

THE SPACELESS CONCEPT: NO MORE SPACER

Each Tera tunnel furnace - T-Barmaster - involves the use of ingot molds combined with spacers. In fact, spacer ensures perfect heat distribution in the ingot mold during melting.

But, why not design a tunnel furnace without spacers?

The "Spaceless" concept is geared towards maximum optimisation of our tunnel furnace. Less space occupied, less consumption, optimum performance. To achieve this, we decided to eliminate spacers and rethink the entire design of our T-Barmaster.



SPACE SAVING

By eliminating the spacers and rotating the inlet orientation of the ingot moulds in the furnace, we were able to reduce the overall dimensions of our T-Barmaster.



HIGHER PRODUCTIVITY

Our goal is to have machines that perform even better in terms of consumption and productivity. The performance of our "Spaceless" furnace is the sum of all the best technology we have on hand.



REDUCTION OF CONSUMPTION...

...of energy and graphite. With the same consumption we almost doubled productivity. In addition, by eliminating the spacers we have reduced graphite consumption.

T-BARMASTER ONE SMART SPACELESS



1700 mm

2400 mm

1350 mm



Overall dimensions (LxWxH): 2400 x 1350 x 1700 mm
Overall weight: 1500 kg
Converter on-board
Converter weight: included in the weight of the machine

A NEW ECOLOGICAL APPROACH TO INGOTS PRODUCTION

Everyone wants high performance at a fair price, but eliminating spacers was also a choice of responsibility and awareness towards a more rational, conscious and ecological production. With "Spaceless" furnaces, we have reduced footprint, raw material consumption and increased the consumption/production ratio: this translates into an advantage on all sides!

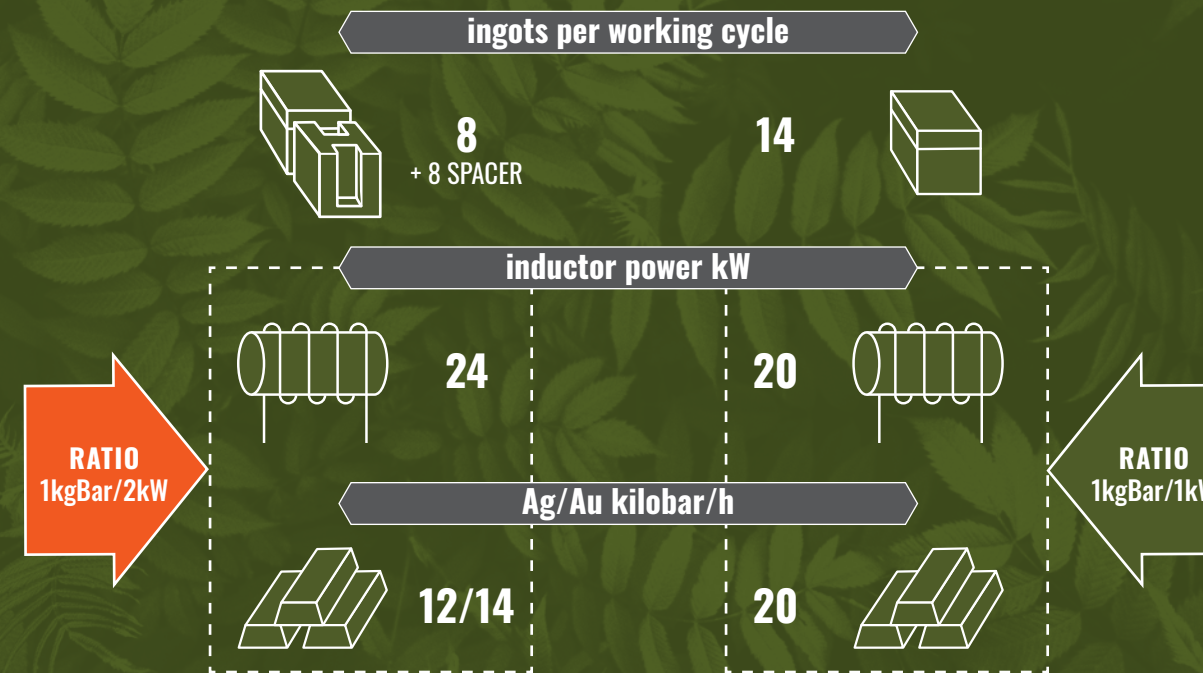
TECHNICAL DATA

- Total absorbed power: 25 kW
- Converter power: 20 kW
- Supply voltage: 400V - 3Ph-E - 50 Hz
- Cooling device: T-Chiller O81
- Air compressor: SX6

