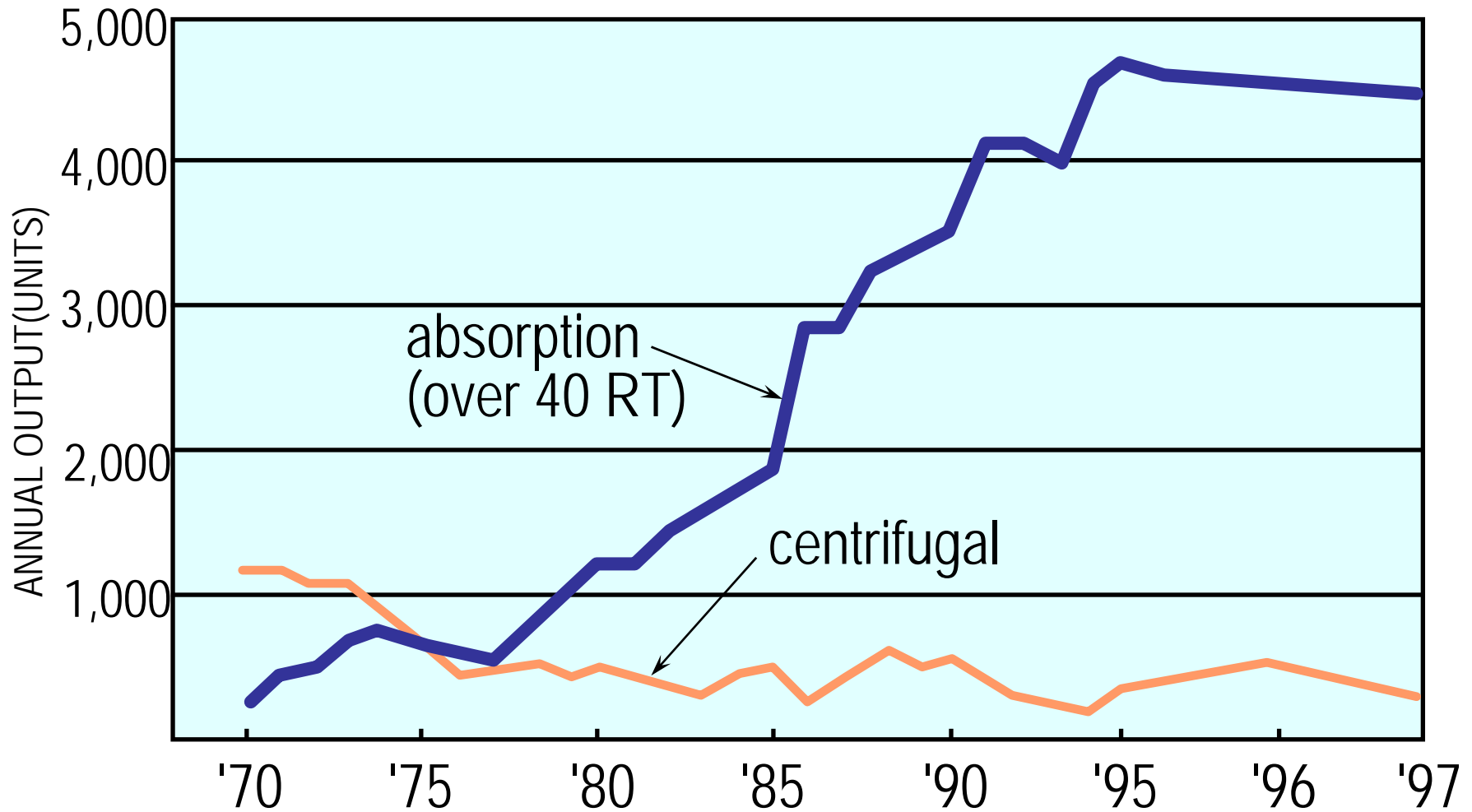


# Features of Absorption Chiller

- Small Power Consumption
- Ozone Safe, CFCs Free
- Low Noise and No Vibration
- Low Maintenance Cost
- Waste Heat is Applicable
- Chilled/Hot Water Supply(Direct fired type)
- Wide Range Selection

