Brief History of Refrigeration

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Prehistoric Times

- Since prehistoric times, Snow and Ice were used for cooling.
- The business of harvesting ice during winter and storing for summer.
- This practice was replaced by mechanical ice-making machine. 2nd Century Chinese inventor Ding-Huan of the Han Dynasty invented a rotary fan for AC.



History of Refrigeration

- For 17th Century, Cornell's Drebbel demonstrated "Turning summer into winter" for jams of England by adding salt to water.
- James horrison's first ice-making machine began in operation in 1851. Followed in 1853, vapor compression refrigeration system was granted in 1855.
- Modern AC emerged from advanced in chemistry during the 19th century. The first large scale electric AC was invented and used in 1902 by American inventor Willis Carrier.
- Willis Carrier is also known as fater of HVAC.
- In 1902, First modern electric air conditioning unit was invented by Willis Carrier in Baffalo, New York.
- The First Air-Conditioner, designed and built in Baffalo by Carrier, began working on 17th July 1902.
- In 1995, Germany made CFC refrigeration illegal.
- In 2004, Greenpeace worked with multinational corporation like Coca-Cola and Unilever and later Pepsico and other, to create a corporate coalition called Refrigerant Naturally



History Refrigeration Timeline

1000 be 1748

1805

1851

1920's

1937

1955





















CHINA

The Chinese cut and store ice for food preservation. Through the ages, the seasonal harvesting of snow and ice was a regular practice of most of the ancient cultures: Chinese, Hebrews, Greeks, Romans, Persians, Ice and snow were stored in caves or dugouts lined with straw or other insulating materials. Icehouses remained in use into the 20° century.

GLASGOW SCOTLAND

The first known artificial refrigeration is demonstrated when William Cullen lets ethyl ether boil into a partial vacuum: he does not however, use the result to any practical purpose.

USA

American inventor, Oliver Evans, designs the first refrigeration machine that uses vapor instead of liquid. Evans never constructs his machine.

USA

American physician, John Gorrie is granted the first U.S. patent for mechanical refrigeration.

USA

Domestic mechanical refrigerators become available. Pictured is the Seeger dry-air siphon refrigerator, circa 1900.

General Electric unveils a refrigerator invented by a French monk, Abbe Audiffren.

A number of synthetic refrigerants called halocarbons or CFCs (chlorofluorocarbons) are developed by Frigidaire.

There are 200 different models of refrigerator on the market.

More than 2 million Americans own refrigerators. 80% of American homes now have refrigerators

A domestic refrigerator is present in 99.5% of American homes

ENERGY STAR® Recycle My Old Fridge Campaign launched to help consumers save energy, money, save valuable natural resources. and reduce greenhouse gas emissions. The campaign launch coincided with new ENERGY STAR criteria. requiring new qualified refrigerators to be at least 20% more energy efficient than the minimum federal standard.