

OROTIG 

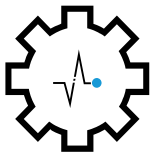


CASTING - **PROMETHEUS**

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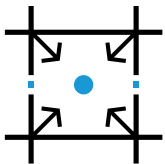
# Patented inline casting system for precious metals

Orotig sets a new standard for casting precious metals. **Prometheus is a fully automatic, easy to use tabletop casting machine** that enables jewelry producers to create customized designs directly at their shop, reducing lead time for the end customers.



## Fully automatic

The operator only needs to push a button, while the tilting and the blocking happens in a completely automatic way.



## Compact

Prometheus' compact size allows seamless placement in any lab, catering to even the smallest spaces. An ideal companion for daily use, it combines efficiency with versatility.



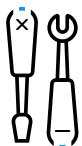
## Consistent, high-quality results

Perfectly smooth surface with reduced porosity and great alloy homogeneity are obtained thanks to the inductive power mixing and automatic vacuum and overpressure functions.



## Easy to use

With a user-friendly interface, Prometheus is perfect for first-time operators. Simplifying the experience, it ensures accessibility and ease of use for all users.



## Low maintenance, few consumables

Manufactured in Italy using top-quality materials, Prometheus stands out for its durability and minimal maintenance requirements. It does not require any consumables, representing enduring quality and cost-effectiveness.