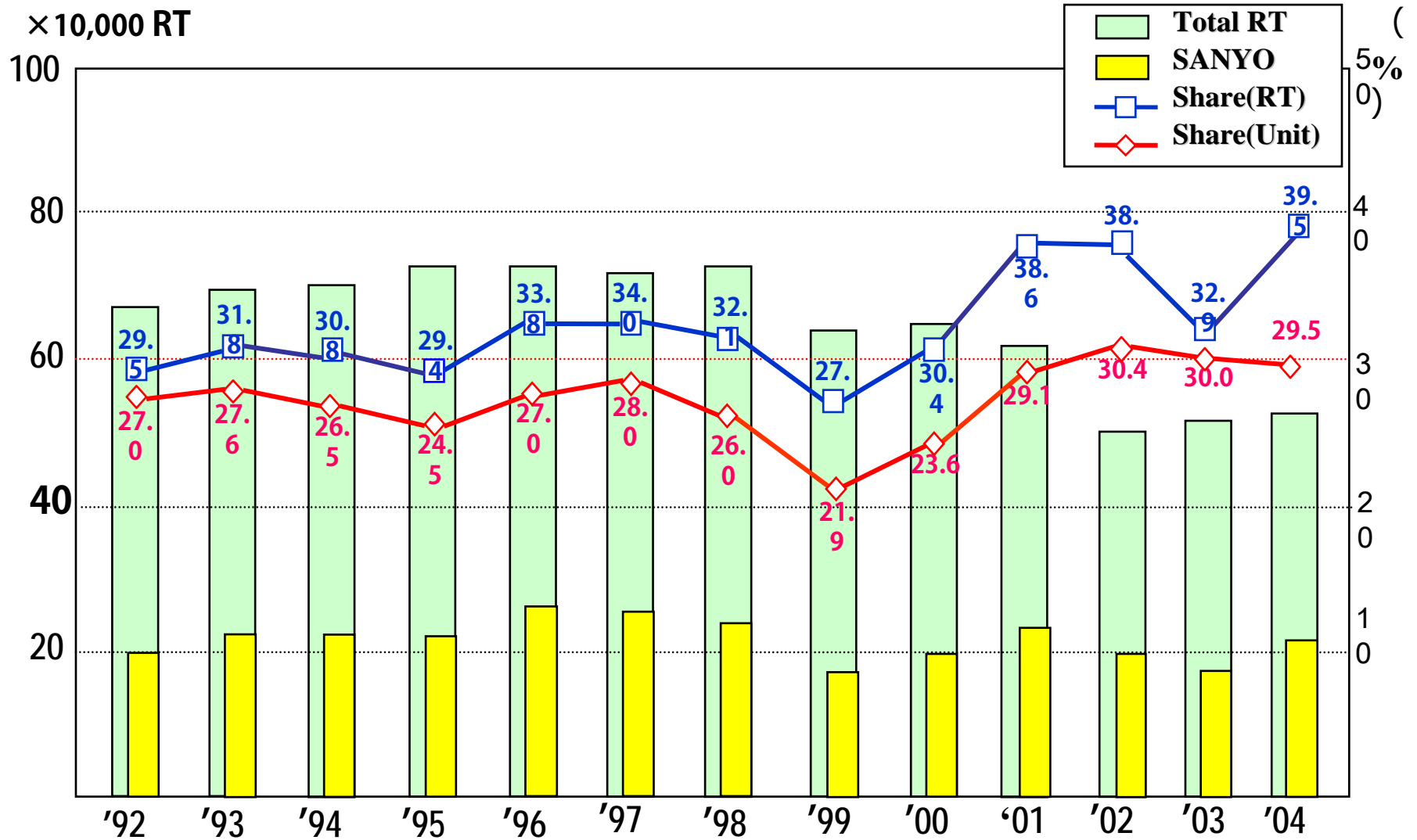
# High Growth Rate of Absorption Chiller in Japan



