

# TECHNICAL DATA SHEET

## SK1ALTR

Light alloy solutions heat treatment

### ► DESCRIPTION

Light alloy heat treatment furnaces have wide range of use on the production sites for the processes of heat, homogenization, annealing, heat treating, degasing, solution heat treating, aging, quenching, stress-relieving, preheating, stabilization of light alloys.

All furnaces are equipped with high-tech control systems, that allow in on-line mode all current process management, store the information about the items treated, print the heat treatment parameters.

Most part of the furnaces are designed according to the individual technical description, to correspond as high as possible to the requirements of the Customers.

The turbo-convection used in the furnaces allow to reach the homogeneity of the temperature at standard level of  $\pm 3^{\circ}\text{C}$ , if necessary this rate can be improved up to  $\pm 1^{\circ}\text{C}$ .

The furnaces meet the requirements of aerospace norms such as NADCAP, AMS2750, BAC5621, which confirms the highest level of quality of the equipment.



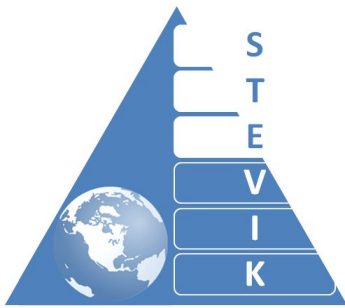
**Vertical load**



**Horizontal load**



**Vertical load**



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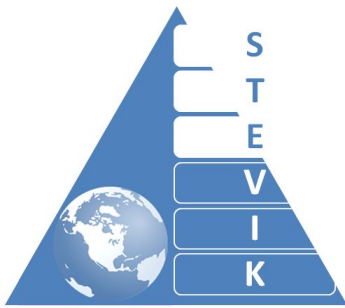
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### ► TECHNICAL CHARACTERISTICS

- Heating temperature: 0 – 650 °C.
- Standard temperature homogeneity +/- 3°C.
- Automatic system of filling the charge to the zone of quenching
- Standard time of transfer of the charge to the quenching bath not more than 7 seconds (from the moment of doors opening till the full immersion of the charge)
- Quenching liquid: water, polymer
- Possible types of the oven: mobile oven / fix oven
- Possible types of quenching baths: mobile bath / fix bath
- Possible types of ovens: vertical / horizontal / box oven / tunnel oven



- Standard volume of the furnaces with horizontal load: up to 30 m<sup>3</sup> (it is possible to increase the volume)
- Standard weight of the charge for the furnaces with horizontal load: up to 4 tons (it is possible to increase the weight)
- Standard volume of the furnaces with vertical load: up to 100 m<sup>3</sup> (it is possible to increase the volume).



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- Standard weight of the charge for the furnaces with vertical load: up to 4 tons (it is possible to increase the weight).
- Possible types of the doors: swing single leaf door / swing two-leafed door / guillotine type.
- Door opening gear: manual / automatic.
- Air circulation from the bottom up in the working area of the furnace provided by the centrifugal fans made of stainless steel.
- Resistance heating elements made of heat-resistant alloy (Type 800).
- Each heating element can be easily removed in the upper part of the oven even when the furnace is heated. To have an access to the heating elements there is no need to be inside the furnace.
- Heat-resistant insulation with thickness - 50 mm and rock wool with thickness -200 mm
- Furnace chamber is made of stainless steel with thickness – 1,5 mm.
- The temperature of the exterior walls of the oven only 20 °C higher than the temperature inside the building with the furnace stabilized temperature at 550°C.
- System of accelerated cooling can be installed.



#### ► NOTE

Please contact us for more detailed information as well as for system development according to your technical specification.

Standard warranty period: 12 months.