



## REMIX S.A.

- Casting and non-ferrous metals heat treatment furnaces



Crucible furnaces are designed for melting and holding of liquid non-ferrous metals and their alloys: aluminum, copper, silver, zinc, tin, magnesium and others. REMIX Company offers electric (resistance), oil, or gas heated furnaces – stationary or tilting as well.

### Maximum capacity and productivity of melted charge:

- for aluminum – capacity up to 800 kg; productivity up to 400 kg/h
- for copper alloys – capacity up to 1300 kg; productivity up to 550 kg/h.

*The design of our furnaces enables to reach the temperature of 1450°C inside the crucible.*

Our Customers may increase the device productivity applying additional options:

- temperature measurement system inside the crucible
- power control systems with continuous output
- weekly programmable clock
- operation time meter
- power consumption device
- exhaust fumes recuperator

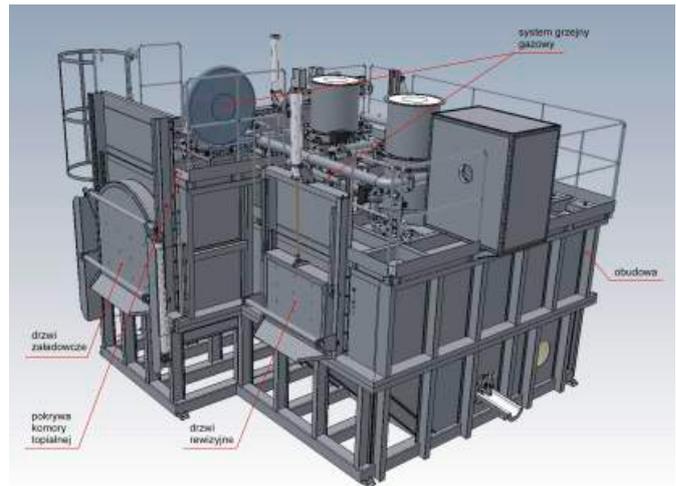
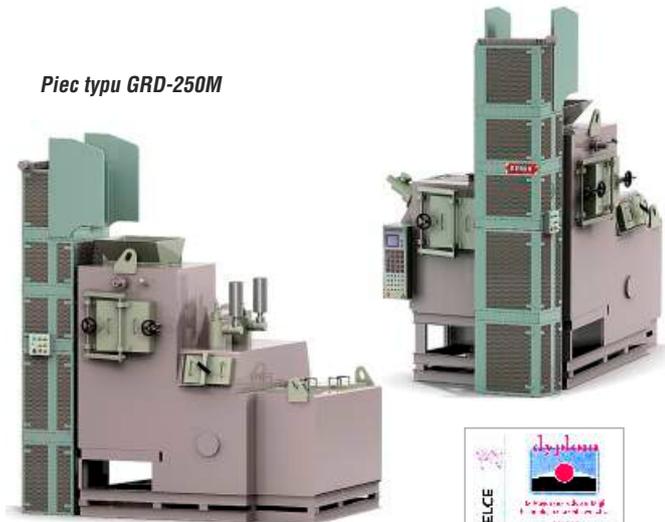


## Shaft and bath furnaces for aluminium melting and holding

Tilting or stationary shaft and bath furnaces are designed for melting and holding of liquid aluminum and its alloys, at maximal temperature up to 1100°C, measured in the heating chamber. Productivity for aluminum is up to 4000 kg/h, the capacity of baths reach 20 tons of liquid aluminum.

The combination of advantages of shaft furnace with modern control system of the heating system enables to achieve high efficiency of the used equipment. As a result there is low energy consumption.

Piec typu GRD-250M



## Bath furnaces for liquid aluminum holding

REMIX delivers electric or gas bath furnaces for liquid aluminum holding at maximal temperature of 900°C, inside the furnace chamber. The furnaces are adapted to run with permanent mould casting machines and injection moulding machines equipped with filtration or refining system. Such solution provides high production capacity and quality. This equipment can additionally be equipped with separate chamber with mixing pump designed to melted aluminium turnings.



All furnaces are custom designed according to customers' individual needs. They are equipped with control system and loading and unloading devices - .

REMIX offers:

- chamber furnaces
- car bottom furnaces
- continuous furnaces
- technological lines for continuous operation and automated machining slots

Versions available to operate in air atmosphere, protective atmosphere or controlled one.

