

Double Effect Direct Fired Absorption Chiller & Heater

Performance Data

Double Effect Direct Fired Type (50~400RT) → →

Model		Unit	DW50	DW60	DW70	DW80	DW100	DW120	DW150	DW180	DW210	DW240	DW280	DW320	DW360	DW400						
Cooling Capacity	kW		176	211	246	281	352	422	527	633	938	844	985	1,125	1,266	1,407						
	usRT		50	60	70	80	100	120	150	180	210	240	280	320	360	400						
Heating Capacity	kW		147	176	205	235	293	352	440	528	616	704	822	939	1,056	1,174						
	kcal/h		126	151	177	202	252	303	378	454	530	606	706	807	908	1,009						
Chilled Water	Inlet Temp./Outlet Temp.	°C	12 / 7																			
	Flow rate	m ³ /h	30	36	42	48	60	73	91	109	127	145	169	194	218	242						
	Pressure Drop	mH ₂ O	4.0	3.7	6.2	6.9	5.6	5.9	7.6	8.1	7.5	7.4	5.4	5.3	5.8	6.0						
	Connection	mm	80				100				125			150								
Hot Water	Inlet Temp./Outlet Temp.	°C	55.8 / 60																			
	Flow rate	m ³ /h	30	36	42	48	60	73	91	109	127	145	169	194	218	242						
	Pressure Drop	mH ₂ O	4.0	3.7	6.2	6.9	5.6	5.9	7.6	8.1	7.5		5.4	5.3	5.8	6.0						
	Connection	mm	80				100				125			150								
Cooling Water	Inlet Temp./Outlet Temp.	°C	32 / 37.5																			
	Flow rate	m ³ /h	50	60	70	80	100	120	150	180	210	240	280	320	360	400						
	Pressure Drop	mH ₂ O	7.0	6.1	10.2	10.0	8.9	9.1	10.4	10.8	10.7	11.2	8.9	8.6	8.8	8.7						
	Connection	m	100				125				150			200								
Gas	High Heating Value	kcal/Nm ³	10,550																			
	Flow rate	Nm ³ /h	14.4	17.2	20.1	23.0	28.7	34.4	43.1	51.7	60.3	68.9	80.4	91.8	103	115						
	Inlet Pressure	mmAq	200				4,000															
	Connection	mm	50(200mmAq)				40(4,000mmAq)						50(4,000mmAq)									
	Exhaust gas	mm	190 X 110			270 X 150			280 X 210				310 X 310			360 X 310						
Electric	Power source	-	3PH, 400V, 50Hz																			
	Ref. Pump	kW	0.2				0.3				0.4											
	Abs. Pump	kW	1.5				2.0				2.4			4.0								
	Purge Pump	kW	0.4																			
	Burner	kW	0.4		0.7			1.1			2.2			3.2								
	Control Panel	kW	0.2																			
	Total kW	kW	2.7		3.0			3.6			4.0			4.5			5.6			8.2		
	Total Amp.	A	8.8		10.1			11.8			14.1			15.2			16.6			22.4		
Size	Length (L)	mm	2,095			2,598			2,597			3,680			3,708			4,734			4,776	
	Width (W)	mm	1,477			1,615			1,810			1,920			2,100			2,200			2,290	
	Height (H)	mm	1760				2,090				2,122				2,385							
Weight	Rigging	ton	2.6	2.7	3.2	3.3	4.6	4.9	5.8	6.2	7.3	7.7	8.9	9.4	11.6	12.2						
	Operation	ton	2.8	3.0	3.5	3.7	5.0	5.3	6.3	6.8	8.0	8.5	9.8	10.4	12.8	13.5						
Space for Tube Replacement	mm	1,900			2,400				3,400				4,500									

Note

1. Working pressure of chilled water/cooling water circuit are based on 1.0Mpa [150psig].
2. Fouling factor 0.0001m².h.°C/kcal for Absorber and Condenser, 0.0001m².h.°C/kcal for Evaporator.
3. Standard power source is 3ph, 400V, 50Hz. Available 220, 380, 440V and 460V Power source.
4. Catalogue specifications are subject to change without prior notice.