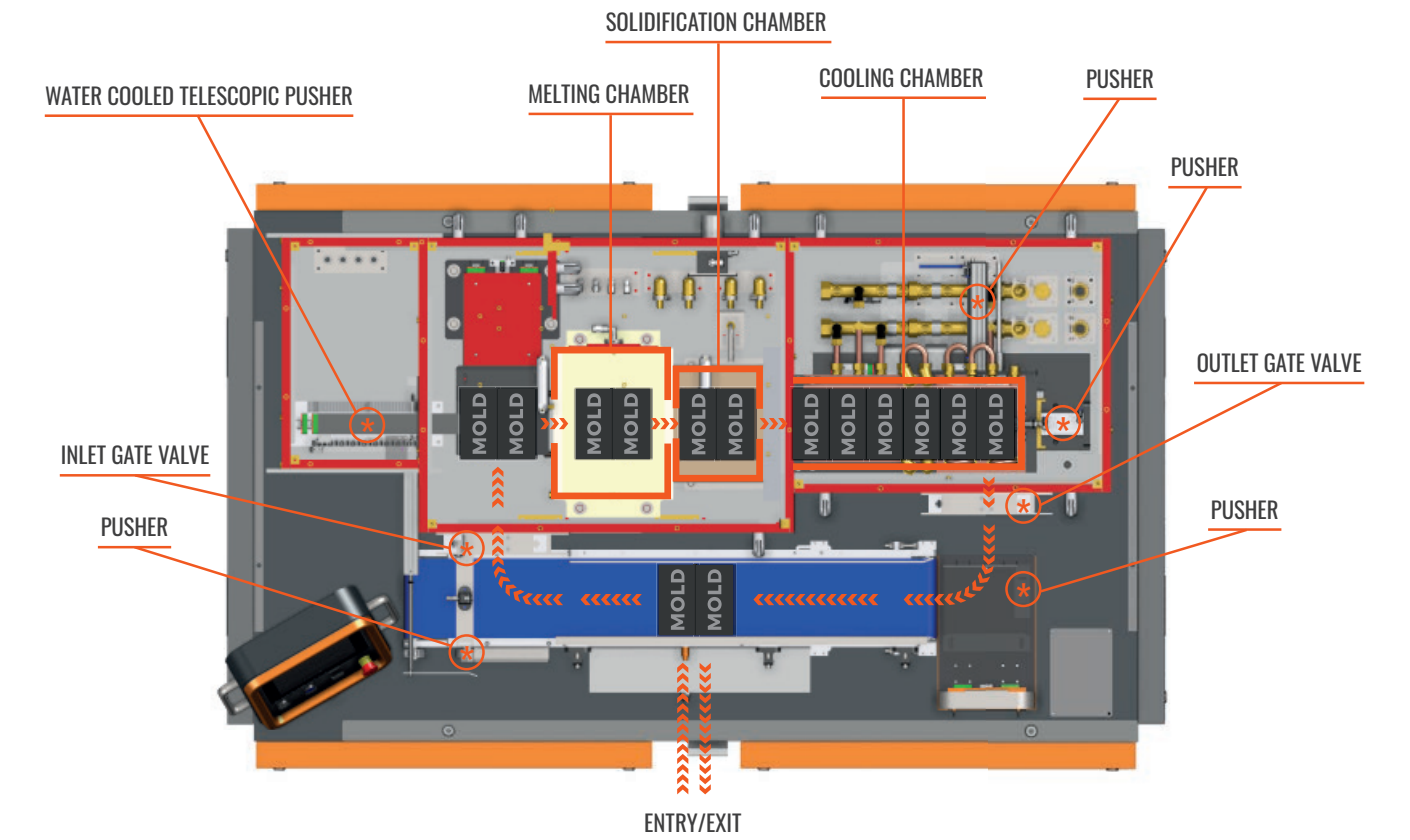
T-BARMASTER ONE SMART



T-BARMASTER ONE SMART - SPACELESS



ALL WORK STEPS IN A SMALL SPACE



PERIPHERAL EQUIPMENT



T-CHILLER Cooling system

The critical phase of precious metals bars solidification must be fully controlled, T-Chiller ensures a constant flow of chilled water.



