



Intelligent Gas Cooler

for CO₂ refrigeration systems





<u>Green</u> solution Energy <u>saving</u>



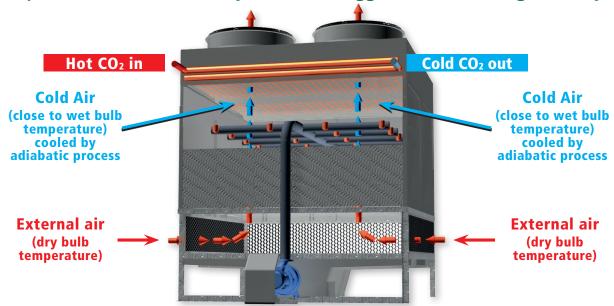
Since 1960 the incorrodible leader in cooling

Adiabatic Gas Cooler

The evolution of air cooler



The MITA adiabatic gas cooler is a dry cooler with adiabatic pre-cooling of the air that increases the performance and efficiency. PAD G-C is suggested for CO₂ refrigeration systems.



Benefits in comparison with dry systems:

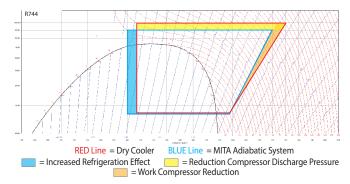
- ✓ Lower CO₂ discharged pressure for compressors of refrigeration system
- **Higher COP for refrigeration system**
- ✓ Smaller footprint

Benefits in comparison with other adiabatic systems:

- ✓ No aerosol (Tested by INERIS)
- No water treatment
- Lower water consumption

Example:

Design Condition						
Dry bulb 34 [°C]	Relative humidity 43 [%]	Wet bulb 24 [°C]				
	Dry Cooler Solution	MITA Adiabatic System				
Air temperature to Heat Exchanger	34 [°C]	26,5 - 28,5 [°C]				
CO ₂ gas cooler temperature	In 124,3 [°C] - Out 40 [°C]	In 114 - Out 36 [°C]				
CO ₂ discharge pressure	100 [bar]	90 [bar]				
Expected theoretical design COP	1,45	1,70				
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Model	Width	Lenght	Fans	Total motor power	Capacity in adiabatic mode
	mm	mm	N°	kW (**)	kW (**)
G-C 1-4	1600	1200	1 (*)	1,16	100
G-C 1-6	1600	1200	1 (*)	2,58	125
G-C 2-4	1600	2400	2	2,32	215
G-C 2-6	1600	2400	2	5,16	250
G-C 3-4	1600	3600	3	3,48	320
G-C 3-6	1600	3600	3	7,74	390
G-C 4-4	1600	4800	4	4,64	435
G-C 4-6	1600	4800	4	10,32	520

^(*) Available multifans solution for redondance

Technical Data not binding





^(**) Considering 34°C ambient temperature; 43% relative humidity; CO2 in 114°C; CO2 out 36°C; pressure 90 bar