

MM21 DHC installs three chillers (two electric turbo chillers and one absorption chiller)

MM21 DHC upgraded and expanded the chillers at the No. 2 Plant, installing total of three units consisting of two electric turbo chillers (5,400RT each) with the world's largest capacity and an absorption chiller (3,000RT) which is the same model as existing equipment.

MM21 DHC has been upgrading and expanding its plants in order to keep up with increasing demand for heat as a result of the development of the Minato Mirai 21 district, and this is the first time that three chillers have been installed at the same time.

Going forward, MM21 DHC will continue expanding its facilities in line with the development of the Mirato Mirai 21 district for improved stability in heat supply.



World's largest capacity electric turbo chiller



Absorption chiller

Table 1: Comparison of newly installed and existing electric turbo chillers in No. 2 Plant

	Equipment newly installed this time	Existing equipment	
Chilling capacity*	5,400RT	5,000RT	3,000RT
Coefficient of performance (COP)**	5.80	5.70	4.91
Refrigerant	HFC134a	HFC134a	HCFC123
Year installed	2021	2009	1997

Table 2: Comparison of newly installed and existing absorption chillers in No. 2 Plant

	Equipment newly installed this time	Existing equipment	
Chilling capacity*	3,000RT	3,000RT	5,000RT (Decommissioned due to this upgrade)
Steam consumption rate (kg/h, RT)	3.59	3.59	3.9
Year installed	2021	2010 2011	2001

* The RT is U.S. refrigeration ton (USRT). 1 USRT = 3.517 kW

** COP = Coefficient of Performance. A higher COP indicates greater energy conservation.

$COP = \text{Refrigerating capacity (kW)} / \text{Power consumption (kW)}$