# History of SANYO Absorption

<b>1971</b>	<b>First Absorption Chiller (Large type)</b>
<b>1972</b>	<b>Simultaneous operation Absorption Chiller/Heater</b>
<b>1975</b>	<b>20% Energy Saving Absorption Chiller/Heater</b>
<b>1976</b>	<b>High Temp. Hot Water Driven Double Effect Absorption Chiller</b>
<b>1978</b>	<b>Solar Powered Chiller &amp; Absorption Heat Pump</b>
<b>1980</b>	<b>Modular Type Double Effect Absorption Chiller/Heater</b>
<b>1981</b>	<b>Type II Absorption Heat Pump</b>
<b>1986</b>	<b>GASPAC Absorption Chiller/Heater</b>
<b>1989</b>	<b>Super Absorption Chiller/Heater ( C series )</b>
<b>1991</b>	<b>Huge type Double Effect Steam Fired Absorption Chiller</b>
<b>1995</b>	<b>Super Absorption Chiller/Heater ( E series )</b>
<b>2002</b>	<b>Super Absorption Chiller/Heater ( F series )</b>

# Absorption Market in JAPAN



# SANYO Absorption Product Range

## Direct-Fired Absorption Chiller/Heaters

**Capacity Range: Cooling 352kW (100USRT)~5,275kW (15000USRT)**

**:Heating 294kW~4,413kW**

**Heat Source :Natural Gas**

## Double Effect Steam-Fired Absorption

**Capacity Range: Cooling 352kW (100USRT)~21,100kW (60000USRT)**

**Heat Source :Steam (standard 