Manual Trolley Furnace >>

Main Application

The manual small trolley furnace is suitable for the heat treatment of medium and small workpieces. It has the advantages of large furnace loading, convenient workpiece access, low heat treatment cost etc. Processes include heat treating, homogenizing, annealing, preheating and stress relieving. Industries served are aerospace, oil drilling, steel mills, automotive, military and many more. Materials processed include aluminum, steel, cast iron, titanium and others.Saftherm manual car bottom furnace can be also customized for each individual application.

Main Features

> Manual trolley furnace bottom can be pulled out easily with the design to be free steering system
> The manual trolley furnace can load and unload the sintering materials easier
> Four universal wheel achieve wholly pulled function out of the furnace, and the two front can brake to fix the position
> Five sides heating increase the temperature uniformity largely
> Electric auto exhaust cover on the top can be freely set according to the temperature

Technical Parameters

Model	Chamber Size W*D*H(mm)	Volume(L)	Max Temp(°C)	OperateTemp(°C)	Voltage(V)	Heating Element	Controller Accuracy
STT-150-12	450x530x590	150L	1200°C	1100°C	380 V	HRE WIRE	±1°C
STT-200-12	500x530x720	200L	1200°C	1100°C	380 V	HRE WIRE	±1°C
STT-300-12	550x700x780	300L	1200°C	1100°C	380 V	HRE WIRE	±1°C
STT-450-12	600x750x1000	450L	1200°C	1100°C	380 V	HRE WIRE	±1°C
STT-660-12	600x1100x1000	660L	1200°C	1100°C	380 V	HRE WIRE	±1°C
STT-1000-12	800x1000x1250	1000L	1200°C	1100°C	380 V	HRE WIRE	±1°C
STT-1500-12	900x1200x1400	1500L	1200°C	1100°C	380 V	HRE WIRE	±1°C
STT-2200-12	1000x1400x1600	2200L	1200°C	1100°C	380 V	HRE WIRE	±1°C
STT-96-14	400x600x400	96L	1400°C	1300°C	380 V	SIC ROD	±1°C
STT-150-14	450x530x590	150L	1400°C	1300°C	380 V	SIC ROD	±1°C
STT-200-17	500x530x720	200L	1400°C	1300°C	380 V	SIC ROD	±1°C
STT-64-17	400x400x400	64L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C
STT-96-17	400x600x400	96L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C
STT-150-17	450x530x590	150L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C
STT-200-17	500x530x720	200L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C
STT-288-17	600x800x600	288L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C

Bogie Hearth Furnace>>

Main Features

A bogie-hearth resistance furnace,which comprises a car trolley and a furnace body, During the working process, the electric heating element on the furnace body and the electric heating element below the car bearing refractor layers are simultaneously switched on, so that the temperature balance at each angle,including the bottom.

1200℃/ 1400℃/ 1700℃ car bottom furnace (box type resistance furnace) mainly provides high temperature heat treatment environment for industrial, research institutes, factories and other industrial, and is applied to carburization new materials such as metal materials, ceramic materials, nano materials, and semiconductor materials and so on.

Equipment Description

>Furnace consists of furnace chamber material, heat insulation material and heating elements and car roll-out basement.

>It is mounted on a trolley with a burning plate, and the trolley can enter and come out of the furnace along the track.

>Furnace body and Temperature controller system box with separate design with safety.

>Auto lifting upwards door or door integrated with car bottom , the operation button on the separate control box.

Alloy resistance wire

Furnace Chamber

Heating Zone and Heating Element & Chamber material

>Heating Zone: The whole furnace can be divided with different temperature zones and more points temperature control.

>Heating Element:

—1200°C bogie hearth furnace with high-purity alumina ceramic fiber module block chamber material, High quality alloy resistance band arranged in the furnace three sides with good temperature uniformity.

—1400°C bogie furnace with high strong solid refractory brick chamber or alumina ceramic fiber. SAFTHERM generally use high quality SIC rod as heating element. It is easily for replacing.