DW Series

Double Effect Direct Fired Absorption Chiller & Heater

Performance Data

Double Effect Direct Fired Type (450~1500RT)

Model		Unit	DW450	DW500	DW560	DW630	DW700	DW800	DW900	DW1000	DW1100	DW1200	DW1300	DW1400	DW1500	
Cooling Capacity	kW	1,582	1,758	1,969	2,215	2,461	2,813	3,165	3,516	3,868	4,220	4,571	4,923	5,274		
	usRT	400	500	560	630	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500		
Heating Capacity	kW	1,320	1,467	1,643	1,848	2,054	2,347	2,641	2,934	3,227	3,521	3,814	4,108	4,401		
	kcal/h	1,135	1,262	1,413	1,590	1,766	2,019	2,523	2,271	2,523	2,776	3,280	3,532	3,785		
Chilled Water	Inlet Temp./Outlet Temp.	°C	12 / 7													
	Flow rate	m ³ /h	272	302	339	381	423	484	544	605	665	726	786	847	907	
	Pressure Drop	mH ₂ O	5.1	5.4	4.2	5.8	7.7	5.7	7.7	10.1	6.7	8.6	10.7	8.7	10.6	
	Connection	mm	200					250			300			350		
Hot Water	Inlet Temp./Outlet Temp.	°C	56.3 / 60													
	Flow rate	m ³ /h	272	302	339	381	423	484	544	605	665	726	786	847	907	
	Pressure Drop	mH ₂ O	5.1	5.4	4.2	5.8	7.7	5.7	7.7	10.1	6.7	8.6	10.7	8.7	10.6	
	Connection	mm	200					250			300			350		
Cooling Water	Inlet Temp./Outlet Temp.	°C	32 / 37.5													
	Flow rate	m ³ /h	450	500	560	630	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	
	Pressure Drop	mH ₂ O	8.4	8.6	6.8	9.3	12.4	8.8	12.0	15.8	11.1	14.1	17.6	14.0	16.8	
	Connection	m	250			300			350			400			450	
Gas	High Heating Value	kcal/Nm ³	10,550													
	Flow rate	Nm ³ /h	129	144	161	181	201	230	258	287	316	344	373	402	431	
	Inlet Pressure	mmAq	4,000													
	Connection	mm	50(4,000mmAq)						65(4,000mmAq)							
	Exhaust gas	mm	410 X 310			350 X 500			400 X 620			400 X 900				
Electric	Power source	-	3PH, 400V, 50Hz													
	Ref. Pump	kW	0.4					1.5								
	Abs. Pump	kW	3.2		5.5					7.5						
	Purge Pump	kW	0.4						0.75							
	Burner	kW	4.0			7.5			11.0			15.0				
	Control Panel	kW	0.2													
	Total kW	kW	8.2		10.5		14.0		15.1		18.6		21.0		25.0	
	Tatal Amp.	A	22.4		28.4		34.6		37.0		43.7		53.5		60.4	
Size	Lenght (L)	mm	4,880		4,998		5,540		6,038		5,644		6,142		6,667	
	Width (W)	mm	2,490			3,055			3,330			3,738			4,460	
	Height (H)	mm	2,633			2,962			3,310			3,500			3,700	
Weight	Rigging	ton	14.2	14.9	19.5	21.1	22.7	27.9	30.4	32.8	40.0	43.0	45.8	49.7	52.3	
	Operation	ton	15.8	16.6	22.2	24.0	25.7	32.0	34.4	37.1	45.1	48.5	51.5	26.1	59.1	
Space for Tube Replacement	mm	4,500			5,200		5,700		5,200		5,700		6,200		6,700	

Options

1. High Pressure water Boxes

Water boxes rated for 250psig or 300psig working pressure shall be furnished when specified on the equipment specification data.

2. Special Tubes

Tubes of non-standard materials and/or wall thickness shall be provided when specified on the equipment specification data.

3. Special operation temperature conditions

Special operation temperature shall be provided when specified on the equipment specification data.