8kg/cm<sup>2</sup>G)**

## Hot Water Fired Absorption Chillers

**Capacity Range: Cooling 105kW (30USRT)~1,846kW (525USRT)**

**Heat Source :Hot water (standard 90°C)**







直線自動溶接機

3



# Absorption Chiller/Heater (COP=1.1 HCV)

- 352 ~ 3,516 kW

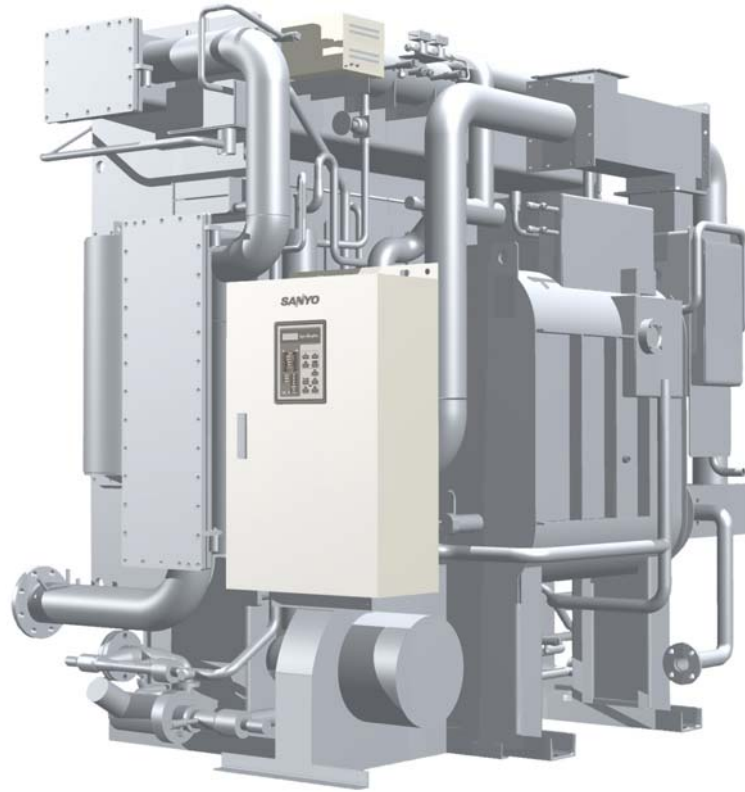
- for JAPAN use



# Absorption Chiller/Heater (COP=1.35 HCV)

- 352 ~ 2,813 kW

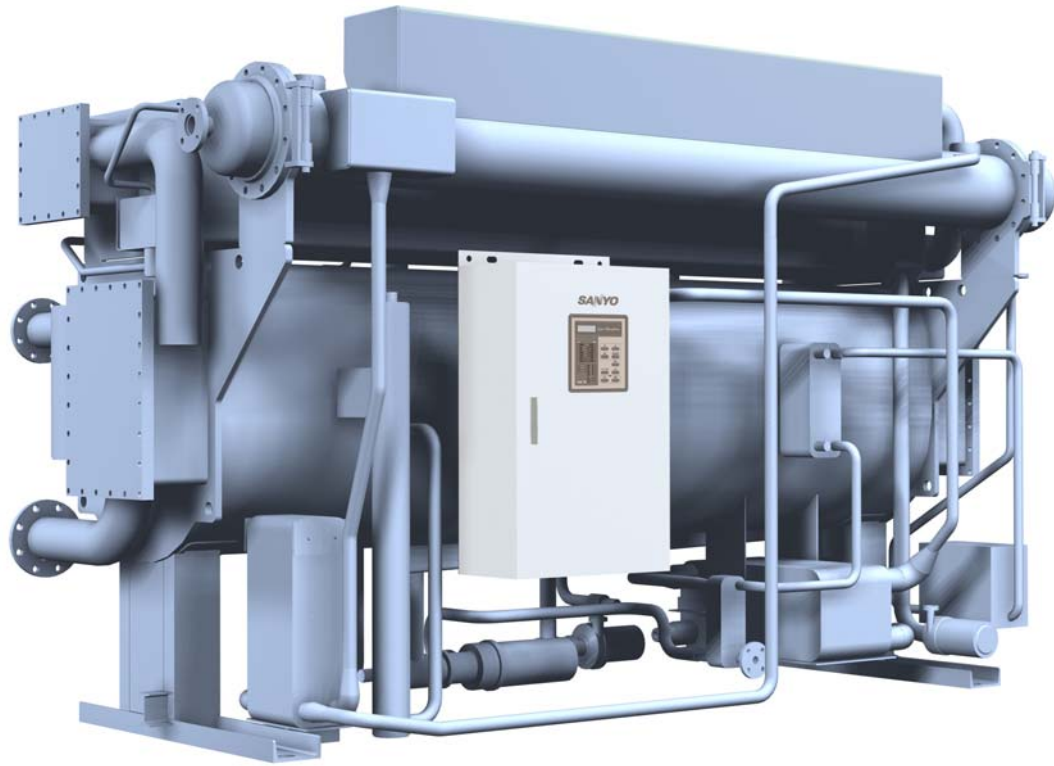
- for JAPAN use



# Absorption Chiller (Double Effect)

- 352 ~ 4,747 kW

- for JAPAN use



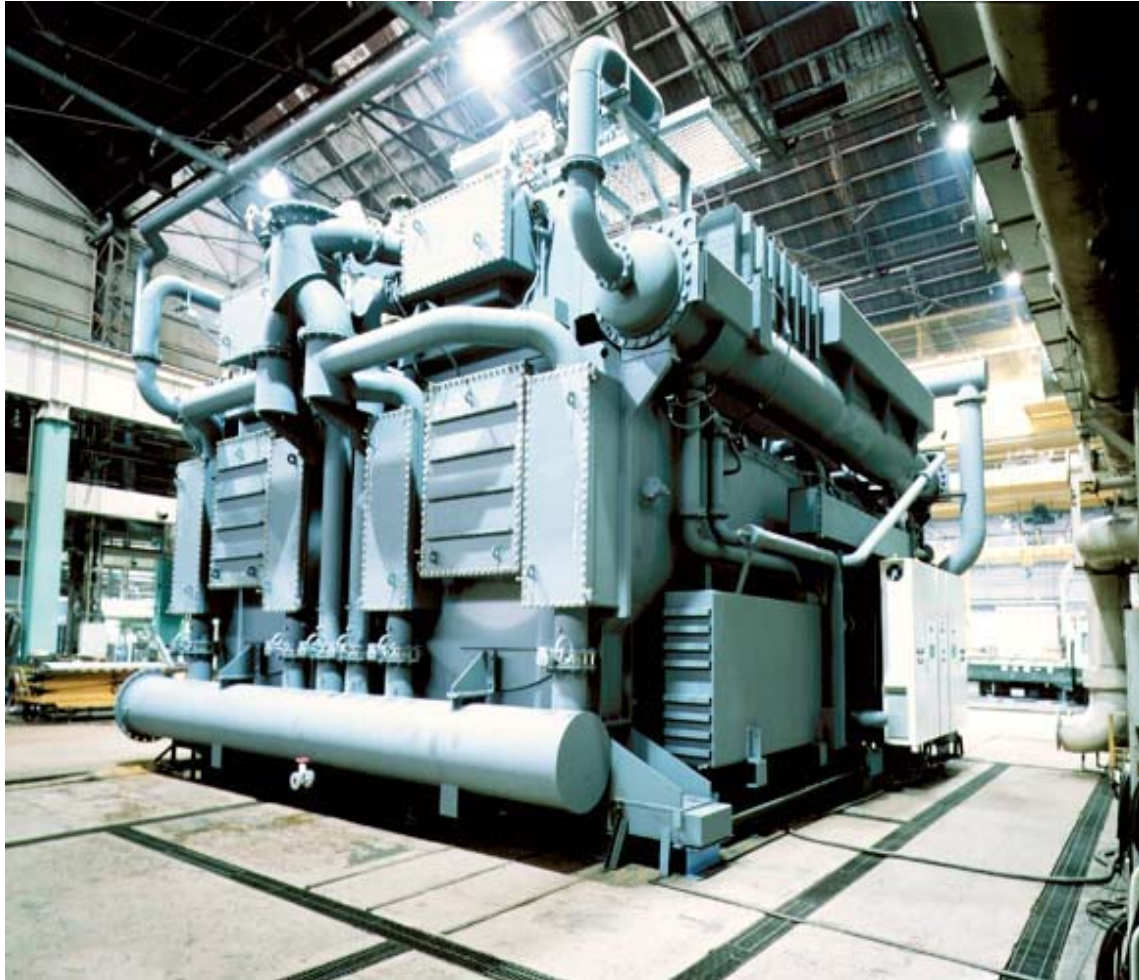
# Absorption Chiller (Simultaneous)

