

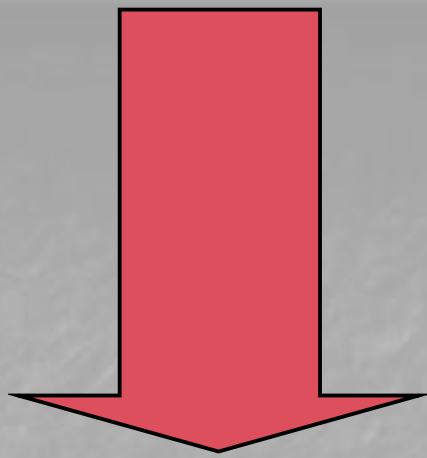
ELEVATING

HEATED

SATURATED

AIR

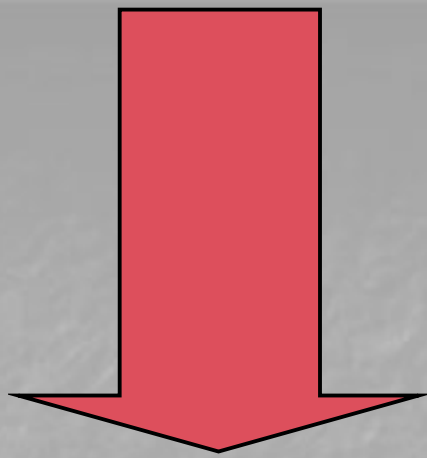
GEO THERMAL



DESICCANT

DEHYDRATION

TEMPERATURE



ELEVATED

TEMPERATURE

WELLHEAD

WATER

FROM

7 Barrels Min

160°F H₂O

Yields 250 kW

Electricity

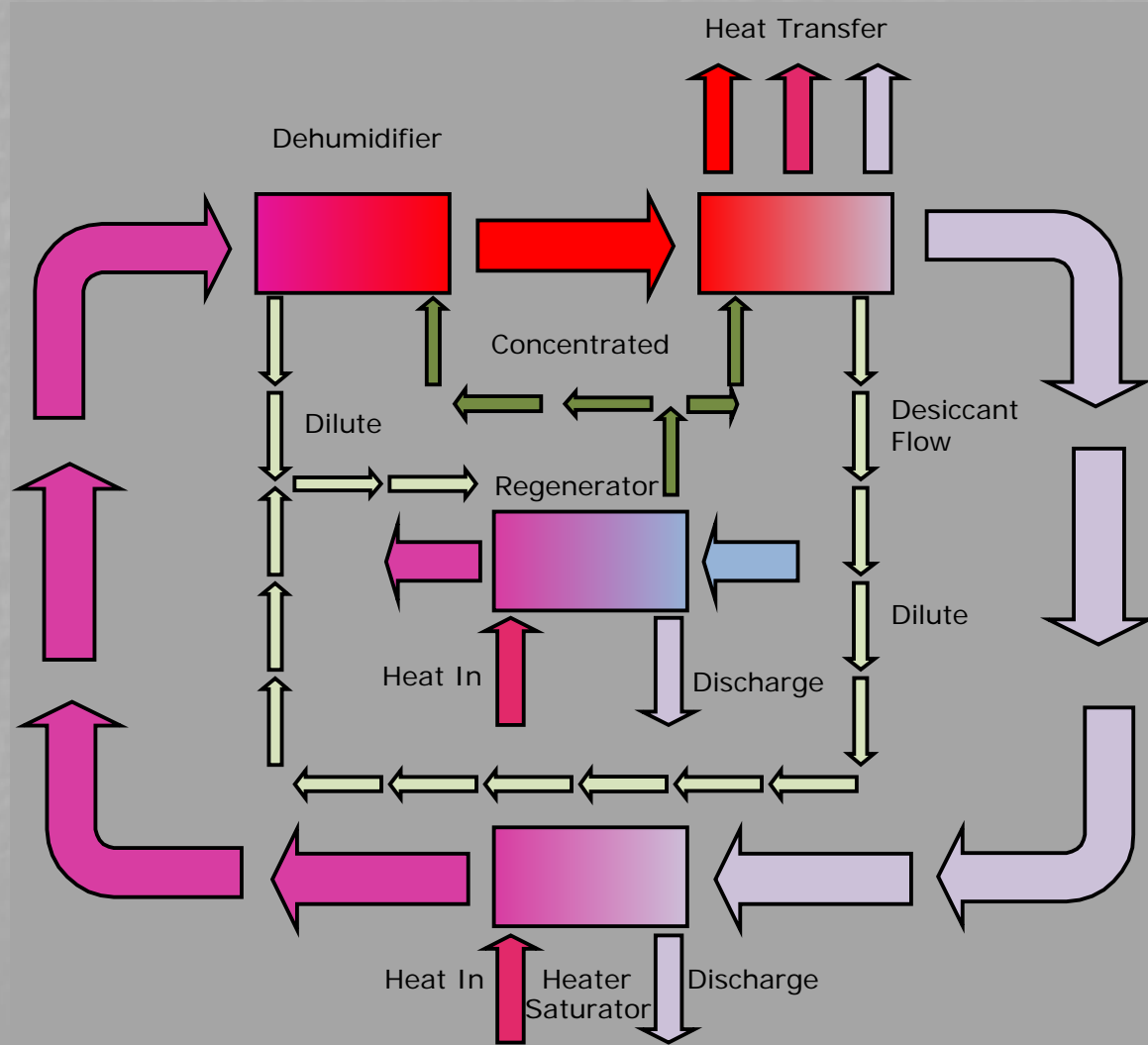
160°F

INCREASED

TO

275°F

Temperature Elevation Schematic



Work transferred to the turbine loop by the air loop is computed as the entering air Btu level of 321 less the exit level of 85 Btu per pound giving a requirement of 4.2 pounds (a pound of water losses one Btu per degree of temperature reduction).

