

ICBP® DUO TH

DOUBLE CHAMBER VACUUM FURNACE WITH OIL QUENCHING

ICBP® Duo TH Oil Quenching comprises 2 independent chambers separated by a vacuum-tight door. This furnace is compatible with AMS 2750 E and suitable for the treatment of aeronautics parts.

ICBP® Duo TH Oil Quenching does not need any pit installation which reduces the floor space. Quenching cell can use hot or cold oil.



ICBP Duo® TH Oil Quenching pitless installation

MAIN STRENGTHS

- ◆ **The design is optimized to shorten treatment cycles** thanks to the heating chamber which remains hot;
- ◆ **High quenching efficiency:** cold quenching chamber with vacuum-tight door separation;
- ◆ **Enhancement of treatment quality** by using our **INFRACARB®** Low Pressure Carburizing (LPC) & Carbonitriding (LPCN) processes already proven on more than 1 100 ICBP heating cells worldwide;
- ◆ **Pitless Design** up to 966 size

ADVANTAGES

Process advantages:

- No oxidation
- No decarburizing
- No carbon potential control required
- Less power consumption
- Optimum atmosphere quality
- Enhanced fatigue strength with combination of LPC and stop quenching
- Excellent repeatability, from batch to batch, from part to part

Facility advantages:

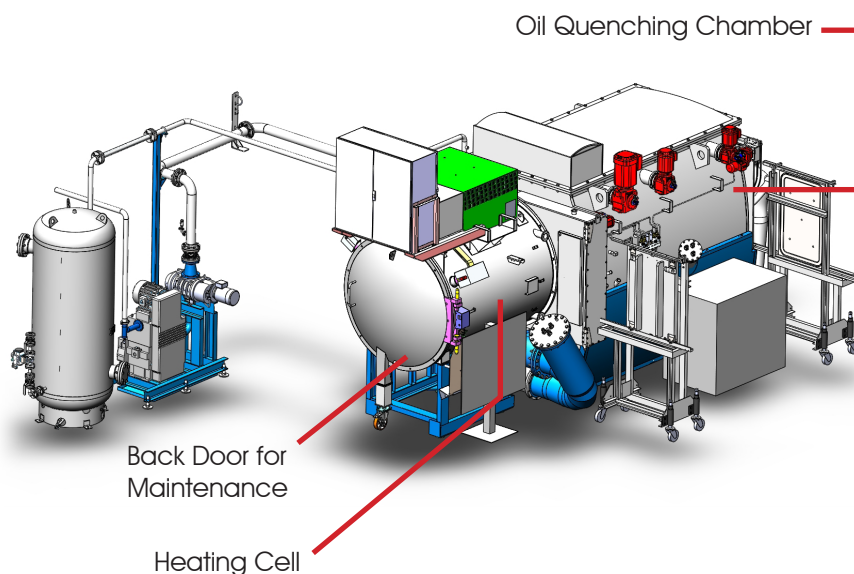
- Direct integration in machining workshop
- The installation is completely automated
- Less surface occupied on the ground
- No civil engineering required (pitless)
- Short transfer time between heating chamber & quenching
- Easy maintenance: back and lateral doors, oil is mixed by an internal hydraulic turbine, sensors and actuators located externally...

POSSIBLE PROCESSES

- Vacuum carburizing
- Vacuum carbonitriding
- Hardening
- Precipitation hardening
- Vacuum annealing
- Brazing
- Sintering

OPTIONS

- Machine compatible with AMS2750
- Protective atmosphere convection heating
- System for exhaust gas treatment
- Cooling water loop
- All peripherals such as washing machine, preheating, tempering, storage, transfer and loading/unloading stations, etc.



TREATMENT CAPACITY

Range	OIL QUENCHING		
	Pitless	Useful dimension L*W*H	Gross load
ICBP® DUO 644	■	600 mm x 450 mm x 450 mm	200 kg
ICBP® DUO 966	■	1000 mm x 610 mm x 750 mm	750 kg
ICBP® DUO 1299		1200 mm x 910 mm x 910 mm	1500 kg
Working temperature up to 1,200 °C			