## Casting volumes



Au 18K 150 g



Ag 90 g

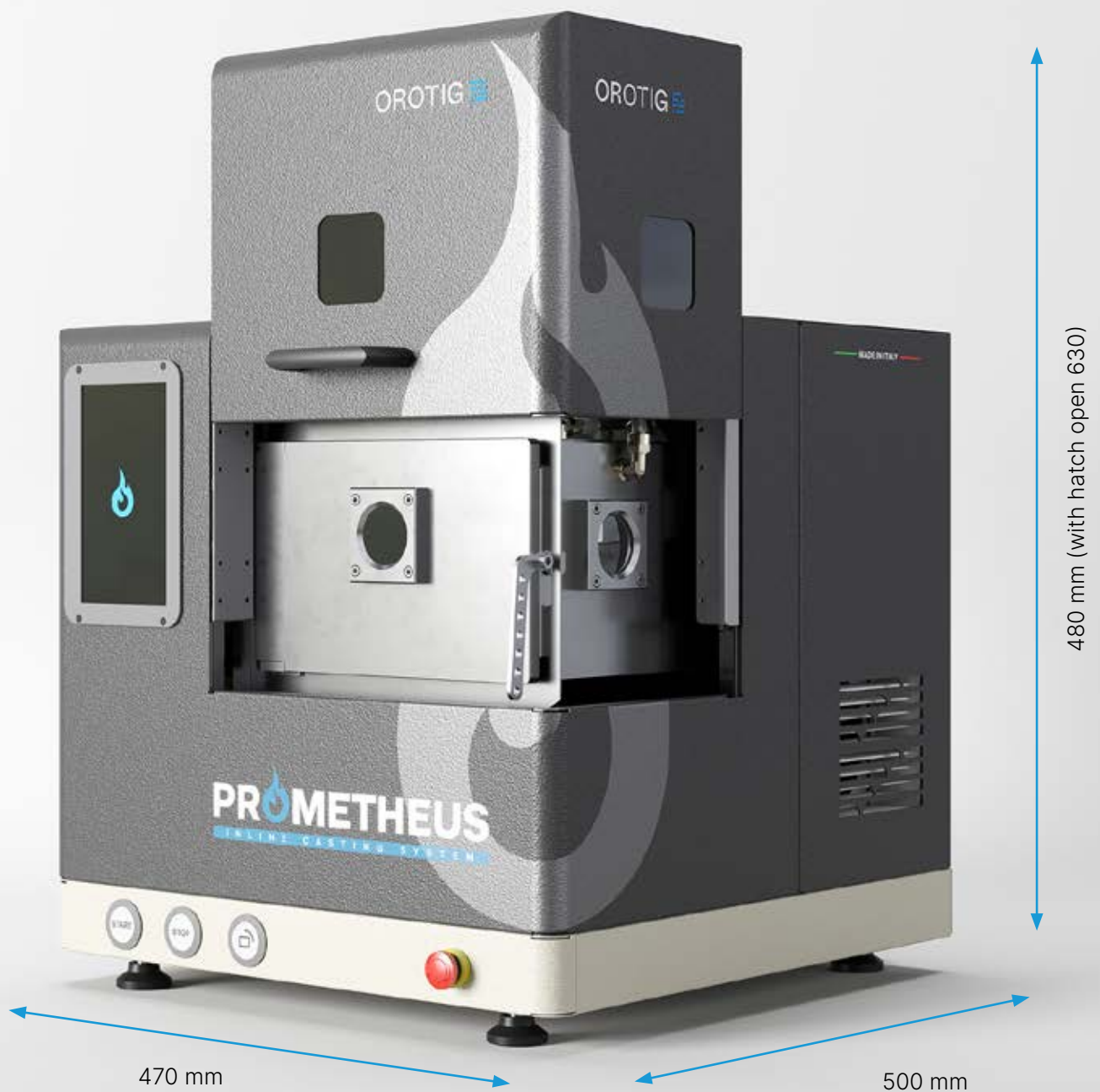


Pt 140 g

# Compact

Not only does Prometheus boast a remarkably compact footprint, making it suitable for even the tightest spaces, but it also efficiently manages all automatic functions using a minimal amount of gas. This unique feature **eliminates the need for compressed air, ensuring efficient use of shop space.**

Furthermore, while in its standard configuration **the external chiller enables continuous casting cycle,** thanks to the integrated water cooling system, Prometheus **can handle two consecutive casting cycles without the need for an external chiller,** optimizing shop space even further.



