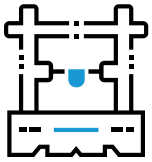
OROTIG

CASTING - **ACKERON**

PATENT-PENDING INLINE CASTING SYSTEM

Excellence in platinum casting for fine jewelry

Ackeron is the ideal solution for platinum casting, designed to ensure product quality that meets the high standards of fine jewelry. With its innovative horizontal casting system and a chamber capable of melting up to 500 g of platinum in a single operation, Ackeron addresses the needs of jewelry manufacturers working with platinum for luxury creations.



Superior Casting Quality

Ackeron ensures perfectly smooth, porosity-free castings with exceptional alloy homogeneity. Its horizontal casting system enables the rapid transfer of molten metal, minimizing temperature losses and ensuring complete, uniform casting results.

Maximum Process Efficiency

The automatic flask locking and tilting system reduces setup and operational times, streamlining workflow and ensuring high repeatability and process efficiency.

Simplified Operation

Ackeron features a 10″ capacitive touch screen displaying real-time casting parameters. It offers pre-set programs for platinum, gold, and silver, along with 50 customizable options for straightforward and immediate casting process management.

Casting volumes

Pt 500 g

Au 18 kt 370 g

Ag 250 g

Functionality and versatility for every need

Ackeron offers a flexible solution, **available both as a benchtop version and with an integrated support base** to accommodate the external chiller and vacuum pump. Both configurations include a practical **drawer with refractory stone**, ideal for storing crucibles, tongs, molds, and other essential tools, ensuring an organized workspace and optimizing efficiency during the casting process.

Benchtop version

Support base

PATENT-PENDING INLINE CASTING SYSTEM

Orotig technology: perfect platinum casting

Ackeron incorporates the innovative Orotig technology (patent pending), featuring a **horizontal crucible perfectly aligned with the casting flask**.
This configuration enables rapid and direct transfer of molten metal, **drastically minimizing temperature loss and reducing turbulence during metal pouring into the mold cavity**.
The pouring speed is essential to maintain the fluidity of platinum, which solidifies very rapidly, ensuring flawless mold filling.
The **automatic vacuum and overpressure functions** (up to 2 bar) guarantee complete and uniform filling of the flask, including its most intricate branches, delivering castings with smooth and compact surfaces.

PATENT PENDING

Melting temperature
1.768 °C

Density
21,45 g/cm³

Platinum casting, ring

How does it work?

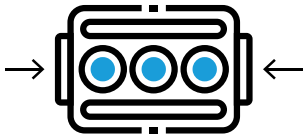
The direct and swift pouring of metal into the flask prevents temperature drops and minimizes vortices, enhancing the final result’s quality.

PATENT-PENDING INLINE CASTING SYSTEM

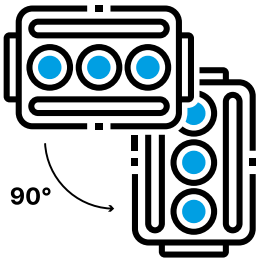
Automatic flask locking and rotation: efficiency and repeatability

The automatic flask locking system optimizes the workflow by significantly reducing setup times.
The operator simply places the flask into the dedicated housing, and a piston automatically locks it in place, eliminating the need for manual intervention.
The chamber rotation is fully automated as well, with controlled, consistent speed, ensuring maximum process repeatability.

Automatic flask locking



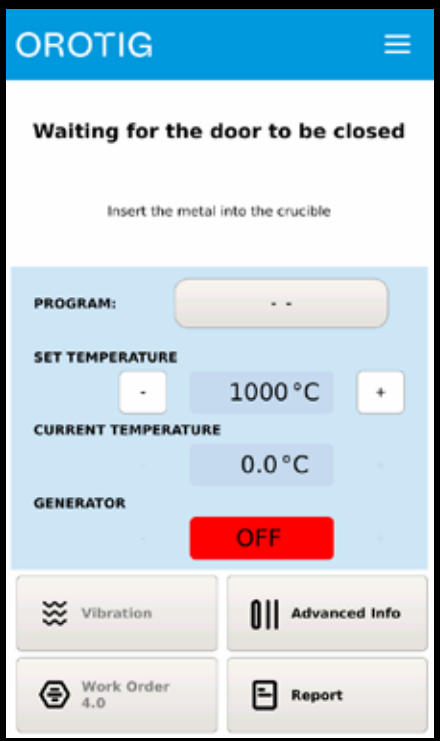
Automatic chamber rotation



User-friendly interface and advanced digital management

Ackeron is designed to deliver exceptional performance in the casting of platinum, gold, and silver.
The 10" capacitive touch screen offers an intuitive interface, allowing operators to continuously monitor casting parameters in real-time throughout the entire production process.

Equipped with **three pre-set programs** tailored specifically for platinum, gold, and silver, Ackeron also supports **up to 50 customizable programs**. This flexibility enables operators to fine-tune key parameters such as temperature, casting time, and cooling speed.
Leveraging the latest technologies, Ackeron ensures seamless digital process management.
Ethernet connectivity allows for **remote monitoring and support**, while its 4.0-compliant architecture ensures smooth integration into interconnected production systems, providing reliable performance in any manufacturing environment.



Technical data

CASTING PROCESS	Induction with controlled atmosphere
MAX CASTING VOLUMES (g)	PT (500 g), Au 18 kt (370 g), Ag (250 g)
MIN CASTING VOLUMES (g)	PT (300 g), Au 18 kt (100 g), Ag (100 g)
OVERPRESSURE WITH GAS	Argon 2 bar
VACUUM	10^{-2} bar
MAX FLASK SIZE (h x Ø, mm)	170 × 130
TEMPERATURE CONTROL	Pyrometer, up to 2000° C
FLASK LOCKING	Automatic
FLASK FILLING	Automatic
FLASK FILLING SYSTEM	Tilting
COOLING SYSTEM	Optional external water cooling system
DISPLAY	10” Touch screen
POWER	230 Vac ±10%, 60 Hz, 3P + N + PE - max power consumption 10 kW 400 Vac ±10%, 50 Hz, 3P + N + PE - max power consumption 10 kW
COMPRESSED AIR	6 bar
MACHINE WEIGHT	310 kg
TRANSFORMER WEIGHT	90 kg

Accessories

CHILLER