

Indirect systems versus directs in medium and large cooling plants

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ABSTRACT:

- On medium and big cooling plants, like large supermarkets, chilling rooms, foods processing factories, direct expansions plants with HFC R404A and piston compressors are largely used in Europe due to stop of R22 use..

- The article will demonstrate that indirect refrigeration could be a valuable alternative in term of efficiency, TEWI, and also on economical point of new if :
 - other refrigerant : R134a – NH3
 - Other compressors : like screw or scroll
 - Other construction approach
 - Other piping systemare used.

Some examples will be presented for comparisons.

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