185°F

INCREASED

TO

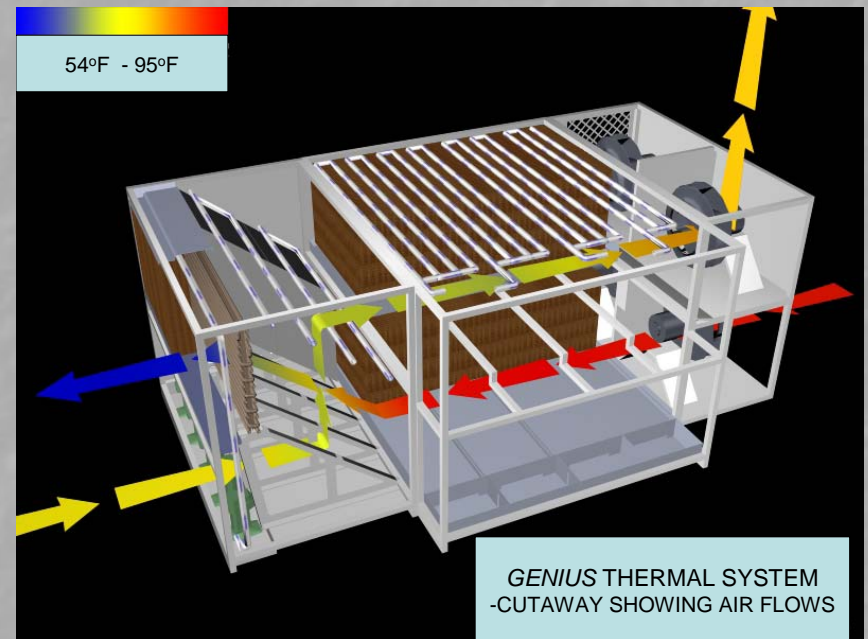
345°F

Maximum Efficiency

$$225^{\circ}\text{F} = 18\%$$

$$345^{\circ}\text{F} = 30\%$$

Desiccant Usage Development

