

HEAT TREATMENT PROCESS

HARDENING, BRAZING, ANNEALING, CARBURIZING, CARBONITRIDING
NITRIDING, OTHERS HEAT TREATMENT PROCESS



PIT TYPE FURNACE

DESIGNED WITH CIRCULAR CONSTRUCTION, WITH INSULATED COVER WHICH IS HYDRAULICALLY LIFTED FOR CHARGING OR REMOVING THE PRODUCTS INTO AND FROM THE FURNACE. THE PRODUCTS CAN BE LOADED INTO THE PIT FURNACE WITH CRANE OR SUITABLE LOADING MACHINE.

INDUSTRY

- . Aircraft
- . Automotive
- . Metals Parts
- . Forging
- . Foundry
- . Heavy Machinery Manufacturing
- . Heat Treatment Services

WHY HEAT TREATMENT?

TO IMPROVE TOUGHNESS OF MATERIAL, INCREASE HARDNESS, REFINE GRAIN STRUCTURE, TO REMOVE RESIDUAL STRESS, IMPROVE WEAR RESISTANCE

CONTINUOUS FURNACE SYSTEM



BOGIE HEARTH FURNACE



BOGIES WITH FLANGED WHEELS RUNNING ON RAILS FOR EASY AND PRECISE MOVEMENT OF HEAVY LOADS

TEMPERING , STRESS RELIEF FURNACE



FOR APPLICATION OF RELIEVE THE INTERNAL STRESSES AND REDUCE BRITTLINESS OF METAL PARTS AFTER HARDENING.

TITLING CRUCIBLE FURNACE : OIL OR GAS



WITH HIGH MELTING OUTPUT, MOSTLY USED FOR MELTING COPPER ALLOYS, ALUMINIUM ALLOYS, ZINC ALLOYS AND ETC. IN PRODUCTION.



HORIZONTAL VACUUM FURNACE



VERTICAL VACUUM FURNACE

SPECIFICATIONS :

MAX TEMPERATURE 1400°C,
VACUUM UP TO 10⁻⁵ MBAR.
WITH HIGH PURITY GRAPHITE AND CFC INSULATION,
TEMPERATURE UNIFORMITY ±10°C AND
SYSTEM ACCURACY ACCORDING TO AMS2750.

HEAT TREATMENT SPARE PARTS , CONVEYOR BELTING



HIGH QUALITY CONVEYOR BELT



HEATING ELEMENT & BURNER TUBE



IN-SITU & EXTRACTIVE OXYGEN SENSOR



ANTI-CARBURIZING PRODUCT

Nabertherm develops and produces laboratory and industrial furnaces for various applications for over 60 years. Nabertherm has the widest and deepest range of furnace in the world with large worldwide customer references. Its furnace is well-known in the market for its durability, excellent design, good quality and cost efficiency.



LABORATORY



MUFFLE FURNACE
1200°C/1400°C



ASHING FURNACE



HIGH-TEMPERATURE OVENS, AIR CIRCULATION CHAMBER FURNACE
450°C/650°C/850°C



HARDENING FURNACE
1280°C



PROFESIONAL CHAMBER FURNACES



ELECTRICALLY HEATED OVEN
300°C



LABORATORY MELTING FURNACE
1300°C/1500°C



HIGH TEMPERATURE CHAMBER FURNACES WITH MoSi₂ OR SiC UP TO 1800°C HEATING ELEMENTS



TUBE FURNACE UNDER VACUUM ATMOSPHERE, PROTECTIVE GAS ATMOSPHERE



CHAMBER HIGH-TEMPERATURE FURNACES WITH FIBER INSULATION UP TO 1800°C

THERMAL PROCESS TECHNOLOGY



SALT-BATH FURNACES FOR HEAT TREATMENT OF STEEL OR LIGHT METALS



CHAMBER FURNACES FOR HEAT CLEANING
500°C



CHAMBER DRYER
260°C



AIR CIRCULATION PIT-TYPE FURNACES



AIR CIRCULATION CHAMBER FURNACES >560 LITERS



RETORT FURNACES
HOT-WALL RETORT FURNACE UP TO 1100°C
PIT-TYPE COLD-WALL RETORT FURNACE UP TO 2400°C OR UP TO 3000°C
COLD-WALL RETORT FURNACES UP TO 2400°C



AIR CIRCULATION BOGIE HEARTH FURNACE



ROTARY HEARTH FURNACE UP TO 1300°C WITH AND WITHOUT AIR CIRCULATION



DEWAXING FURNACE



HINGED TUBE FURNACE FOR HORIZONTAL OR VERTICAL OPERATION UP TO 1300°C - FOR GAS ATMOSPHERE OR VACUUM



GAS-FIRED CHAMBER FURNACE UP TO 1300°C



LIFT-TOP OR LIFT-BOTTOM FURNACE WITH WIRE HEATING UP TO 1400°C, ALSO AS COMBI FURNACE FOR DEBINDING AND SINTERING IN ONE PROCESS



CHAMBER FURNACE FOR CLEAN ROOM SOLUTIONS



FUSING FURNACE WITH WIRE HEATING WITH FIXED TABLE



HIGH-TEMPERATURE LIFT-BOTTOM FURNACE UP TO 1650°C FOR SINTERING OF TRANSLUCENT ZIRCONIA WITH INTEGRATED SPEED COOLING SYSTEM



HIGH-TEMPERATURE CHAMBER FURNACE UP TO 1650°C SUITABLE FOR SINTERING TRANSLUCENT ZIRCONIA

ARTS AND CRAFTS



CHAMBER KILN, HEATED FROM FIVE SIDES



RAKU KILN



TOP LOADER, ROUND/OVAL