Smart Manufacturing for the Future

Numbering

Automatic marking machine for ingot serialization and logo printing

WHAT IS T-NUMBERING

One single machine with a very compact size lets you apply logos, serial numbers or customized texts on metal surfaces thanks to its **column-mounted marking tool with electromagnetic micro-percussion marking stylus**.

The T-Numbering™ marking system **does not engrave, but it performs micro markings**; therefore, the metal is not removed, but just flattened.

The main advantage of this machine is the **absence of metal loss**.

This innovative solution, which represents an **alternative to traditional presses**, allows marking different types of images, fonts or numbers on precious metal ingots and other types of surfaces, without needing to buy different stamps or bulky machines.

It is recommended to opt for a stand-alone T-Numbering™ in the case of small-sized or small to medium-sized production.

THE ADVANTAGES OF AN AUTOMATED SOLUTION

- Customization of precious metal ingots
- **Compact and modular** work station
- **Can mark various shapes, surfaces and materials**
- Top quality and accuracy of the guidance
- Straightforward user interface
- **No metal loss**
- It can easily be integrated

T-Numbering is available as:

STAND-ALONE TECHNOLOGY

SEMI-AUTOMATIC TECHNOLOGY

FULLY AUTOMATED TECHNOLOGY

4.0

TERA automation

forging competitive clients™

HOW IT WORKS

The electromagnetic micro-percussion T-Numbering™ machine **marks both precious metal ingots and objects made with varying material, shape and surface**, without removing any material. Moreover, the whole process can be customized according to the customer's specific needs.

ENDLESS MARKING POSSIBILITIES

T-Numbering™ is an accurate and extremely precise column-mounted marking machine which can **easily mark codes, numbers, letters, images, etc. on several types of objects and surfaces made of metal and plastic.**

THE T-SERIALIZING™ SOFTWARE

T-Serializing™ is the **software developed by Tera Automation** which, if fitted to the T-Numbering™ machine. It allows **serializing a set number of both casting and minting ingots with different designs.** By setting the parameters on the touch screen, operators can easily choose the marking process which best suits the products.

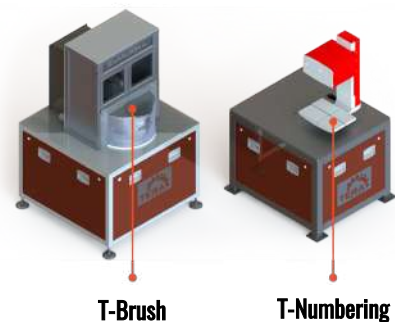### FLAWLESS MARKING ON ANY SURFACE WITH AUTOSENSING

Thanks to the **Auto-Sensing Technology,** the T-Numbering™ machine can automatically **adapt to several shapes and surface conditions,** whether they are flat, concave, convex, circular or made with raw material. This device is especially useful in case of ingots which do not have a perfectly smooth surface, in order to avoid ending up with different pressure marks according to the ingot thickness.

TAILORED AUTOMATION FOR THE HIGHEST ACCURACY

Each Tera Automation machine can be conceived **as part of a modular line** which can be combined according to the company's needs and facility space. **Each machine can be fitted to existing machines and a full line can be developed over time.**

T-Numbering™ is an automation which can be integrated to other machines, according to each operator's specific needs:

T-Brush   T-Numbering

Version	Max abs. Power	Marking area (mm)	Production speed	Voltage supply	Dimensions (LxWxH)	Weight
STANDARD 1	0,3 kW	160 × 100 mm	5 digits per second	220 V 50/60 Hz	900 x 500 x 700 mm	40 Kg
STANDARD 2	0,9 kW	130 × 100 mm	5 digits per second	220 V 50/60 Hz	350 x 350 x 800 mm	28 Kg
XL 1	0,3 kW	150 x 300 mm	5 digits per second	220 V 50/60 Hz	900 x 640 x 400 mm	50 Kg
XL 2	0,9 kW	250 x 200 mm	5 digits per second	220 V 50/60 Hz	1900 x 700 x 1800 mm	100 Kg