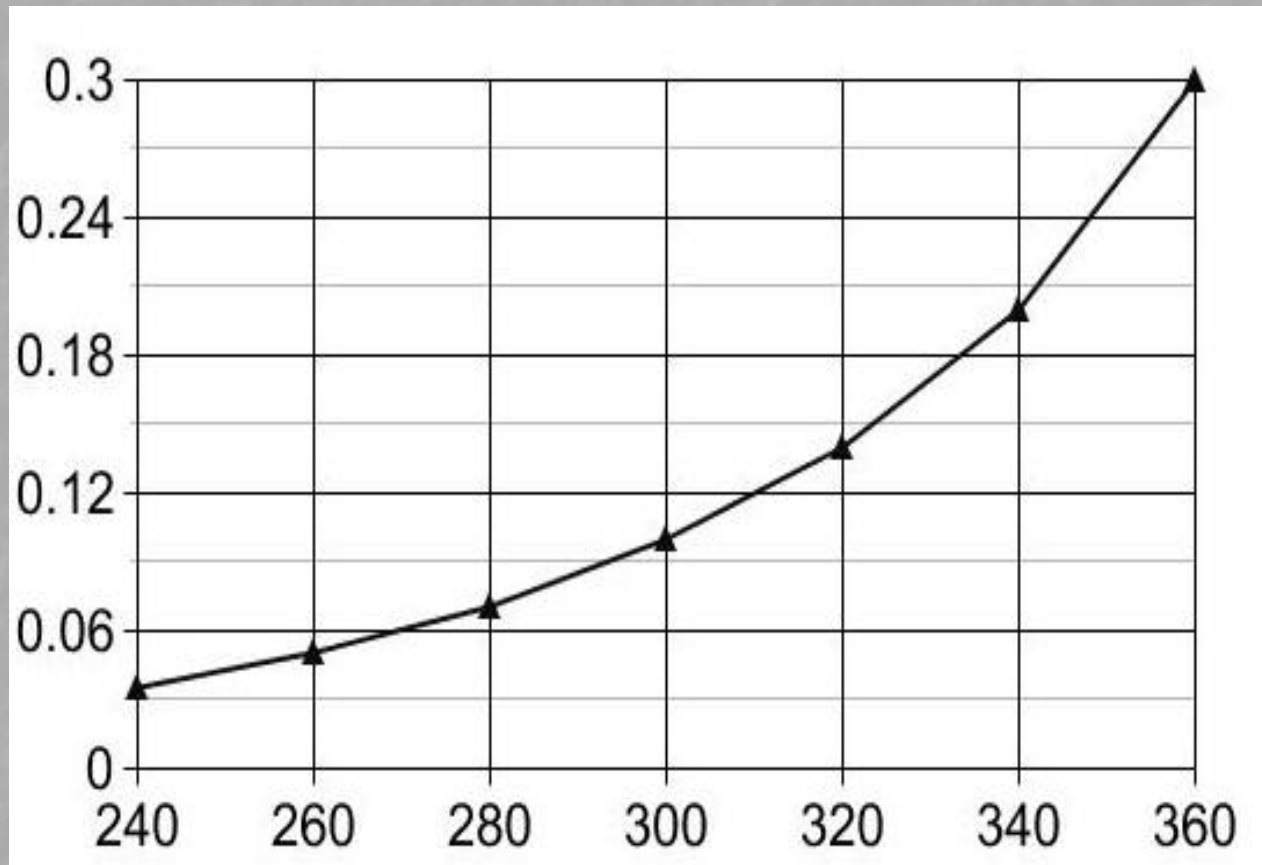


Regenerators: Hot Water Supply



Air Temperatures at Reduced Moisture Levels

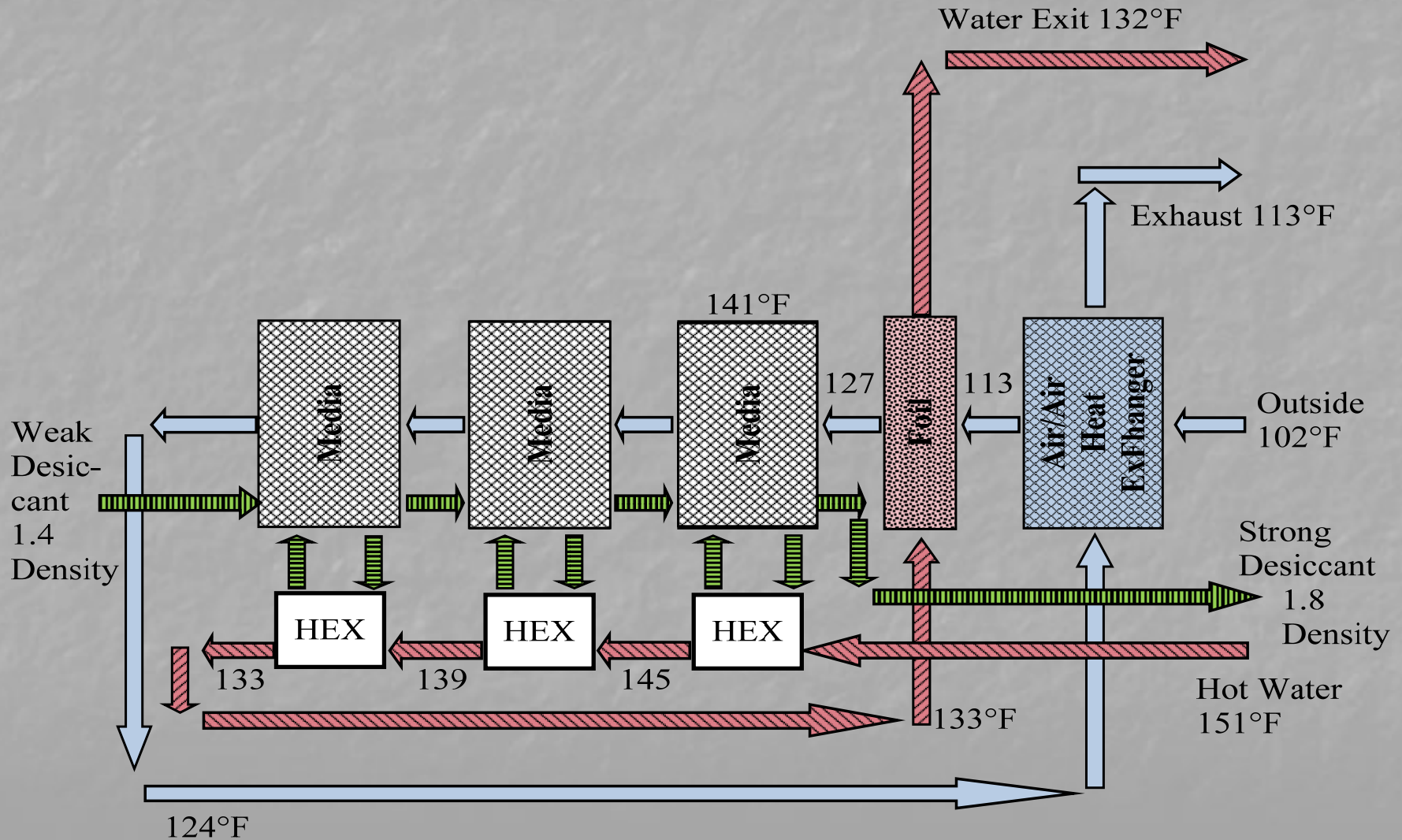
Initial
Moisture
Content
(Pound Per
Pound of Air)



