

# MRI Chillers





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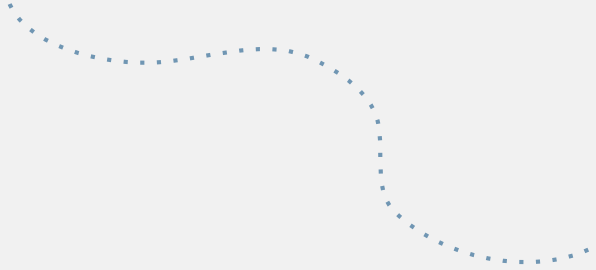

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"It was eerie. I saw myself in that machine. I never thought my work would come to this."

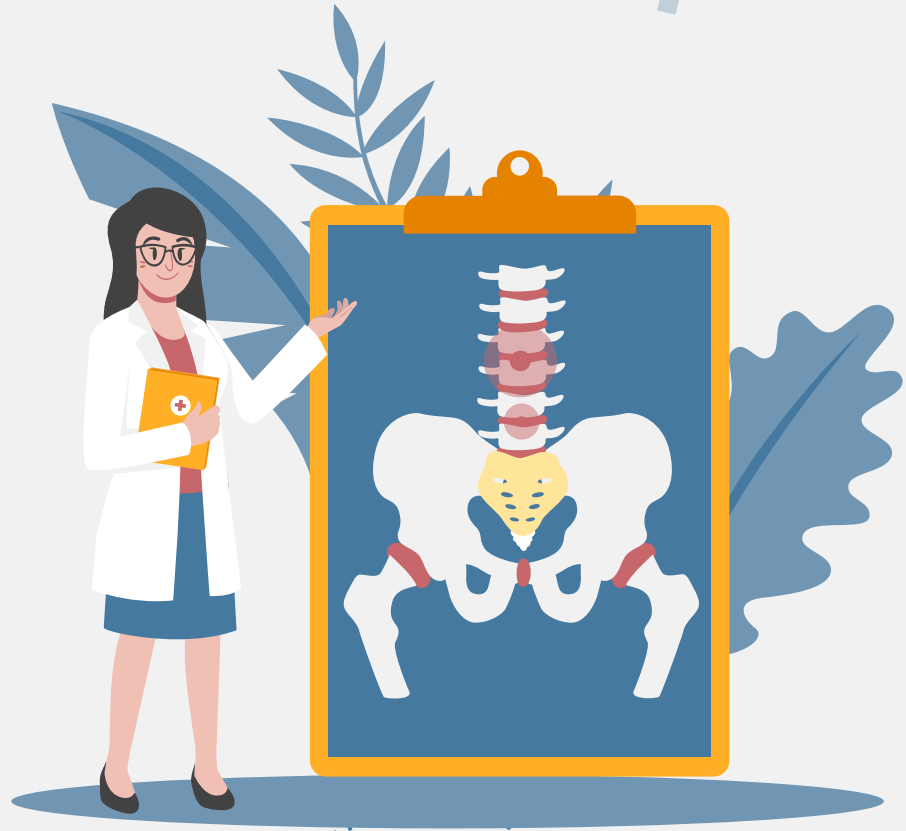


— **Isidor Isaac Rabi**, discovered the  
nuclear magnetic resonance



# 01.

## MRI Chiller overview





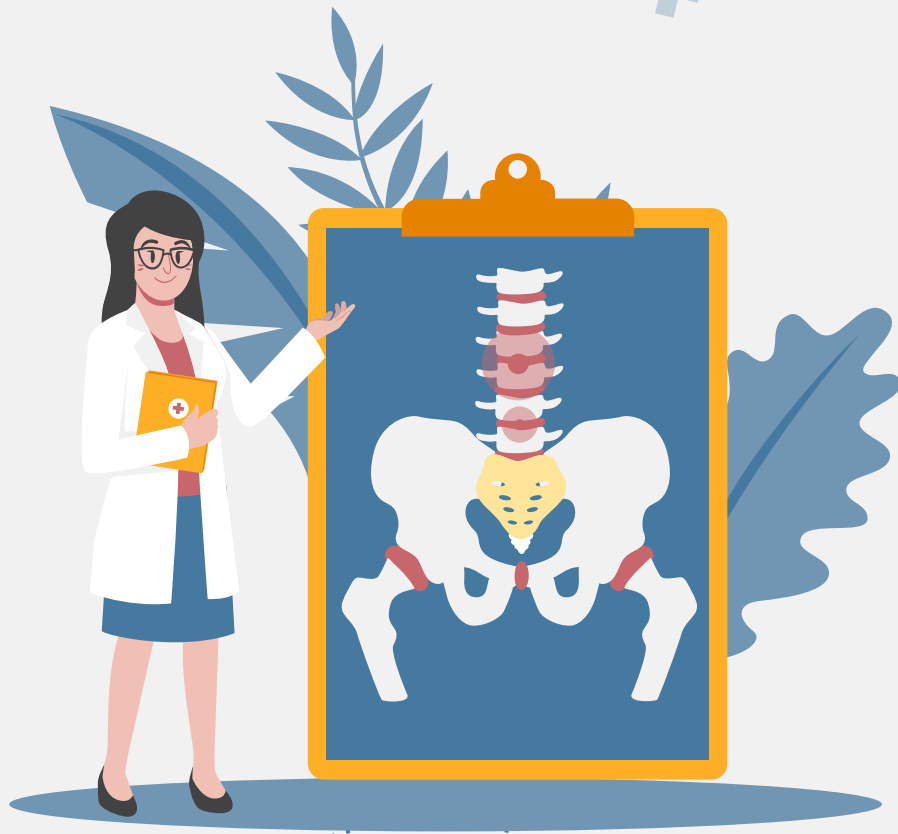
# MRI Chiller overview

The impressive capabilities of MRI machines have many beneficial uses, but they also generate a lot of heat. This can cause serious damage if it's not removed, otherwise, it can cause permanent damage and safety hazards. MRI Chiller displaces or removes the heat produced by these MRI machines.



# 02.

## Device 1: Top Chiller



# Top Chiller AC-1A



## Cooling capacity

2.85 KW (50HZ/60HZ)



