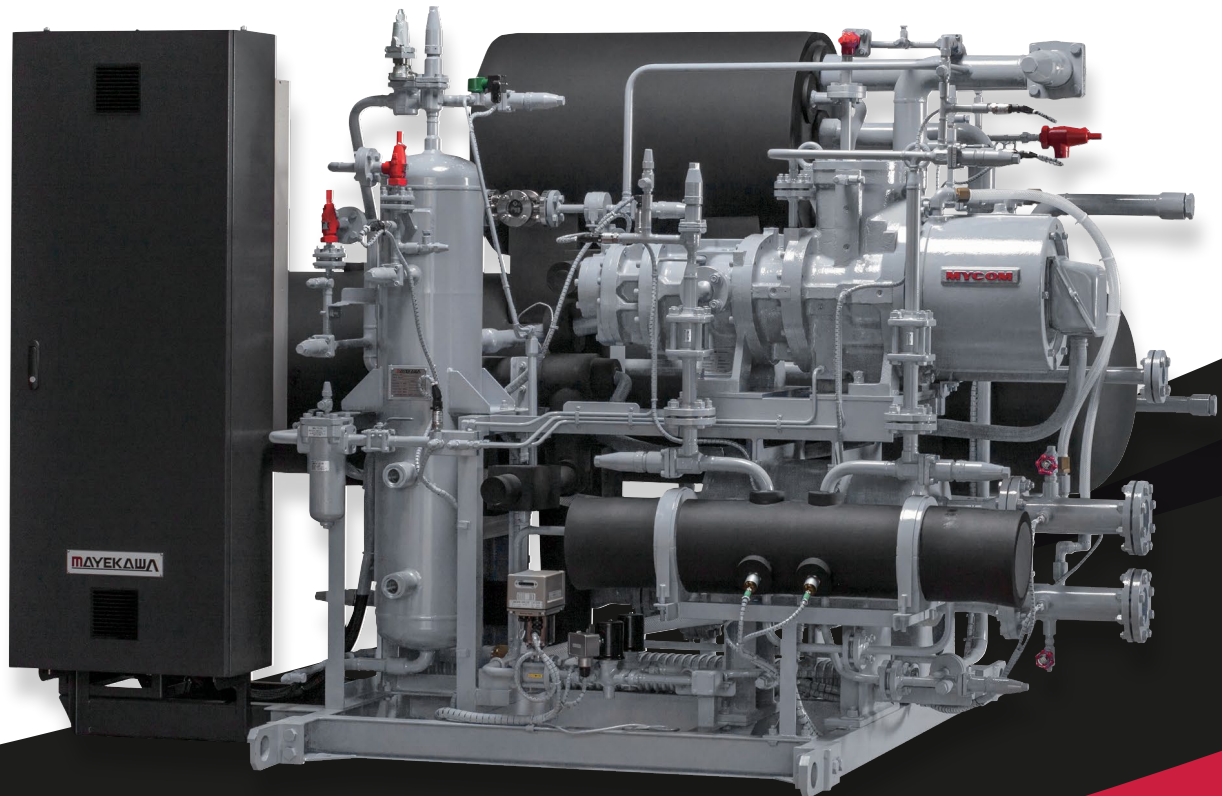


NewTon

Refrigeration System

Semi Hermetic Screw Compressors

МAYEKAWA
MYCOM



NH₃/CO₂
Cooling System

<https://americas.mayekawa.com/mna>

Interior Permanent Magnet (IPM) motor

The system employs an IPM motor to improve drive efficiency. Achieving higher efficiency by 5 to 10% than the conventional induction type.

Revolution speed control by Variable Frequency Drive (VFD)

VFDs are used to drive IPM motors. The rated revolution is set 4,500rpm (partially 5,600rpm) and continuously revolution speed control is equipped as a standard feature to correspond to part load operation. Driving a high speed and controlling revolution speed greatly contribute to energy-saving part load operation.

Adopted shell & plate type heat exchanger

We employed compact and high performance shell & plate heat exchangers on both condenser and evaporator to enable them to exchange heat even with a small differential temperature.

Minimum Ammonia Charge

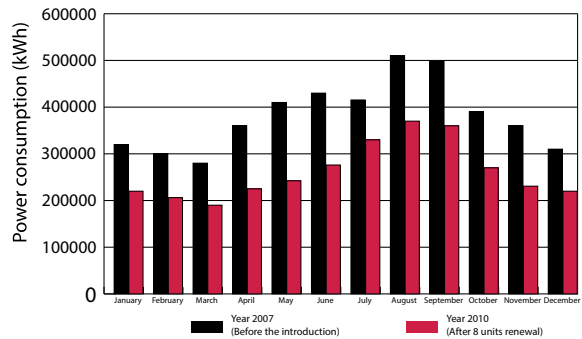
Minimum ammonia charge from 55 lbs to max. 165 lbs for each package. Employing indirect cooling method enables ammonia to be contained only in the machine room.

New Profile

We developed a new profile for the rotors with advanced machining technology enabling them to reduce internal leakage and achieve higher efficiency.

