

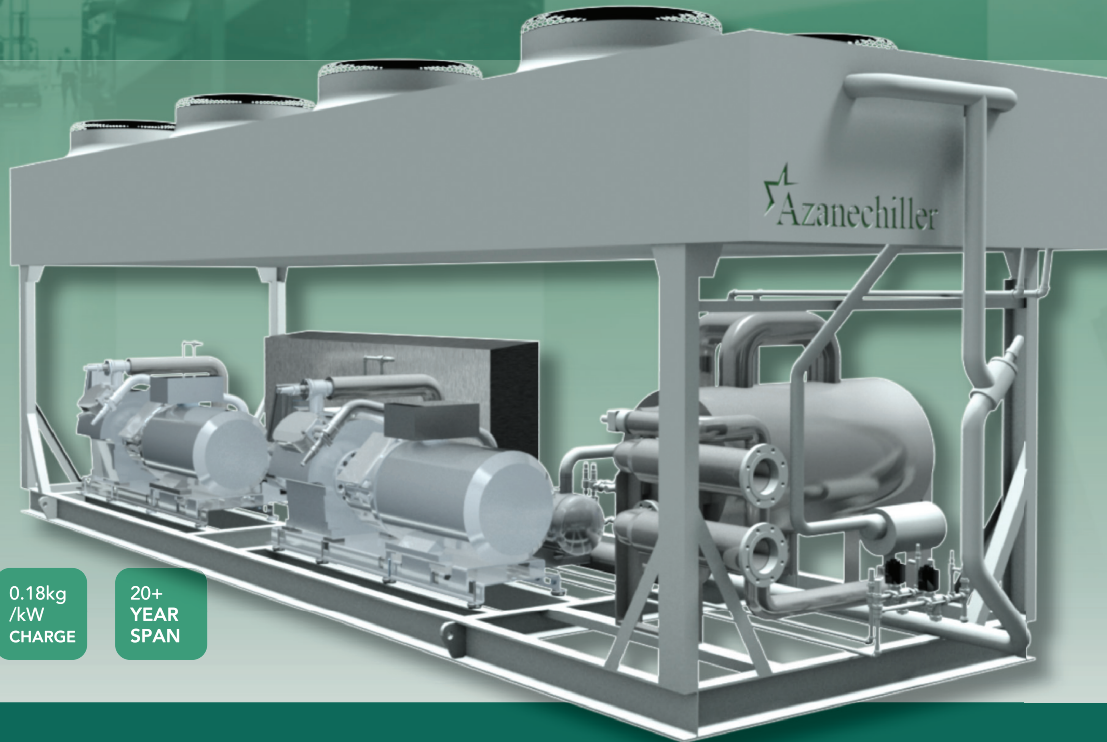
# THE NATURAL CHOICE

# Azanechiller

2.0



140kW to 1200kW Air Cooled Ammonia Chillers. -10°C to +10°C Fluid Temperatures



NH<sub>3</sub>

0.18kg  
/kW  
CHARGE

20+  
YEAR  
SPAN

## Features

- Variable speed reciprocating compressors
- High efficiency IE3 drive motors
- Low profile, air cooled condenser with high efficiency
- EC condenser fans and epoxy coated fins as standard
- Compact plate and shell evaporator with integrated separator
- PLC control to continuously optimise chiller operation
- Remote PLC access facility
- Continuous performance monitoring and optimisation
- Factory charged, run tested and commissioned prior to dispatch
- Options for:
  - Single or twin compressor
  - Axitop for all condensers
  - Heat recovery
  - Witnessed performance test at factory

## Benefits

- A future proof chiller solution which does not fall under the F-Gas regulation
- A chiller that has an efficiency 71% higher than the Eco Design Requirement
- An SSCEE of 236.5% for comfort cooling applications and an SEPR of 8.01 for process cooling
- Refrigerant charges of 0.18kg/kW
- 39% reduction in chiller weight
- 15% reduction in footprint
- No plant room required
- 20+ year life expectancy
- A quick installation
- A chiller that is ready to run when delivered to site

Azanechiller

## The Natural Selection

Reduce energy costs, avoid the uncertainty of synthetic F-Gas refrigerants and invest in a future proof solution that will deliver reliable cooling for 20+ years. Our new, enhanced Azanechiller range has been designed to deliver optimum efficiency across a wide range of operating conditions. The Azanechiller 2.0 reduces life cycle costs by 15% compared to the previous model through use of variable speed compressors, EC fan technology and automated PLC control. The use of ammonia, a refrigerant with zero global warming potential, means the chiller doesn't fall under the European F-Gas regulation. Our 40 years of experience in industrial equipment design, manufacturing and aftercare ensures a reliable, efficient ammonia chiller solution.