## Material used

Copper is used to manufacture the evaporator and shell tubes, stainless steel 304 is used as the primary material to make the sheets and shells.



## Environment

Chilled water and Cooling air



# Top Chiller AC-1A

## Collection of Heat

Helium gas in the cold head is responsible for the collection of heat. This heat is then transferred to the evaporators, cold head does this step. In the evaporator, the refrigerant absorbs the heat and lowers the system's temperature.

## Release of Heat

The flowing cold water surrounding the condenser coils absorbs the heat from the refrigerant as the residence time increases.

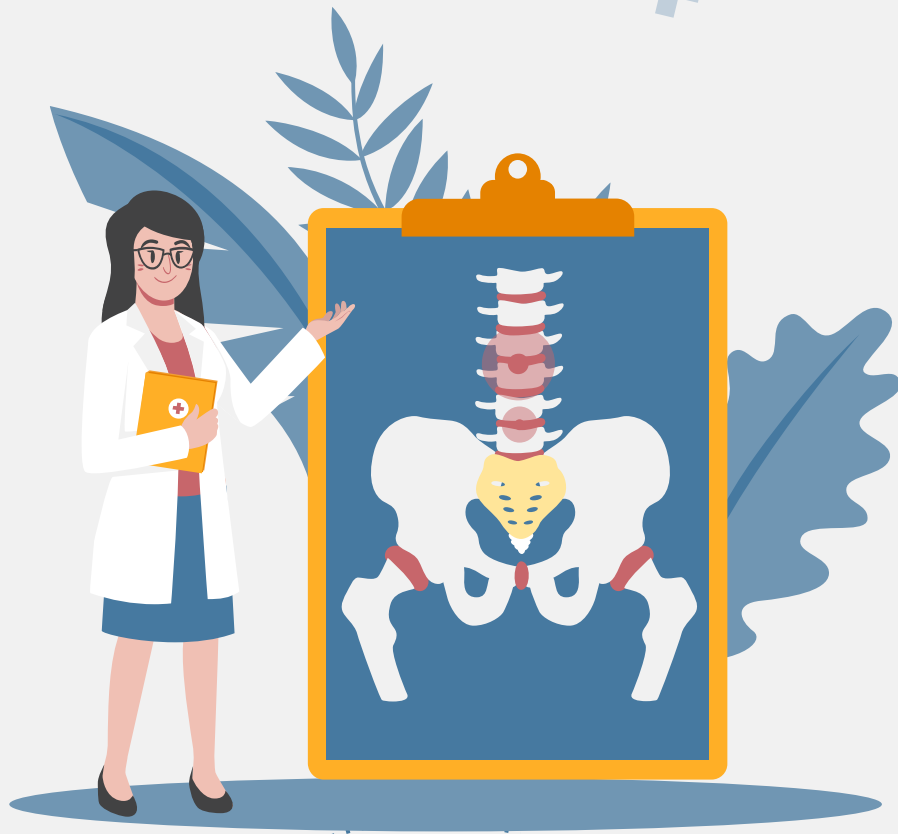
**Input Power:** 1.35 kW





# 03.

## Device 2: Sky Chiller



# Sky Chiller 4 Ton Portable AC Chiller

**Cooling capacity:** 13.6KW(50HZ/60HZ)

**Power Consumption:** 4.8 KW

## Material used:

The evaporator adopts a reinforced copper tube with inner and outer threads, the copper tube has a good cooling effect.