OVER 30% ENERGY-SAVING

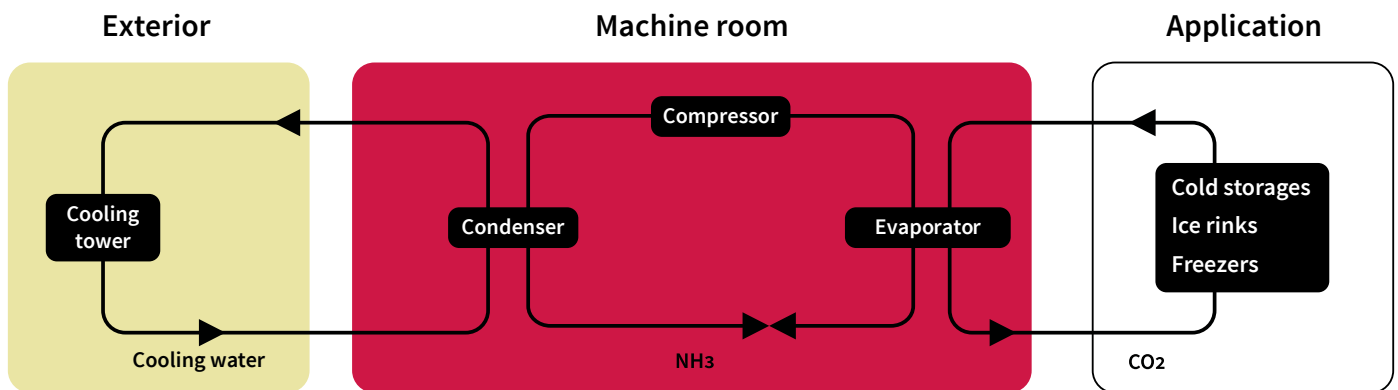
Comparison of before and after introducing NewTon



*estimation from the power company bills
*all electricity including main machine, auxiliary machine, transporting machine, lighting and etc.

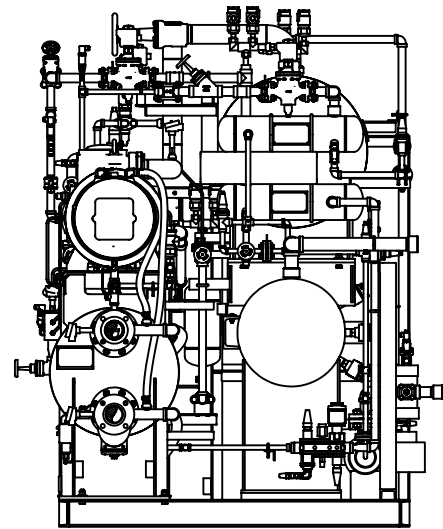
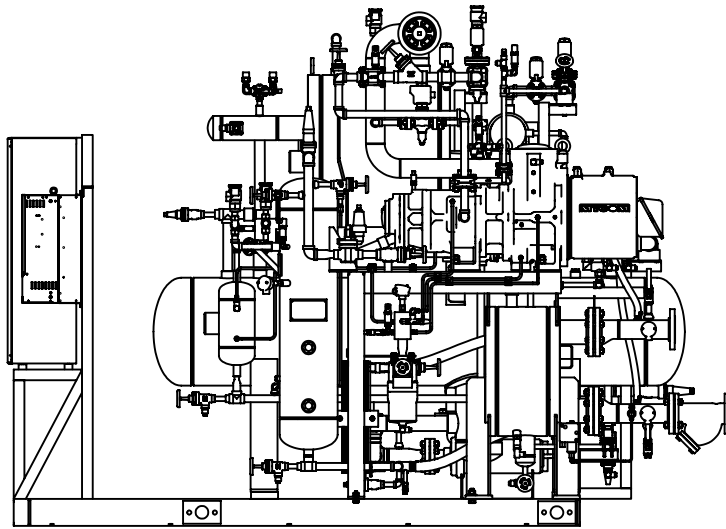
INDIRECT COOLING METHOD UTILIZING CO₂ CHARACTERISTICS

NewTon system can contain ammonia completely only in machine room to achieve energy-saving and safety.



DIMENSIONS & SPECIFICATIONS

Dimensions are for reference only. Please contact MYCOM for more detailed drawings.



*NewTon R-3000 image shown

For Cold Storage and Ice Plants **NewTon R & NewTon C**

		NewTon R-3000	NewTon R-6000	NewTon R-8000	NewTon C
CO2 Supply Temperature			-25.6°F		23°F
Cooling Capacity		94.5kW/26.8TR	189kW/53.7TR	270kW/76.7TR	235kW/66.8TR
Motor kW		43kW	86kW (43kW x 2)	120kW	65kW
C.O.P (EER)		2.2		2.25	
Power Source	for motor	AC400/440V x 50/60Hz			
	for control	AC200/220 V x 50/60Hz			
Refrigerant		Primary: NH ₃			
Compressor	Type	Semi-hermetic compound screw			Semi-hermetic single stage screw
	Drive method	VFD			
	Motor type	IPM motor			
Ammonia Charge		55 lbs	110 lbs	165 lbs	132 lbs
Outer Dimensions		L109 x W77 x H95	L186 x W94 x H102	L156 x W100 x H104	L134 x W87 x H106
Net Weight		7275 lbs	14991 lbs	16755 lbs	13228 lbs

in the case of cooling water at 89.6°F

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