

Vapor Phase Aluminizing (VPA)

Vapor Phase Chromizing (VPC)

Fluoride Ion Cleaning (FIC)

Low Pressure Carburizing (LPC)

Hardening & More



**ECM**USA Inc  
VACUUM FURNACES

## VACUUM FURNACES for **AERONAUTICS**



PFTH VERTICAL VACUUM OIL QUENCHING FURNACE

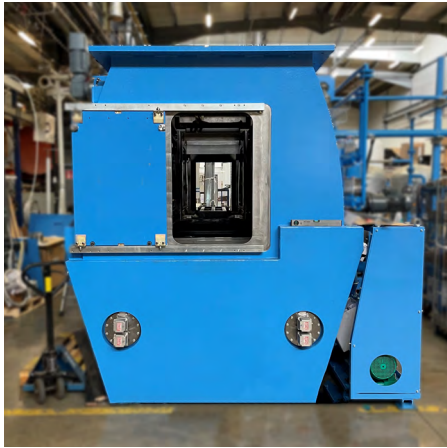
Heat treatment of rotors, bearings, landing gears, transmission systems, turbines & propellers for the aeronautics industry

Low pressure carburizing or other vacuum heat treatments ensure mechanical property requirements for alloys used in landing gears, transmission systems or jet engines.

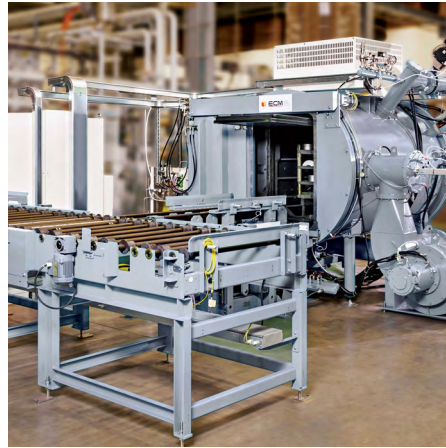
## SMALL TO LARGE VOLUMES

## HEAVY LOADS & LARGE PARTS

## SERVICE & UPGRADES



ECO furnace with oil quenching cell for the heat treatment of helicopter transmissions parts.



MONO single chamber furnace for helicopter transmissions.



The PFTH furnace consists of a heating cell and pit oil quenching cell. It is a fully automated installation, guaranteeing high reproducibility.



Vapor Phase Aluminization (VPA), VPC and FIC furnaces for protective coatings against high temperature oxidation and hot corrosion. AMS Compliant. Diameters from 700mm to 1500mm.

Along with the success of low pressure carburizing installations, ECM has commissioned specialty furnaces to meet very specific requirements:

**ECO FURNACE** for the treatment of helicopter transmissions. In this completely innovative system with 3 heating zones, parts are first heated in a vacuum chamber and then oil quenched for improved hardness and distortion control.

**MONO FURNACE** is perfect for smaller volumes of massive loads. As the loads are fixed, the MONO furnace enables the perfect temperature homogeneity and adhere to AMS standards.



### FLEX Furnace for Bearings

This system includes both oil & gas quenching cells and has the capacity to treat a very large volume of bearings thanks to its footprint and additional automation. Producing mainly for major accounts in the aeronautical sector, this manufacturer guarantees bearings with high mechanical properties and high resistance to friction - all at a high processing rate, which makes it one of the world's leading suppliers of bearings today.

