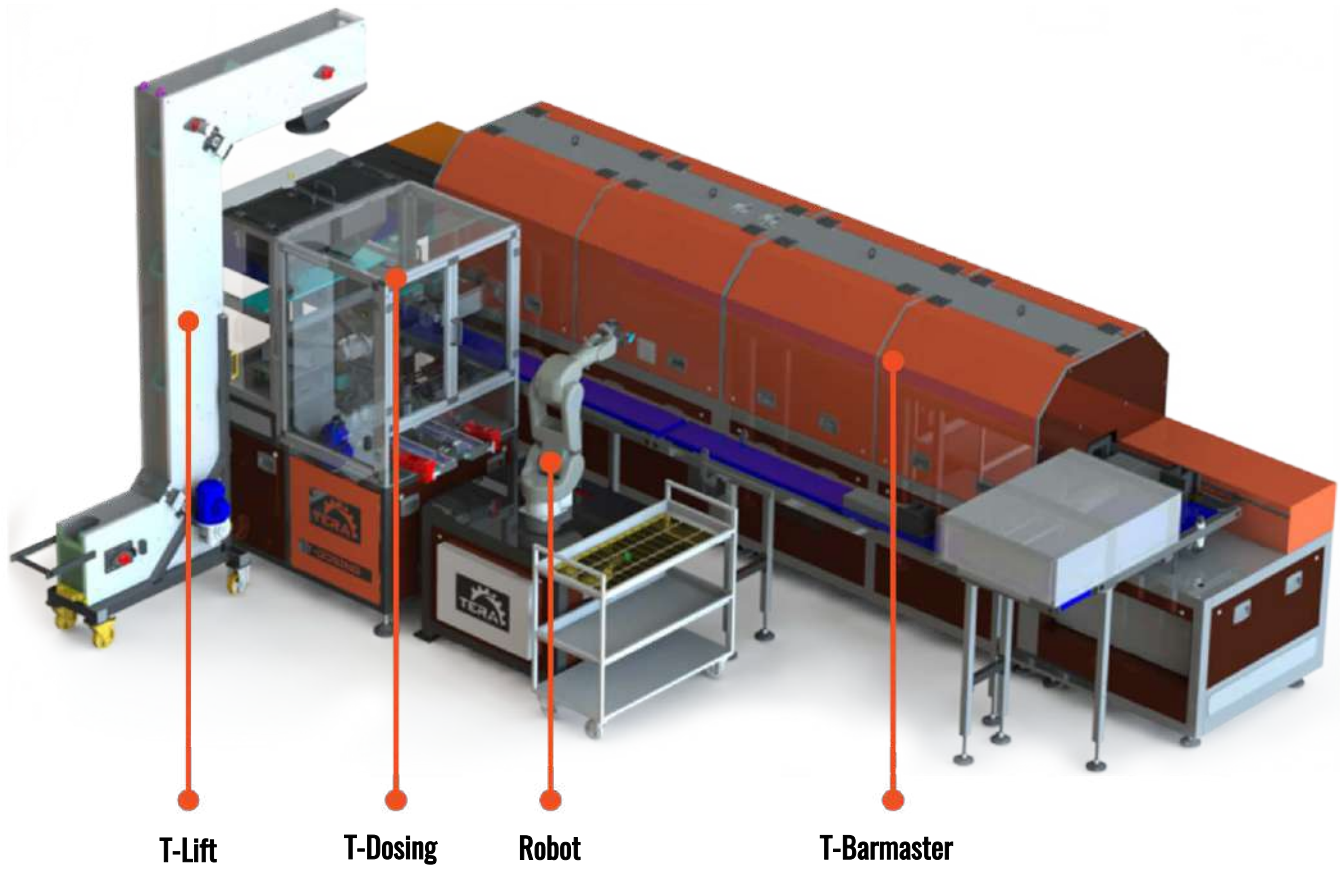


TAILORED AUTOMATION FOR THE HIGHEST ACCURACY

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.**

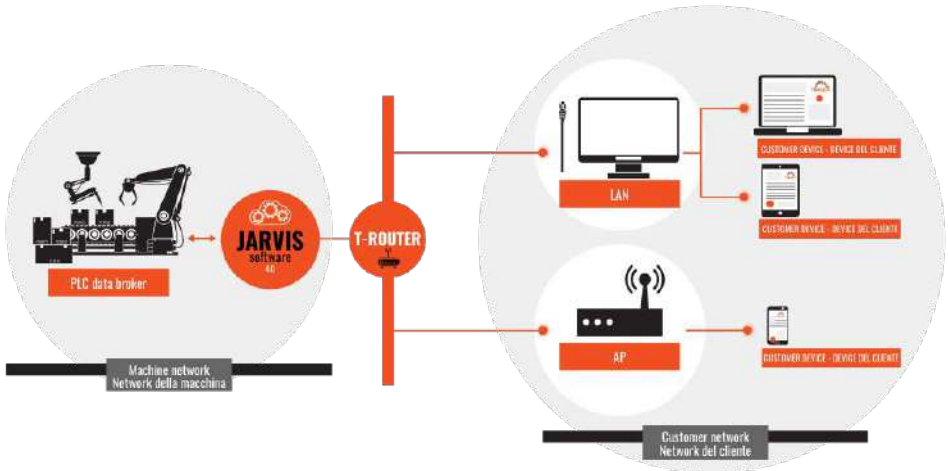
T-Dosing™ was designed to perform an extremely accurate dosing - with a thousandth of a gram accuracy - of precious metals used for casting and may be combined with other machines, according to each operator's particular needs:



HOW TO CREATE YOUR SMART FACTORY

In smart factories data acquisition systems monitor physical processes, by creating a **virtual copy of real production** and sending accurate data to the supervisor.

