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THE SUSTAINABLE

ALTERNATIVE TO

ATMOSPHERIC

FURNACES





The ECO Furnace is a double chamber system composed of one heating cell and one integrated quenching cell. It is a compact installation that aims at replacing sealed quench furnaces or IQ furnaces for heat treatment operations.

Its development was based on four pillars: environmental impact, efficiency, metallurgical quality and ease of integration into existing heat treatment lines.



ECO - Oil quenching

- E-Mobility: Hybrid and EV
- Automotive Industry
- Mining
- Aeronautics
- Industrial Tooling
- Heat Treaters

ADVANTAGES

- Sustainable solution: reduction of CO2 emissions up to 80% and energy consumption reduced by 40%
- Safety: no flames, no fire hazard
- Better **metallurgical** quality
- Easy **integration** in existing lines
- Machine compatible with AMS2750 & CQI9 standards



LAYOUT & PROCESSES

- Low pressure carburizing
- Low pressure carbonitriding
- Hardening
- Brazing
- Sintering
- Oil quenching / Gas quenching
- Vacuum annealing



Oil quenching chamber

TREATMENT CAPACITY

rango	OIL QUENCHING		GAS QUENCHING	
	Useful dimensions L*W*H	Gross load	Useful dimensions L*W*H	Gross load
	● 600 mm x 450 mm x 450 mm	200 kg	600 mm x 450 mm x 450 mm	200 kg
	● 1000 mm x 610 mm x 750 mm	750 kg	1000 mm x 610 mm x 660 mm	500 kg
	1220 mm x 910 mm x 910 mm	1500 kg		

Pitless oil quenching design

ENVIRONMENTAL IMPACT

ECO range furnaces support the industrial ecological transition by allowing a strong reduction in the carbon impact of heat treatment operations. This is particularly enabled thanks to:

- No endo gas generator
- Higher temperature treatments that reduce cycle times
- No CO gas used for carburizing operations
- Electrical heating system



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