Double Effect Direct Fired Absorption Chiller & Heater

Performance Data

High Efficiency Double Effect Direct Fired Type (50~400RT) →

Model		Unit	DWH50	DWH60	DWH70	DWH80	DWH100	DWH120	DWH150	DWH180	DWH210	DWH240	DWH280	DWH320	DWH360	DWH400									
Cooling Capacity	kW	176	211	246	281	352	422	527	633	738	844	985	1,125	1,266	1,407										
	usRT	50	60	70	80	100	120	150	180	210	240	280	320	360	400										
Heating Capacity	kW	121	145	170	194	242	291	363	436	509	581	678	775	872	969										
	kcal/h	104	125	146	167	208	250	313	375	438	500	583	667	750	833										
Chilled Water	Inlet Temp./Outlet Temp.	°C	12 / 7																						
	Flow rate	m ³ /h	30.2	36.3	42.3	48.4	60.5	72.6	90.7	109	127	145	169	194	218	242									
	Pressure Drop	mH ₂ O	4.0	3.7	6.2	6.9	5.6	5.9	7.6	8.1	7.5	7.4	5.4	5.3	5.8	6.0									
	Connection	mm	80				100				125			150											
Hot Water	Inlet Temp./Outlet Temp.	°C	56.3 / 60																						
	Flow rate	m ³ /h	30.2	36.3	42.3	48.4	60.5	72.6	90.7	109	127	145	169	194	218	242									
	Pressure Drop	mH ₂ O	4.0	3.7	6.2	6.9	5.6	5.9	7.6	8.1	7.5	7.4	5.4	5.3	5.8	6.0									
	Connection	mm	80				100				125			150											
Cooling Water	Inlet Temp./Outlet Temp.	°C	32 / 37.2																						
	Flow rate	m ³ /h	50	60	70	80	100	120	150	180	210	240	280	320	360	400									
	Pressure Drop	mH ₂ O	7.0	6.1	10.2	10.0	8.9	9.1	10.4	10.8	10.7	11.2	8.9	8.6	8.8	8.7									
	Connection	m	100				125				150				200										
Gas	High Heating Value	kcal/Nm ³	10,550																						
	Flow rate	Nm ³ /h	11.9	14.2	16.6	19.0	23.7	28.4	35.6	42.7	49.8	56.9	66.4	75.8	85.3	94.8									
	Inlet Pressure	mmAq	200				4,000																		
	Connection	mm	50(200mmAq)				40(4,000mmAq)						50(4,000mmAq)												
	Exhaust gas	mm	180 x 110			270 x 150			280 x 210				310 x 310				360 x 310								
Electric	Power source	-	3PH, 400V, 50Hz																						
	Ref. Pump	kW	0.2				0.3				0.4														
	Abs. Pump1	kW	1.5				2.0				2.4				3.2										
	Abs. Pump2	kW	0.2				0.3				0.4														
	Purge Pump	kW	0.4																						
	Burner	kW	0.4				0.7				1.1				2.2				4.0						
	Control Panel	kW	0.2																						
	Total kW	kW	2.9				3.9				4.3				4.9				6.0		6.8		8.6		
	Tatal Amp.	A	9.9				13.4				15.7				16.8				18.2				20.2		24.0
Size	Lenght (L)	mm	2,095			2,598			2,597			3,680			3,708			4,734			4,776				
	Width (W)	mm	1,477			1,615			1,810			1,920			2,1			2,137			2,270				
	Height (H)	mm	1,760				2,090				2,122				2,385										
Weight	Rigging	ton	2.7	2.9	3.4	3.6	4.5	4.8	5.7	6.2	7.2	7.6	8.8	9.3	11.5	12.1									
	Operation	ton	2.9	3.1	3.7	3.9	5.0	5.3	6.3	6.8	8.0	8.5	9.8	10.4	12.8	13.5									
Space for Tube Replacement	mm	1,900			2,400				3,400				4,500												

Note

1. Working pressure of chilled water/cooling water circuit are based on 1.0Mpa [150psig].
2. Fouling factor 0.0001m².h.°C/kcal for Absorber and Condenser, 0.0001m².h.°C/kcal for Evaporator.
3. Standard power source is 3ph, 400V, 50Hz. Available 220, 380, 440V and 460V Power source.
4. Catalogue specifications are subject to change without prior notice.