Furnace Chamber

Alloy resistance band

SIC Rod Heater

Furnace Chamber

1700°C bogie furnace with high strong solid refractory brick chamber or alumina ceramic fiber. SAFTHERM generally use high quality MoSi2 rod as heating element. It is easily for replacing.

Furnace Appearance

>The shell of the furnace is machined by high-quality cold-rolled steel plate CNC machine tool, after welding, grinding, polishing, phosphating and acid.

>After washing and spraying plastic powder on the surface, it is baked at high temperature. The color matching is reasonable and the appearance is novel.

>Appearance color: ripple grey or silver, can be customized.

Temperature Control System

>Japan SHIMADEN or Yudian intelligent microcomputer PID temperature control instrument.

>Germany SEMIKRON SCR controller thyristor phase shift voltage control, PID parameter self-tuning function, over temperature alarm and break alarm function.

>Temperature control with automatic temperature rise, automatic heat temp preservation, automatic stop and can meet the requirements of continuous constant temperature and temperature control.

>SCR thyristor phase shift trigger voltage control method and heating temperature fluctuations are small with good temperature stability.

>When the load current exceeds the current limit value it will limit the output current of the voltage regulator within the rated current range to ensure the output and regulator work properly.

>The protection of the heating element avoids the impact of excessive current and voltage, and achieves safe and reliable control effect and control precision.

Furnace Structure

>Furnace Chamber consists of furnace material, thermal insulation material and heating elements.

>Temperature control system consists of temperature control instruments, control elements and thermocouples.

>Furnace body and temperature control center designed in separate structure.

>The trolley is designed in a rectangular shape. The electric drive of the trolley move forward or backward and the limit switch is designed to automatically stop. The trolley control button is integrated on the temperature control cabinet panel.

>There is a burning board on the trolley. The material of the burning board is stainless steel or silicon carbide ceramic.

Safety Protection

>Modular control, which can send out sound and light alarm signals when over-temperature and breakage occur in the working process, and automatically complete the protection movement.

>Equipped with an open circuit breaker on the equipment, it will pop up automatically in case of short circuit leakage, which can protect the equipment and safety of operating staff.

Model	Chamber Size W*D*H(mm)	Volume(L)	Max Temp(°C)	OperateTemp(°C)	Voltage(V)	Heating Element	Controller Accuracy
STT-96-12	400x600x400	96 L	1200°C	1100°C	380 V	HRE WIRE/BAND	±1°C
STT-288-12	600x800x600	288 L	1200°C	1100°C	380 V	HRE WIRE/BAND	±1°C
STT-640-12	800x1000x800	640 L	1200°C	1100°C	380 V	HRE WIRE/BAND	±1°C
STT-1200-12	1000x1200x1000	1200 L	1200°C	1100°C	380 V	HRE WIRE/BAND	±1°C
STT-2160-12	1200x1500x1200	2160 L	1200°C	1100°C	380 V	HRE WIRE/BAND	±1°C
STT-96-14	400x600x400	96 L	1400°C	1300°C	380 V	SIC ROD	±1°C
STT-288-14	600x800x600	288 L	1400°C	1300°C	380 V	SIC ROD	±1°C
STT-640-14	800x1000x800	640 L	1400°C	1300°C	380 V	SIC ROD	±1°C
STT-1200-14	1000x1200x1000	1200 L	1400°C	1300°C	380 V	SIC ROD	±1°C
STT-2160-14	1200x1500x1200	2160 L	1400°C	1300°C	380 V	SIC ROD	±1°C
STT-96-17	400x600x400	96 L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C
STT-288-17	600x800x600	288 L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C
STT-640-17	800x1000x800	640 L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C
STT-1200-17	1000x1200x1000	1200 L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C
STT-2160-17	1200x1500x1200	2160 L	1700°C	1600°C	380 V	MoSi2 ROD	±1°C