PROMETHEUS - INLINE CASTING SYSTEM

# The first inline casting system for consistent high-quality results

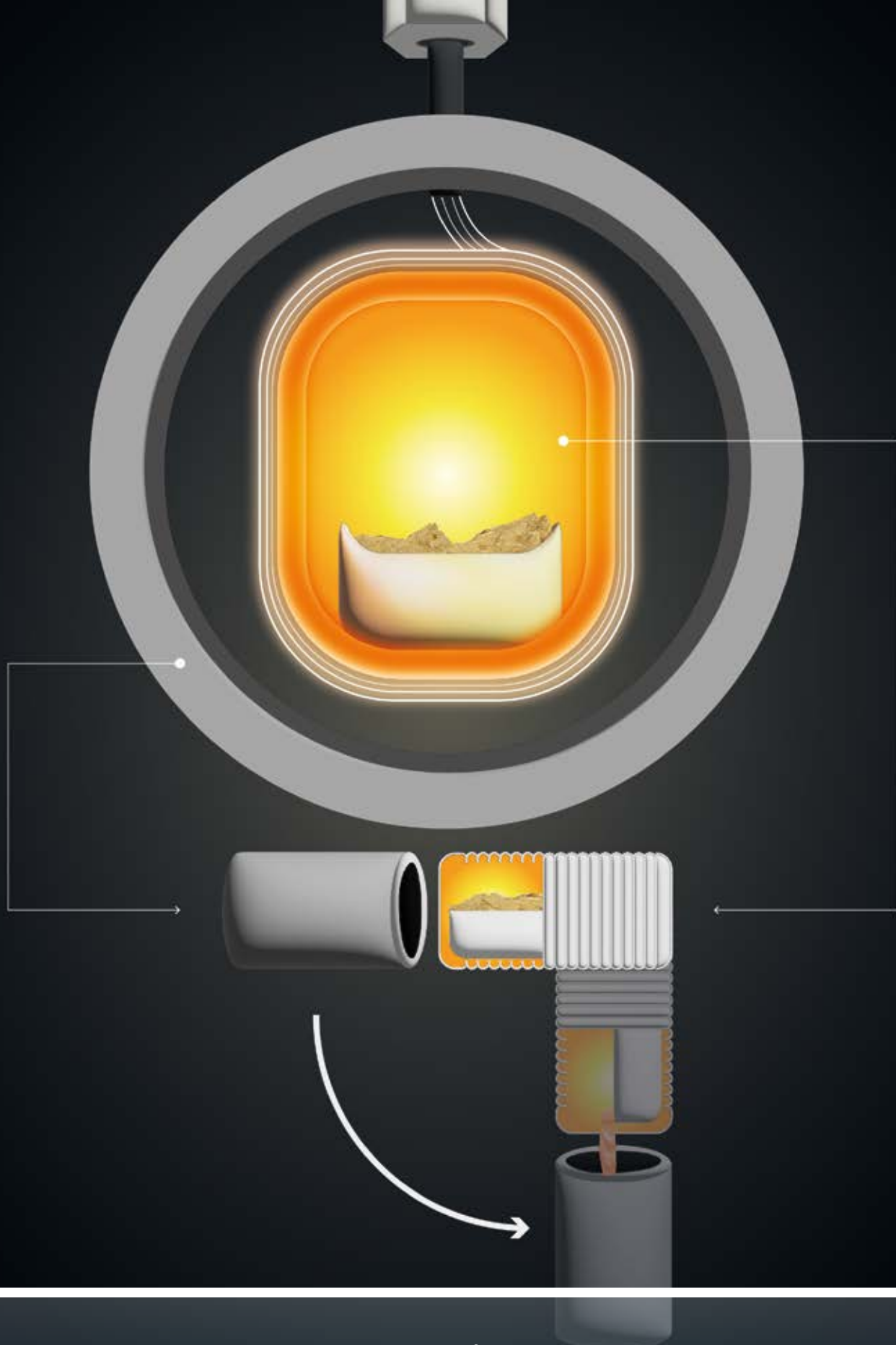
JEWELRY WITH SMOOTH SURFACE AND REDUCED POROSITY

With its patented linear system, Prometheus features a design where the crucible is in horizontal position and aligns perfectly with the flask. This innovative design marks a groundbreaking advancement, **enabling the direct and swift pouring of metal into the flask**. This ingenious approach not only streamlines the process but also **prevents temperature drops and minimizes vortices, ultimately enhancing the final result's quality**.

Moreover, **the automatic vacuum and overpressure functions (up to 2 Bar) and the inductive power mixing** elevate performance, ensuring flawlessly smooth surfaces and perfect flask filling, even for filigree jewelry pieces.



*Ring casting, yellow gold*



## How does it work?

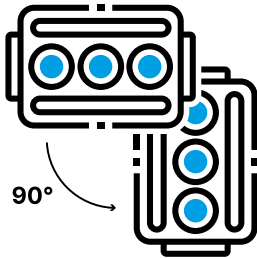
The direct and swift pouring of metal into the flask prevents temperature drops and minimizes vortices, enhancing the final result's quality.



## Fully automated process

**The flask filling process operates seamlessly through a fully automatic, one-button operation.**

A mere push of a button initiates the tilting of the vacuum chamber, ensuring remarkable process repeatability and consistently superior results. This streamlined process guarantees efficiency and reliability.



Moreover, the **automatic flask blocking**, facilitated by a gas-powered piston (without the need for compressed air), further enhances workflow efficiency.

This feature empowers even less experienced operators to achieve optimal outcomes effortlessly.

