


How to compare Airtorch Products

Airtorch® Feature	MHI	Competitor	Why is it important to have a better-constructed unit? How do superior technologies impact a user?
	 www.mhi-inc.com	 MHI's Competitor COMPANY NAME	
Power: Is the derating of Power required?	No.	Yes, typically by 20%.	No derating is a clear advantage. When derated, the user is only allowed a lower power usage for conditions.
Powers offered to date.	1-45 Megawatts. Very versatile.	Generally, do not span this range.	Derating MW systems is a huge disadvantage.
Pressure-drop, for a high-temperature exit temperature.	Typically, 0.25 psi or as shown in the quote.	Typically, four times more, ~1 psi, or as described by the manufacturer.	A lower pressure drop is an indicator of less energy loss. It often determines the life of the heater.
Maximum exit temperature offered.	Up to 1250 °C.	Typically, only 700 °C.	Higher temperature capability indicates a higher life at a lower use temperature.
Electric Panel.	508A.	As listed (the user should inquire whether the entire panel is rated or only the enclosure is rated).	Safety Standards. Follow known electrical codes.
Energy Efficiency.	Typically, 95% and above	Varies: Typically, ~80%.	Higher efficiency is better for process cost and for decarbonization
Does the shell require external insulation? Shell materials.	No. Shell is stainless steel or as requested.	Very often.	Better efficiency. Safety.
Can the shell be rated to ASME or CRN standards?	Yes.	Yes.	Ratings provide safety and uniformity.
SCR?	Phase Angle i.e., each three-phase leg is controlled, and current adjustments are possible.	Varies.	Phase angle and current limit adjustment provide better efficiency and better proportional control making changes softer and thus improving life.
Software switchable SCR	Yes.	Varies.	Quick adjustments to the power supply.
Torispherical terminations.	Yes, almost always.	Generally, not. Either no termination or Conical.	Pressure vessels commonly employ torispherical terminations.
Provision of Exact Mating Flanges and Pipes	Yes, almost always.	Generally, not.	Ease of installation.
Location of the exit process thermocouple.	In the pipe tubing or as shown.	Generally located upstream near the radiator.	The reading is in the flow when located in the pipe.
What does the Warranty cover?	Depending on the model, MHI provides a 1-year Warranty on heaters. Not just on manufacturing defects.	Varies. It is unusual to have guaranteed life for heaters.	Quality and Technology is reflected in the Warranty.