# Sky Chiller 4 Ton Portable AC Chiller

## Heat recovery:

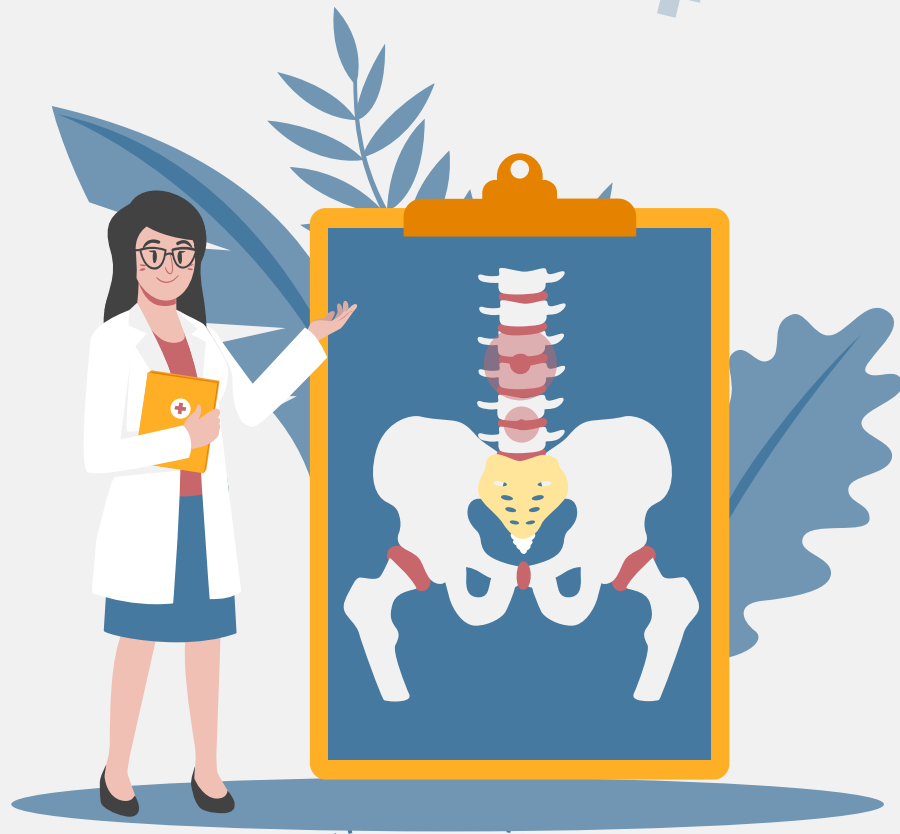
The condenser is equipped with efficient cross-seam fins and female threaded copper tubes for high heat exchange efficiency and good stability.

## Environment:

Chilled water inlet/outlet temperature 12°C/7°C, condensing temperature 45°C.

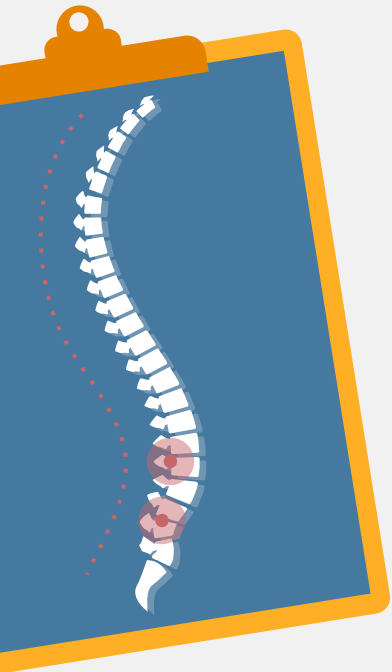


# 04. Comparison



## Comparison between the two devices

| points of comparison | TopChiller AC-1A   | Sky Chiller 4 Ton Portable Air-cooled Chiller |
|----------------------|--|---|
| Cooling capacity     | 2.85 KW (50HZ/60HZ)  | 13.6KW (50HZ/60HZ)                            |
| Cooling Method       | air cooling  | air cooling                                   |
| Refrigerant          | R22/R407C/134a/404A/410A                                       | R22, R407c, R404a, R410A(Optional)            |
| Selected Voltage     | 50HZ-380v  | 3Φ-50Hz-380V(Customizable)                    |
| Compressor           | Hermetic Rotary / piston                                       | scroll compressor                             |
| Evaporator           | SS Tank coil / shell and tube type / Plate type heat exchanger | Built-in tank with copper coil                |
| Chilled water flow   | 10m <sup>3</sup> /h(Inlet/outlet 12°C/7°C)                     | 2.4m <sup>3</sup> /h(Inlet/outlet 12°C/7°C)   |



# THANKS

Do you have any questions?

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