DWH Series

Double Effect Direct Fired Absorption Chiller & Heater

Performance Data

High Efficiency Double Effect Direct Fired Type (450~1500RT)

Model		Unit	DWH450	DWH500	DWH560	DWH630	DWH700	DWH800	DWH900	DWH1000	DWH1100	DWH1200	DWH1300	DWH1400	DWH1500		
Cooling Capacity	kW	1,582	1,758	1,969	2,215	2,461	2,813	3,165	3,516	3,868	4,220	4,571	4,923	5,274			
	usRT	450	500	560	630	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500			
Heating Capacity	kW	1,090	1,211	1,357	1,526	1,696	1,938	2,181	2,423	2,665	2,907	3,510	3,392	3,634			
	kcal/h	938	1,042	1,167	1,313	1,459	1,667	1,875	2,084	2,292	2,500	2,709	2,917	3,125			
Chilled Water	Inlet Temp./Outlet Temp.	°C	12 / 7														
	Flow rate	m ³ /h	272	302	339	381	423	484	544	605	665	726	786	847	907		
	Pressure Drop	mH ₂ O	5.1	5.4	4.2	5.8	7.7	5.7	7.7	10.1	6.7	8.6	10.7	8.7	10.6		
	Connection	mm	200					250			300			350			
Hot Water	Inlet Temp./Outlet Temp.	°C	56.3 / 60														
	Flow rate	m ³ /h	272	302	339	381	423	484	544	605	665	726	786	847	907		
	Pressure Drop	mH ₂ O	5.1	5.4	4.2	5.8	7.7	5.7	7.7	10.1	6.7	8.6	10.7	8.7	10.6		
	Connection	mm	200					250			300			350			
Cooling Water	Inlet Temp./Outlet Temp.	°C	32 / 37.2														
	Flow rate	m ³ /h	450	500	560	630	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500		
	Pressure Drop	mH ₂ O	8.4	8.6	6.8	9.3	12.4	8.8	12.0	15.8	11.1	14.1	17.6	14.0	16.8		
	Connection	m	250			300			350			400			450		
Gas	High Heating Value	kcal/Nm ³	10,550														
	Flow rate	Nm ³ /h	107	119	133	149	166	190	213	237	261	284	308	332	356		
	Inlet Pressure	mmAq	4,000														
	Connection	mm	50 (4,000mmAq)						65 (4,000mmAq)								
	Exhaust gas	mm	410 x 310			350 x 500			400 x 620			400 x 900					
Electric	Power source	-	3PH, 400V, 50Hz														
	Ref. Pump	kW	0.4					1.5									
	Abs. Pump1	kW	3.2		5.5					7.5							
	Abs. Pump2	kW	0.4		2.2					4.5							
	Purge Pump	kW	0.4						0.75								
	Burner	kW	4.0				7.5				11.0						
	Control Panel	kW	0.2														
	Total kW	kW	8.6		12.7		16.2		17.3		19.7		23.2		25.5		
Total Amp.	A	24.0		34.9		41.1		43.5		53.3		60.0		69.5			
Size	Lenght (L)	mm	4,880		4,998		5,540		6,038		5,644		6,142		6,667		
	Width (W)	mm	2,469		2,935					3,330			3,929			4,460	
	Height (H)	mm	2,633		2,962					3,310			3,500			3,700	
Weight	Rigging	ton	14.1	14.8	19.6	21.2	22.7	28.7	30.6	32.9	40.4	43.4	46.0	50.1	52.7		
	Operation	ton	15.8	16.6	22.2	24.0	25.7	32.0	34.4	37.1	45.1	48.5	51.5	56.1	59.1		
Space for Tube Replacement	mm	4,500			5,200		5,700		5,200		5,700		6,200		6,700		

Options

- High Pressure water Boxes**
Water boxes rated for 250psig or 300psig working pressure shall be furnished when specified on the equipment specification data.
- Special Tubes**
Tubes of non-standard materials and/or wall thickness shall be provided when specified on the equipment specification data.
- Special operation temperature conditions**
Special operation temperature shall be provided when specified on the equipment specification data.