

Thermal Processing Equipment for the manufacture of high quality components



RWO retort heat-treatment furnace

with fast cooling function for

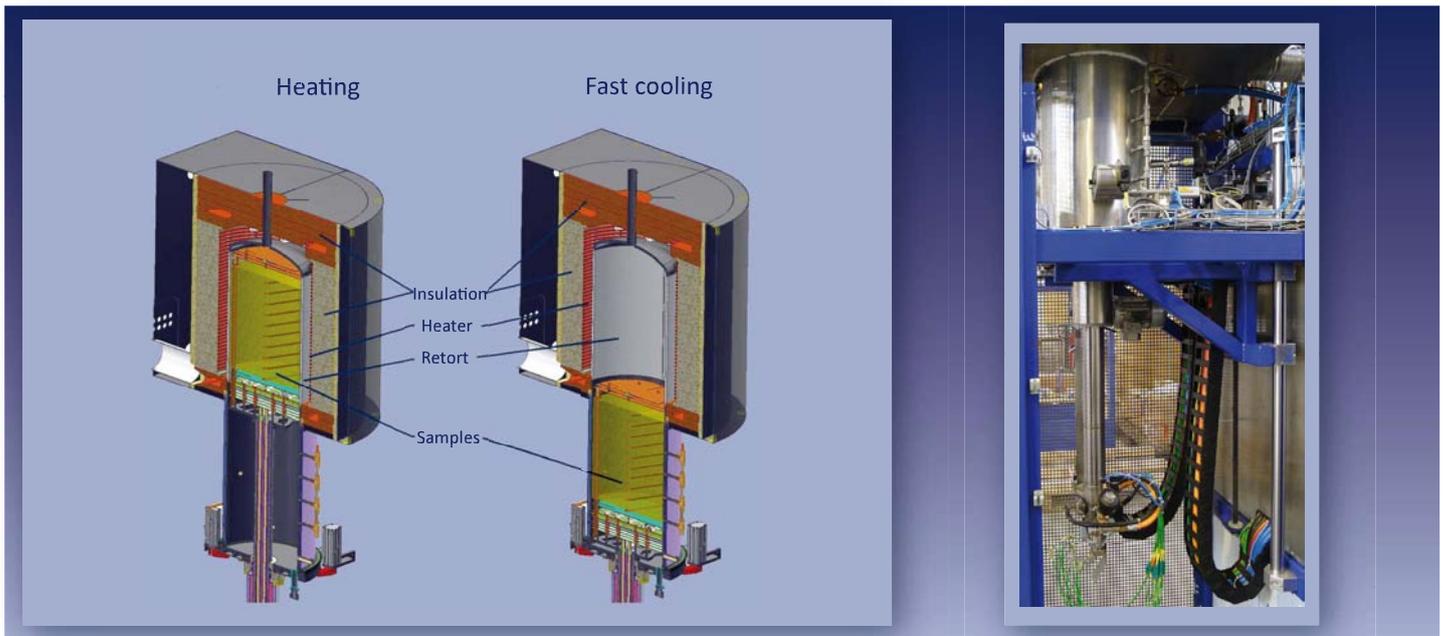
- Quenching
- Freezing of structure
- Short process times
- Fast cooling under vacuum condition

Model series RWO vertical version

MUT company started business 2005 to sell this product line. The furnace series was permanently redesigned. Experiences of the last years were integrated into the furnace design.

Ø [mm]	H [mm]	Volumen[l]	Anschlussleistung [kW]	B[mm]	T[mm]	H[mm]
150	250	4,5	8	585	800	2150
200	280	9	12	650	1200	2000
280	300	18	17	800	1350	2310
360	400	41	27	950	1670	3180
460	500	83	35	1050	1750	3600





RWO retort heat-treatment furnaces

are in principle vertical retort tube furnaces with movable charging racks. A retort heat-treatment furnace consists of two chambers which have the same gas atmosphere, one hot chamber and one fast cooling chamber. The upper hot chamber works like a classical retort tube furnace (hot wall oven). The lower chamber is a double-walled water cooled tube that is an extension of the upper hot retort tube, with additional gas inlet jet nozzles. The charging rack device with the work load can be moved vertically between these two chambers with an electrical spindle drive. After placing the parts on the charging rack and dialing in the desired gas atmosphere (vacuum, oxidizing atmosphere, reductive atmosphere, etc. ...) the parts will be heated up to a certain temperature according to a controlled temperature-time-program. Afterwards the parts can be moved into the fast cooling chamber and can be cooled down very fast. Thus the parts can be cooled down very fast also under vacuum condition. Additionally, to this fast cooling the parts can be rapid cooled with gas through the gas inlet jet nozzles.

Therefore this furnace series is especially suitable for heat-treatment that require high cooling rates as such as: annealing processes for metal, hardening, pre-sintering etc. Furthermore, this technology allows reducing cycle time!

For this furnace series there is a comprehensive range of accessories available. For further information please see brochure of furnace series RRO or contact us for any questions you might have.

MUT ADVANCED HEATING designs and manufactures customized thermal processing equipment and systems since 1994 for industries, such as: glass and ceramic, metal processing, powder metallurgy, carbon and chemical processing industries.

We design systems for state of the art processes, such as: sintering, debinding, joining techniques, heat treatment of aggressive substances as well as for high-pressure and hot gas treatment.

With in-house competence in mechanical design, process and safety techniques, electrical design and software development we are a skilled and reliable partner to our customers. MUT is distinguished in its industry by a high level of vertical integration.