- 352 ~ 5,274 kW

- for JAPAN use



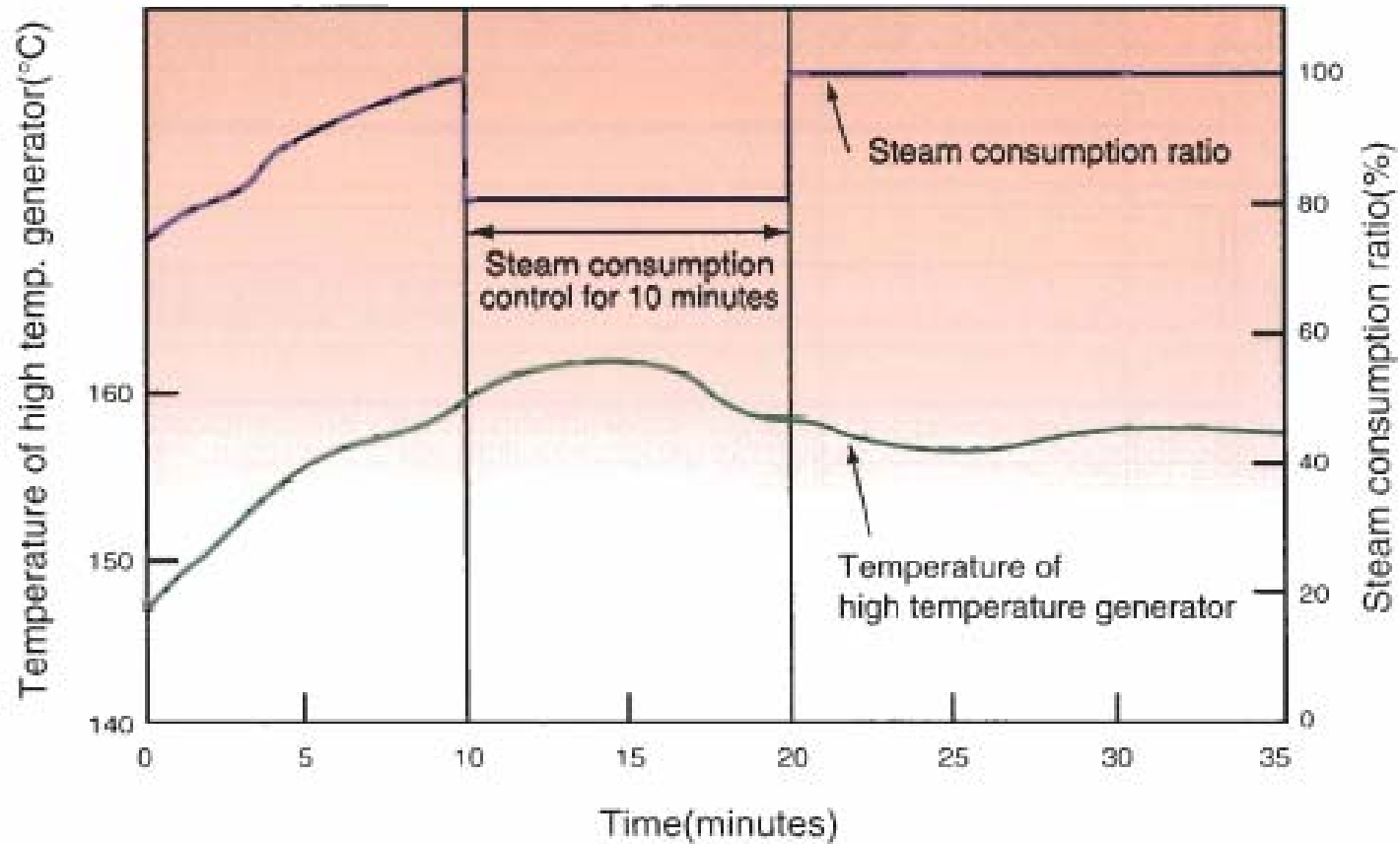
# The World Largest Absorption Chiller (6,000RT)



