	Melting Rate (Kg/Hr)	Holding Capacity (Kg)	Melt. Burner Cap. (Kcal/Hr)	Hold. Burner Cap. (Kcal/Hr)
SER-100	100	up to 450	80,000	80,000
SER-150	150	up to 550	100,000	80,000
SER-200	200	up to 700	120,000	80,000
SER-250	250	up to 900	150,000	120,000
SER-300	300	up to 1,100	150,000	120,000
SER-400	400	up to 1,300	200,000	150,000
SER-500	500	up to 1,500	350,000	200,000
SER-600	600	up to 2,000	400,000	300,000
SER-700	700	up to 2,500	400,000	300,000
SER-800	800	up to 3,000	600,000	400,000

SEH FURNACE SPECIFICATION



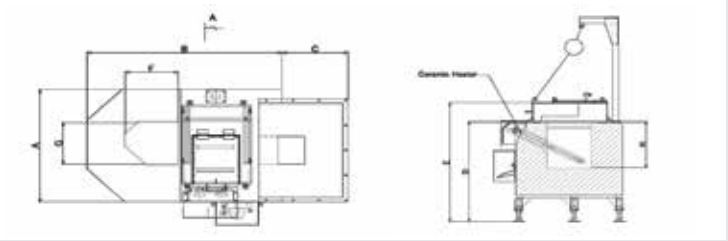
Type	Melting Rate (Kg/Hr)	Holding Capacity (Kg)	Melt. Burner Cap. (Kcal/Hr)	Heater Cap. (KW x No. of Pcs)
SEH-100	100	450	80,000	9x2
SEH-150	150	550	100,000	9x2
SEH-200	200	650	120,000	9x3
SEH-300	300	800	150,000	9x3

ER FURNACE SPECIFICATION



Type	Melting Rate (Kg/Hr)	Holding Capacity (Kg)	Melt. Burner Cap. (Kcal/Hr)	Hold. Burner Cap. (Kcal/Hr)
ER-500	500	1,500	400,000	200,000
ER-700	700	2,000	500,000	300,000
ER-1000	1,000	3,000	600,000	400,000
ER-1500	1,500	4,000	900,000	400,000
ER-2000	2,000	5,000	1,200,000	500,000
ER-2500	2,500	6,000	1,500,000	600,000

SH FURNACE SPECIFICATION



Type	Melting Rate (Kg/Hr)	Heater Capacity (KW x No. of Pcs)	Electric Power On Casting (KWH)	Electric Power On Holding (Kcal/Hr)
SH-500	500	9x2	6	4
SH-600	600	9x2	6	4
SH-800	700	9x2	8	5
SH-1000	1,000	9x3	10	6
SH-1200	1,200	9x3	11	6.5
SH-1500	1,500	9x3	13	7
SH-1800	1,800	9x4	15	7.5
SH-2000	2,000	9x4	17	8.5
SH-2500	2,500	9x5	20	9

PRODUCTION PROCESS

1 DESIGN

2 STEEL WORK

3 REFRACTORY WORK

4 PIPING WORK

5 WIRING WORK

6 TEST RUN

7 DELIVERY

8 INSTALLATION

OUR **SERVICES**

HOT HACKING

REPAIR, OVERHAUL

HIP PAINTING

FLUX CLEANING

PM CHECK

SUPPLY OF FLUX COATING AND MATERIAL

PARTS OF FURNACE

COMBUSTION PART

Blower

Control Motor

Mass Flow Meters

Control Damper

Burner

Limit Valve

Flow rate switching solenoid valve

Ultra Vision

Gas Regulator

Air cylinder

PNEUMATIC COMPONENTS

Directional Control Valve

Pressure Gauge

Solenoid Valve

Solenoid Valve

HEATER PART

MATERIAL CHARGER PART

REFRACTORY AND FLUX

SUSTAINABLE DEVELOPMENT GOALS

CONTACT INFORMATION

DIK

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