ECM Technologies offers a range of furnaces for the vacuum heat treatment of metals, alloys and other materials.

The variety of processes requires the implementation of optimised technologies for each application:

- From 150°C to 2,800°C
- From several cm³ to several m³ of available volume
- From atmospheric pressure to molecular vacuum, up to 20 bar cooling

**HEARTH LIFT FURNACES**

**DIAMANT & LILLIPUT RANGES**

Useful volume:
1 liter to 13 m³

**HORIZONTAL FURNACES**

**VESUVE & TURQUOISE RANGES**

Reduced floor space
Low investing costs

**MOBILE HEARTH FURNACES**

**SESAME RANGE**

Front easy loading

**BELL TYPE FURNACES**

**CRISTAL RANGE**

Easy loading
Loading stability
### A SOLUTION FOR EACH REQUIREMENT

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Vesuve</th>
<th>Diamant</th>
<th>Cristal</th>
<th>Lilliput</th>
<th>Fulgura</th>
<th>Turquoise</th>
<th>Rubis</th>
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</table>

**Primary vacuum**

**Secondary vacuum**

**Ultra-Clean vacuum (UHV)**

**Convection heating**

**Gas scavenging**

**Gaz quenching ≥10 Bar**

**Oil quenching**

**Isostatic pressure ≤ 200Bar**

**RECOMMENDED APPLICATIONS**

**POSSIBLE APPLICATIONS**

### TEMPERATURES

<table>
<thead>
<tr>
<th>Furnace</th>
<th>Vesuve</th>
<th>Fulgura</th>
<th>Turquoise</th>
<th>Rubis</th>
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<th>Cristal</th>
<th>Lilliput</th>
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<tbody>
<tr>
<td>Up to</td>
<td>850 °C</td>
<td>1,350 °C</td>
<td>1,600 °C</td>
<td>2,200 °C</td>
<td>2,200 °C</td>
<td>2,800 °C</td>
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</tr>
</tbody>
</table>

### AVAILABLE FUNCTIONS

**Vacuum**

- Molybdenum
- Graphite
- Tungsten

**Gas**

- Nitrogen
- Argon
- Hydrogen

**Atmosphere management**

- Rotameter
- Mass flow
- Pressure regulation

**Standards**

- AMS 2750
- AMSH 81200
- AMS 28013
- ATEX

**Cooling**

- Forced convection
- Quenching

**Supervision**

- Process piloting
- Speed variation

**Ergonomics**

- Loading platform
- Handling tool