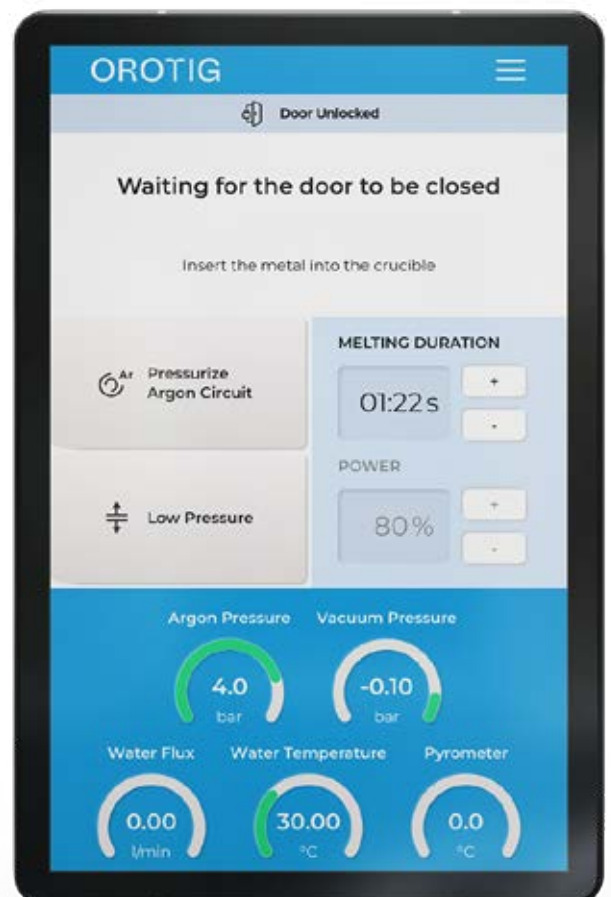
## Intuitive software

Experience enhanced control through Prometheus' advanced **7" touch screen display**. Engineered for user-friendly operation, this interface ensures a smooth casting experience. Throughout the cycle, casting parameters remain clearly visible, empowering operators with real-time information for optimal decision-making.

Prometheus has a **library of 50 programmes** specifically designed for metal casting (gold, silver and platinum). Furthermore, it emphasises customisation, offering the possibility of creating customised **programmes adapted to the operator's specific casting needs**.

The main controls (Start, Stop, Rollover) are in manual configuration to facilitate the use of the machine with gloves.

Prometheus includes Ethernet connectivity, diagnostics and 4.0 configuration, maintaining an industry-leading approach.



## Low maintainance

Prometheus boasts a **sturdy, heat-resistant body that ensures maximum safety and minimal absorption**. Its robust design allows **easy access to the machine core**, simplifying service and maintenance procedures and **reducing downtime**.

In contrast to machines equipped with stoppers, **it minimizes the risk of component wear and metal leakage, reducing the risk of precious metal loss**. This results in reduced operating expenses, providing an economically feasible solution without compromising performance. This reduction in consumables aligns with sustainability objectives, minimizing environmental impact.

Ultimately, Prometheus stands as a testament to durability, simplified maintenance, and cost-efficiency in precision casting technology.

## Technical specifications

|                                   |  |
|-----------------------------------|--|
| <b>CASTING PROCESS</b>            | Induction with controlled atmosphere                       |
| <b>CASTING VOLUMES (gr)</b>       | Au 18k (150 gr), Ag (90 gr), Pt (140 gr)                   |
| <b>OVERPRESSURE WITH GAS</b>      | Argon 2 Bar  |
| <b>VACUUM</b>                     | $10^{-2}$ Bar  |
| <b>MAX FLASK SIZE (h x Ø, mm)</b> | 90 × 100   |
| <b>TEMPERATURE CONTROL</b>        | Pyrometer, up to 2000°C                                    |
| <b>FLASK BLOCKING</b>             | Automatic  |
| <b>FLASK FILLING</b>              | Automatic  |
| <b>FLASK FILLING SYSTEM</b>       | Tilting  |
| <b>COOLING SYSTEM</b>             | Integrated water cooling / Optional external water cooling |
| <b>DISPLAY</b>                    | 7" Touch screen  |
| <b>POWER MAX</b>                  | 2,5 Kw 230V 50/60Hz  |
| <b>COMPRESSED AIR</b>             | Not needed   |

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