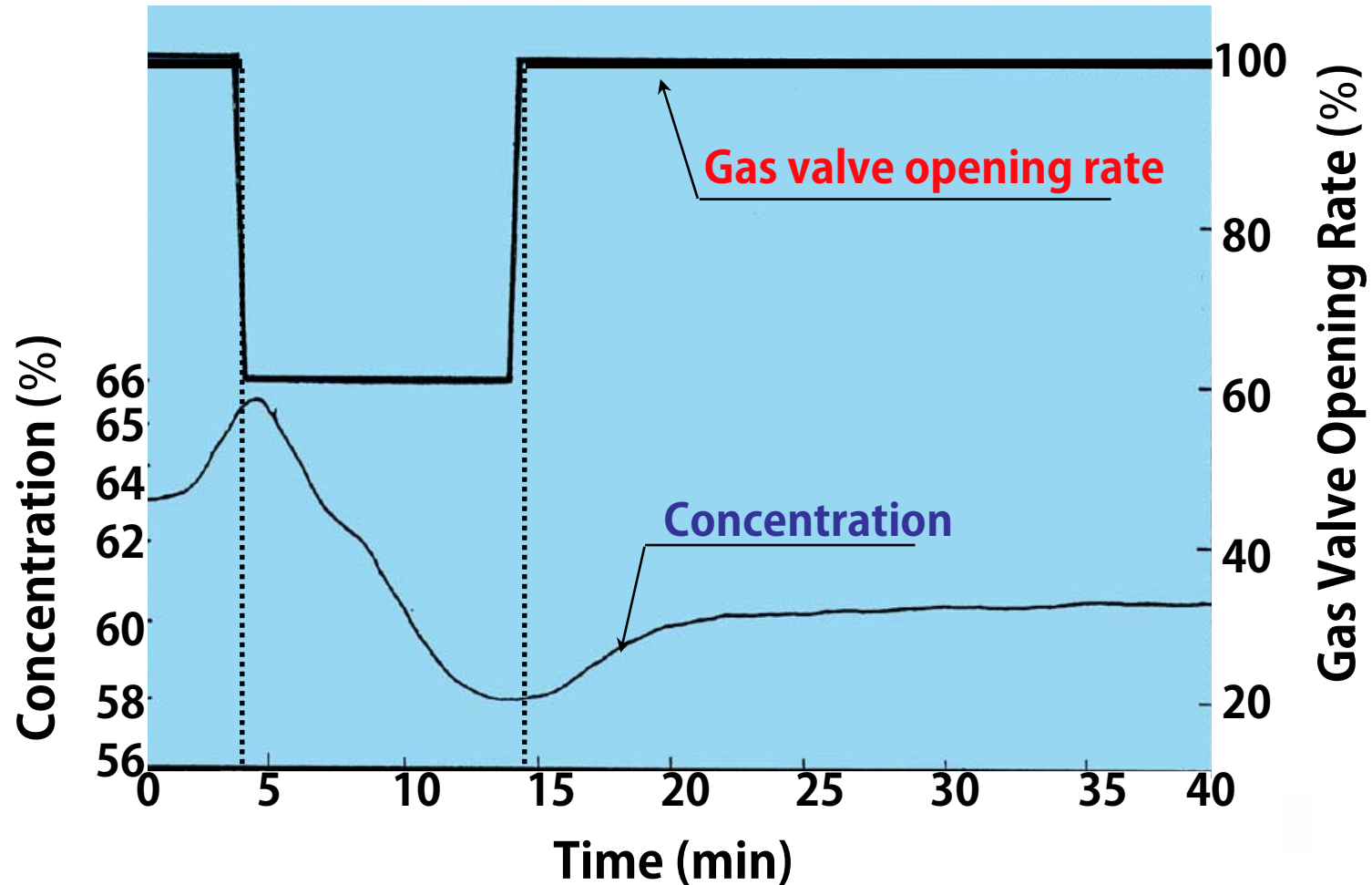
# Features of **SANYO** Absorption Chiller

- **Advanced Control System**
- **Inverter Driven Absorbent Pump**
- **Energy Saving Operation**
- **Digital PID Control**
- **Short Start-up**
- **High Performance Purge System**
- **Steam Valve Opening Control**
- **Safety Operation under Various Conditions**

# High temp. Generator Safety Control



# Automatic Crystallization Protection



# Installation Project in Japan

## OSAKA COSMO SQUARE



Absorption chiller/heat  
2100 RT x 3 units  
Absorption chiller  
2350 RT x 2 units



# Installation Project in Japan



## UMEDA SKY BUILDING

Steam fired  
1300 RT x 2 units  
800 RT x 1 unit

Hot water fired  
300 RT x 3 units

# Installation Project in Japan



**MIYAZAKI  
SEAGAIA**

**Steam fired  
880 RT x 2 units  
500 RT x 1 unit**



**SANYO**  
**WELCOME TO SANYO JAPAN**  
8.2005

# SANYO

コマーシャル企業グループ

・コマーシャル技術本部

・三洋東京マニュファクチャリング株式会社

Commercial Group

・Technology Headquarters

・SANYO Tokyo Manufacturing Co., Ltd.