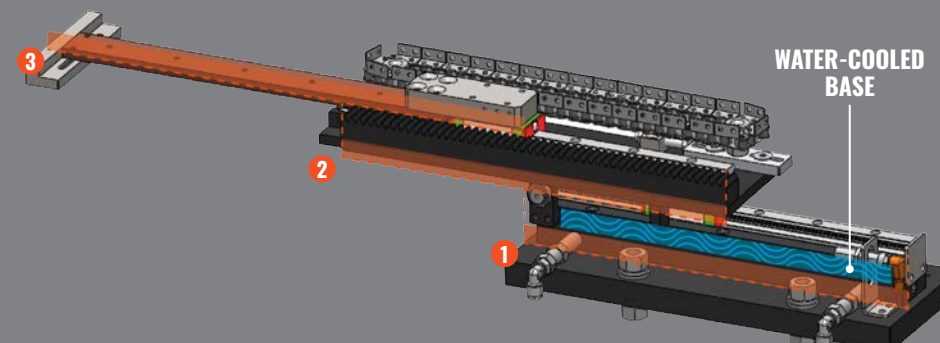
T-NITRO Pure nitrogen gas generator

T-Nitro, specifically designed for the Tunnel Furnace electromagnetic fields, guarantees a continuous production of pure nitrogen (up to 99,999%) of top quality, perfectly filtered and dehydrated.

3 TECHNOLOGIES THAT MAKE IT POSSIBLE

1 WATER-COOLED TELESCOPIC PUSHER

Pusher with 3 thrust levels, driven by electric motor and with water-cooled base. Electronics and motor are located outside the range of the pusher in a protected environment.



2 GATE VALVE...

...instead Pich Valve. Compared to our classic furnaces, in this case there is not one long train of molds but several trains of 2 molds respectively.



3 HIGH-EFFICIENCY CONVERTER

Thanks to our collaboration with Italmimpianti Orafi, we have developed internally a high-efficiency converter that is silent, compact and has an excellent power consumption ratio.

Max. power: 20 kW
Frequency: 45 - 50 kHz
Working point: auto-tuning
Noise level: < 30 dB
Dimensions WxHxD: 19.5 x 42.5 x 30 cm
Weight: 35 kg



SILENT



COMPACT



EFFICIENT



Entirely designed and manufactured by



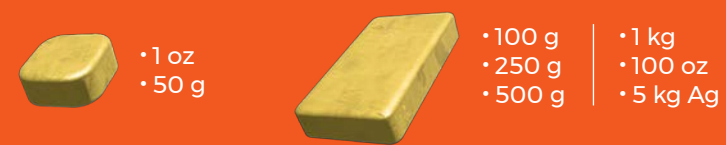
T-BARMASTER ONE SMART SPACELESS

We have converted our T-Barmaster One Smart tunnel furnace into a new, more compact, better performing and more eco-friendly version.



The greenest induction tunnel furnace ever created.
Soon available in various T-Barmaster formats.

T-BARMASTER ONE ingot formats



T-BARMASTER 400 ingot formats



TERA AUTOMATION SRL

Via Romena 7/9, Loc. Porrena
52014, Poppi (AR), Italy
VAT: IT01979320510
Phone: +39 0575 536625

www.tera-automation.com | tera@tera-automation.com

OUR PASSION FOR YOUR EVOLUTION

Stampa_Dicembre 2023

Tera Automation S.r.l. declares that the data and/or images in the brochure do not constitute an infringement of other people's intellectual or other property rights.



T-BARMASTER SPACELESS



The greenest
casting bar machine