JARVIS is an IT product owned by Tera Automation, which enables the **interaction and connection between machines and the company's ERP system**. While the machine works, the system creates a database with the **real-time production data**, as chosen by the client, i.e. variables related to the machine.



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TERA AROUND THE WORLD



- USA
- Korea & Japan
- Hong Kong
- Thailand
- India
- Turkey
- Spain



High-precision automatic dosing machine to dose
metal grains



Smart Manufacturing for the Future



forging competitive clients™



High precision automatic dosing machine to dose metal grains



WHAT IS T-DOSING

T-Dosing™ is an industrial machine employed in the precious metals field to automate the weighing of grains used to produce ingots; this is one of the most delicate steps of the process. Weight accuracy is fundamental for investment ingots, since an underweight ingot cannot be marketed and an overweight ingot would imply an evident gain loss for the manufacturer.

A machine weighing gold and silver grains with accuracy down to the milligram level is not only a tool, but also an actual guarantee. Even more so if all the dosing machine activities are monitored and recorded by an optional integrated computer system (Jarvis).

Prior to casting, weighing accuracy also allows optimizing working times and thus costs. Being able to produce ingots with the right weight avoids waste in a number of areas.

T-Dosing™ can be connected to any type of casting furnace and could manage two different metals - gold and silver - without cross-contaminations.

HOW DOES IT WORK?

The grains, properly sorted by diameter, are loaded in the respective hoppers. They are then funneled into **vibrating channels** leading to the first hopper, in which the macro weighing occurs. The flow rate of grains (higher for big-diameter grains, lower for small-diameter grains) decreases as the target weight is being approached.

Once 98-99% of target weight has being reached, grains are transferred into a specific **empty container** located on the **analytical load cell** which detects the exact missing weight, compensating it automatically by a **wire-cut system**. All containers outside the tolerance range as set by operators are discarded from the process line.

T-Dosing is available as:



T-DOSING MODELS

Standard models



T-Dosing Standard version Dosing machine with two hoppers

Dosing machine with two hoppers to handle both big and small grains of one metal type. Available as "Accuracy version" or "High Accuracy version."



YouTube Video



T-Dosing Plus version Dosing machine with four hoppers

Dosing machine with four hoppers to handle both big and small grains of two metal types without cross-contamination. Available as "Accuracy version" or "High Accuracy version."

Custom models



T-Dosing High Production Dosing machine for bigger quantities of grains

Automated dosing and packaging machine for the continuous production of bags of pure silver grains.



T-Powder Dosing High-precision automatic dosing machine for precious metal powders

T-Powder Dosing is our new, highly accurate system for dosing and packaging precious metals in powder form (e.g. salts) of Potassium dicanoaurate, Rhodium, Palladium and Palladium.



YouTube Video



T-Fill&Seal Dosing and packaging machine for metal grains

The T-Fill&Seal™ machine is designed to package metal grains, by combining two tools into one: a dosing machine equipped with a precision load cell and a vertical packaging machine to pack grains in pillow packaging.



YouTube Video



T-Dosing Standard - Container filling



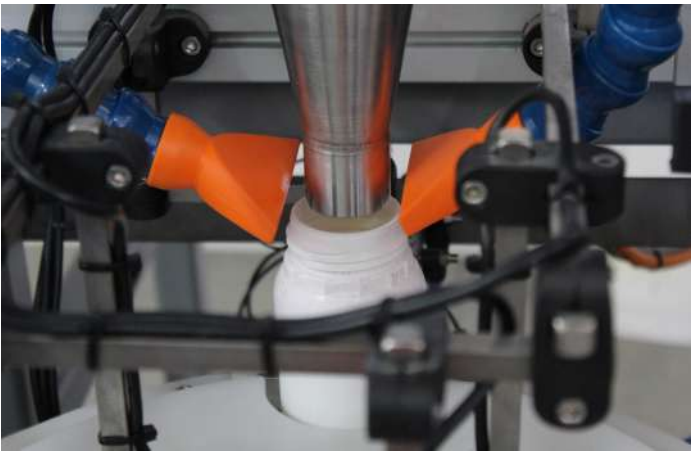
T-Dosing Standard - Wire-cut system



T-Powder Dosing - Filled and sealed containers



T-Dosing High Production - Detail



T-Powder Dosing - Container filling



T-Dosing Standard - Containers full of grains of known weight



T-Fill&Seal - Bags filled with grains