



Products: Bars · Profiles · Wire · Forging parts · Cast parts · Finished parts

Capabilities: Walzwerke Einsal GmbH offers a wide range of modern and strictly monitored heat treatment capabilities, which meet highest customized requirements. Besides various bogie hearth furnaces, top hat furnaces and walking beam furnaces for long products as well as a vacuum furnace and top hat furnaces for wire, sheets and strips are in operation.

On request, Walzwerke Einsal offers other upstream and downstream processes and services:

- Surface treatment by pickling or shot blasting
- Straightening by levelling, pressing or stretching
- Sawing by band saws
- Mechanical testing and preparation of test certificates in the own laboratory

Our innovative quenching line is available for your highest requirements. Unlike to the conventional batch heat treatment, single bars are heat treated in a continuous process to achieve an optimal homogeneity across the entire batch as well as highest possible material related characteristics. Cooling down of the bars is processed in cooling section by water spraying. Maximum cooling rates can be achieved, or specific cooling rates can be set to simulate quenching in oil or polymer.

Type	Max. Dimension [mm]	Temperature Range [°C]	Atmosphere	Cooling	Remarks
Single Bar Quenching Line	Width 8 — 150mm Thickness 6 — 115 mm Length 3000 — 6500	≤ 1250 °C	Air / Combustion Products	Cooling Down by Water Spraying — Max. cooling rate or possibility to simulate quenching in Oil or Polymer	AMS 2750 Class 2 (+/- 6°C)

Type	Max. Dimension [mm]	Max. Capacity [kg]	Temperature Range [°C]	Atmosphere	Cooling	Remarks
Bogie Hearth Furnaces	Width 1180 Length 7700	Ca. 20.000	450 — 900	Air / Combustion Products	Air / Furnace	3 Furnaces are available
Top Hat Furnace	Width 600 Length 6200	Ca. 12.000	450 — 900	Air / Combustion Products	Air / Furnace	AMS 2750 Class 2 (+/- 6°C)
Continious Line Annealing	3,00 x 2,00 to 20,00 x 8,00	Rings up to 2.000	≤ 1250	Protective Gas N2 / H2	Gas quenching	Solution annealing with upstream ultrasonic cleaning
Top Hat Annealing	Rings to Ø 1500	Ca. 30.000	≤ 850	Protective Gas N2 / H2	Cooling down in furnace under	Soft annealing / Stress relief annealing in rings
Vacuum Annealing	Width 1350 Length 1450 Height 900	Ca. 2.000	≤ 1350	Vacuum	Quenching or cooling down in furance	Solution annealing of special grades e.g. Titanium /-alloyed grades

Our team of well-trained engineers, technicians and metallurgists will also advise you on demanding challenges. Feel free to contact us!

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