

FM and IFM

Comparison Between Direct-Fired Air Curtain and Indirect-Fired Gas Air Curtain Solutions

Key Conclusions:

Both FM and IFM are commonly used in doorway areas, but their objectives are different.

- FM focuses more on rapid warm air support, quick local temperature improvement, and direct system response.
- IFM focuses more on doorway and entrance thermal environment management, cold air intrusion control, and transition-zone comfort.
- If rapid warm air delivery is the priority → choose FM first.
- If doorway climate control is the priority → choose IFM first.

Comparison Dimension

Comparison Dimension	FM	IFM
Heating Principle	Direct-fired	Indirect-fired
Product Positioning	Direct-fired air curtain / warm air auxiliary equipment	Indirect-fired gas air curtain
Primary Function	Rapid warm air support	Doorway thermal environment management
Main Focus	Fast warm air response and direct system performance	Cold air intrusion control and transition-zone comfort
Application Area	Local work areas, doorway assistance, temporary warm air supply	Loading docks, industrial doors, logistics entrances

Comparison Dimension	FM	IFM
Air Quality	Standard	Higher
Typical System Feature	More like warm air equipment	More like a dedicated doorway climate-control system
Is doorway climate control the core function?	Not necessarily	Yes
Suitable for rapid local heating?	More suitable	General
Relationship with main space heating	Usually as auxiliary heating	Usually as a dedicated doorway solution
Priority in project evaluation	Check rapid heating demand first	Check doorway operating conditions first

Quick Selection Guidelines:

Prioritize FM when:

- Fast heating is required in local work areas.
- Direct heating response is more important.
- Temporary or auxiliary warm air support is needed.
- Cold air intrusion control at entrances is not the primary goal.

Prioritize IFM when:

- The focus is on loading docks or industrial doorway areas.
- Greater attention is needed for doorway and entrance operating conditions.
- Transition-zone comfort is important.
- A dedicated doorway climate-control solution is preferred instead of simple warm air supply.

Conclusion:

FM is more like a rapid warm air solution, while IFM is more like a doorway climate-control solution.

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