

C A R B O L I N E

CARBO LINE series heat treatment plants are designed to execute hardening, tempering, cementation, and carbonitriding of metallic pieces in several manufacturing branches.

Many models are available, and particularly:

- Hardening lines with oil quenching and temper furnace
 - for bolts and other die cast material like springs or forks
 - with an hourly production from 50 to 300 kg/h and
 - passage dimensions in furnace from 300 to 1000 mm
 - width and height from 80 to 120 mm
- Tempering lines with melted salts tank
 - from 100 to 250 kg/h

All plants work with controlled atmosphere produced by endothermic generators placed on machine board, or with nitrogen and methanol atmosphere and added methane, propane or ammonia depending on needed treatment.

All lines have internal carbon control devices with CO and CO₂ analysers or with an oxygen sensor for automatic carbon percentage regulation.

The heating system is electric, and the temperature control is realised through high precision Silicon Controlled Rectifier groups supervised by an industrial PC that has also the possibility of recording all main working data and alarm messages.

All plants are built according to EN 746-1, EN 746-3, EN 746-5, EN 746-8 and EN 60204-1 European norms and the insulating material used is environment friendly.



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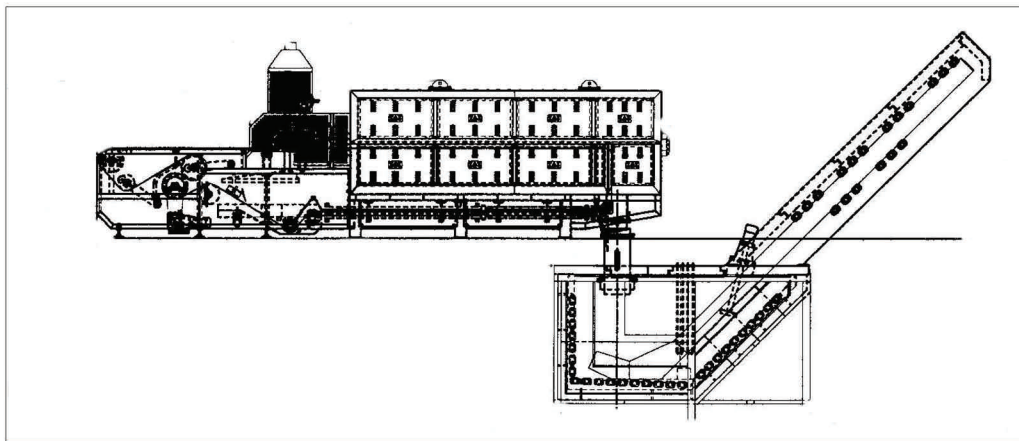
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fig.1 - Exhibition booth

fig.2 - Technical side view

fig.3 - Hardened parts

fig.4 - Hardened parts



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