Temperature (°F) at 3% Relative Humidity

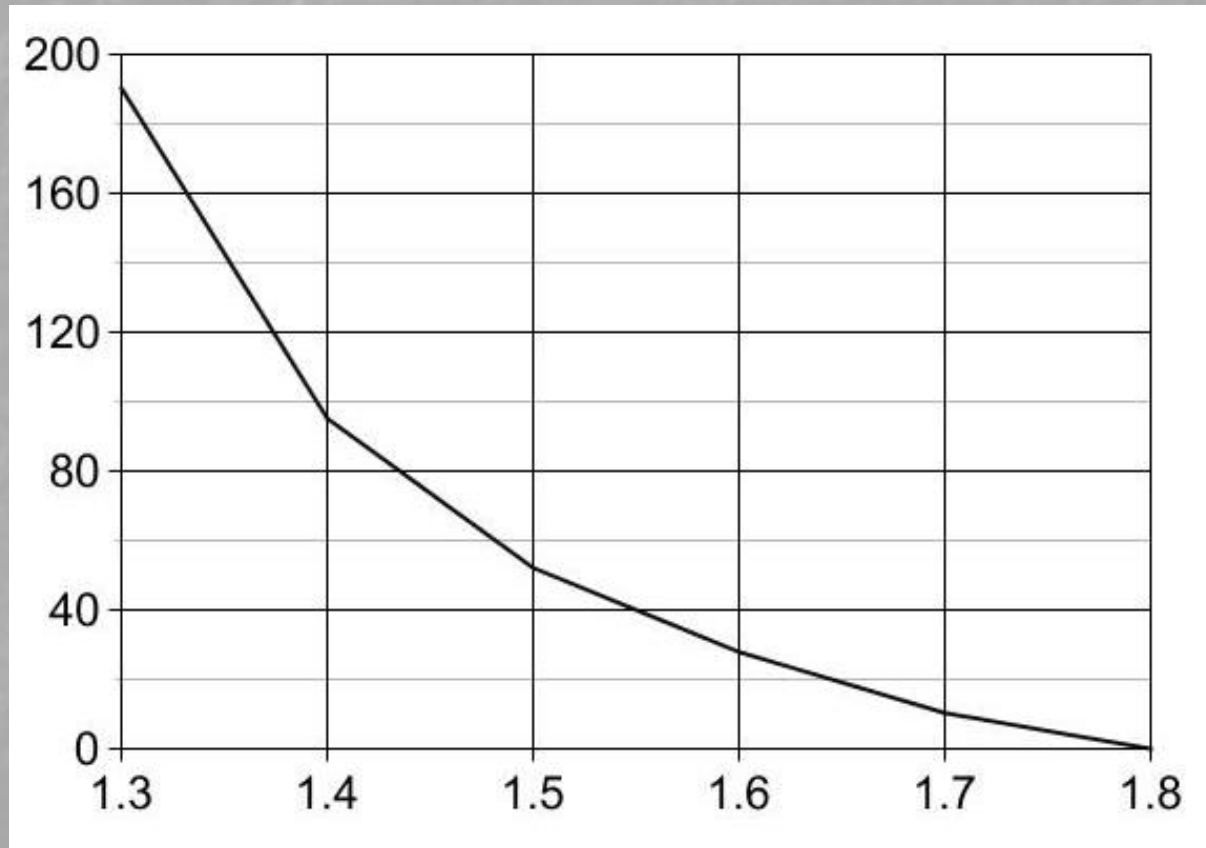
ASHRAE Psychrometric Chart No. 1

Regenerator Schematic



Lithium Bromide Dilution

% Water
Added (1.8
Concentration
Base)



Weight Concentration (To Water)

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Walt Albers