## Natural Flexibility

The high and medium temperature Azanechiller ranges have cooling capacities from 140kW to 1,200kW for secondary fluid supply temperatures from -10°C to +10°C. This means Azanechiller is ideally suited for cooling applications including:

- HVAC
- Temperature Controlled Storage
- Food Production
- Ice and Leisure
- Process cooling (pharmaceutical, chemical, petrochemical)
- Data Centres

AZANECHILLER MODELS - HT RANGE

	AA275	AA400	AA550		AA650		AA800		AA1000		AA1200
	AA275-1	AA400-1	AA550-1	AA550-2	AA650-1	AA650-2	AA800-1	AA800-2	AA1000-1	AA1000-2	AA1200-2
Capacity (kW)	271.7	405.9	542.4		633.2		799.7		999.4		1200.7
Design Dry Bulb Temperature (°C)	35.0	35.0	35.0		35.0		35.0		35.0		35.0
Full Load Current (A)*	154.8	225.2	327.1	297.4	398.5	362.9	480.2	517.1	603.0	617.3	770.5
Sound Pressure Level (dB(A) @ 10m)	63	64	65	65	64	65	65	66	66	67	67
Dimension (m) (L x W x H)	5.1 x 2.3 x 3.0	6.2 x 2.3 x 3.0	8.1 x 2.3 x 3.0		9.7 x 2.3 x 3.0		10.0 x 2.3 x 3.0		11.9 x 2.3 x 3.0		11.9 x 3.1 x 3.0
Approximate Operating Weight (kg)	6698	7907	9464	11110	11160	13134	12354	13794	14257	15724	18482
Approximate Refrigerant Charge (kg)	61	76	102		113		134		166		204
Chiller COP (at full load in 35°C ambient)	3.37	3.43	3.41	3.35	3.45	3.40	3.34	3.32	3.35	3.33	3.33
Water Connection Size (NB)	100	125	125		125		150		150		200
Compressor Quantity	1	1	1	2	1	2	1	2	1	2	2
Water On/Off Temperature (°C)	12/7	12/7	12/7		12/7		12/7		12/7		12/7
Condenser Fan Quantity	4	6	8		8		10		12		12
Condenser Fan Type	EC	EC	EC		EC		EC		EC		EC
Axitop fitted	Option	Standard	Standard		Standard		Standard		Standard		Standard

Note - Power Supply: 400/3/50 Compressor Type: Reciprocating Drive Type: Variable Speed Evaporator Type: Combined PSHE

AZANECHILLER MODELS - MT RANGE

	AA140MT	AA200MT	AA275MT		AA315MT		AA415MT		AA550MT	AA550MTE
	AA140MT-1	AA200MT-1	AA275MT-1	AA275MT-2	AA315MT-1	AA315MT-2	AA415MT-1	AA415MT-2	AA550MT-2	AA550MTE-2
Capacity (kW)	138.6	206.8	277.8		313.6		414.6		548.8	554.9
Design Dry Bulb Temperature (°C)	35.0	35.0	35.0		35.0		35.0		35.0	
Power Supply	400/3/50	400/3/50	400/3/50		400/3/50		400/3/50		400/3/50	
Full Load Current (A)*	143.5	194.7	266.7	270.7	276.9	303.5	327.1	362.9	517.1	527.3
Sound Pressure Level (dB(A) @ 10m)	61	63	64	65	64	65	65	66	67	67
Dimension (m) (L x W x H)	5.1 x 2.3 x 3.0	5.1 x 2.3 x 3.0	6.2 x 2.3 x 3.0	6.9 x 2.3 x 3.0	6.2 x 2.3 x 3.0	6.9 x 2.3 x 3.0	8.1 x 2.3 x 3.0		10.0 x 2.3 x 3.0	11.9 x 2.3 x 3.0
Approximate Operating Weight (kg)	6400	7060	7676	9726	8646	10306	1055	12180	13827	14617
Approximate Refrigerant Charge (kg)	40	57	73		80		106		154	
Chiller COP (at full load in 35°C ambient)	2.14	2.28	2.29	2.24	2.32	2.27	2.32	2.29	2.29	2.39
Secondary Fluid Connection Size (NB)	80	100	100		100		100		125	
Compressor Quantity	1	1	1	2	1	2	1	2	2	2
Secondary Fluid On/Off Temperature (°C)	-2/-8	-2/-8	-2/-8		-2/-8		-2/-8		-2/-8	
Condenser Fan Quantity	4	4	6		6		6		10	12
Condenser Fan Type	EC	EC	EC		EC		EC		EC	
Axitop fitted	Option	Standard	Standard		Standard		Standard		Standard	Standard

Note - Power Supply: 400/3/50 Compressor Type: Reciprocating Drive Type: Variable Speed Evaporator Type: Combined PSHE