Technological applications:

- quenching
- annealing
- solution heat treatment
- aging



The ladles are designed to transport liquid metal. The maximal temperature of metal that is being transported is 1350°C for cast-iron, 1250°C for copper, 800°C for aluminum and 520°C for zinc. The ladles can be transported using either the overhead crane or forklift. The ladle's content can be pour out by use of mechanical transmission or turntable installed on the forklift. The ladle is set to the customers' individual needs.



## Ladle heaters

REMIX offers a ladle heaters designed for soaking an empty ladle chamber before being filled up with liquid metal, to the maximal temperature of 800°C, measured inside of the chamber. The heater can be gas or electrically powered.

The design of the equipment for aluminum alloys refining and modification is based on the licensee of Foundry Research Institute, Cracow . Refining process carried out with the use of REMIX equipment improves alloy quality, what as a result improves the quality of casts.

## Advantages of aluminum alloys refining and modification equipment:

- simple and rigid construction
- regulation of the inert gas flow
- great processes productivity
- extra feeder adding as an option
- modern control and gas cabinet
- owned equipment upgrade as an option



### Standard sizes of the aluminum refining equipment.

Refining device type	The base type	Loose materials dosage	Description
URM-1/A	UP-1/A	URM-1/AX	The base is made as founded column – interaction with placed ladle and crucible.
URM-1/B	UP-1/B	URM-1/BX	The base is made as founded column that may be rotated about own axis. The rotation is electrically powered. The ratchet positions the arm with the given furnace axis, and in the axis between the furnaces (designed for two slots of melting furnaces).
URM-1/C	UP-1/C	-----	The corps is designed for mounting on the overhead crane lifting slings. The overhead crane provides proper refining device positioning according to the furnaces.
URM-1/D	UP-1/D	URM-1/DX	The base is a passing carriage that is handy pushed from one furnace (ladle or crucible) to the other one.



## Graphite crucibles

- universal crucibles of great lifetime for aluminum alloys melting and holding and for zinc distillation used in the resistance and induction furnaces (They do not have any additional marking, red label only).

## Silicon carbide SiC crucibles

- designed for high-power and high loaded furnaces, especially for electric furnaces – great lifetime. The devices are adapted for operation in extreme conditions with sudden temperature changes and applied for copper alloys melting in resistance and induction furnaces and for aluminum alloys melting in resistance, induction, gas- and oil-fired furnaces. (They have an additional marking - X and green label).

## Higher-quality silicon carbide SiC crucibles

- crucibles with additional flame-resistant protection layer. Assigned for melting of copper alloys; brass and bronze in oil- and gas-fired furnaces. (They have an additional marking - XO and yellow label).



## Casting accessories:

- screens for temperature sensors
- degassing lances
- crucible stands
- ladles bowls for liquid metals scooping
- crucible covers
- transfer ladles and dosing tubes for liquid metal transport
- plungers



## Repairs and modernizations

REMIX provides a wide range of repair and modernizations of the equipment manufactured by us or other producers:

- replacement of lining (thermal insulation)
- repairs and modernizations of the heating systems
- repairs and modernizations of the control systems
- replacement of the control systems

*We also provide periodic inspections and services of heat treatment equipment.*



## REMIX scope of supply:



- crucible furnaces for non-ferrous metals melting and holding
  - bath and bath-shaft furnaces for non-ferrous metals melting and holding
  - equipment for heat treatment and chemical heat treatment of metals
  - furnaces and technological lines for heat treatment of castings
  - auxiliary equipment
  - ladles for transport of liquid metals
  - bath furnaces for hot dip galvanizing
  - equipment for refinement and modification of alloys
  - industrial dryers
  - repairs and modernizations
  - spare parts (heating elements, tooling etc.)
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- crucibles and other casting accessories
  - insulating materials (mats, plates, sections, mortars etc.)



## 0 firmie

- **REMIX S.A.** - present at the heat treatment market since 1990. In Poland, one of the biggest heat treatment furnaces manufacturer for non-ferrous metals melting and holding. We offer complete supply, starting from design and manufacturing of melting and holding furnaces, auxiliary equipment and devices for thermal, thermo-chemical heat treatment and casting as well.
- **REMIX S.A.** - the design department provides complete designing and documentation according to the customers' requests and needs.
- **REMIX S.A.** - provides complete warranty and post-warranty services with a wide range of spare parts supply.
- We manufacture high quality, European standards equipment and subassemblies' parts according to the ISO Standard Certificate PN-EN ISO 9001.



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