



Automated Minting Machine

Automated stamping of blank coins and ingots

Smart Manufacturing for the Future





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Automated stamping of blank coins and ingots



Three step process

There are three basic operations in the automated minting process:

- The loader or feeder which presents the coins/ingots for transfer, located on one side of the press;
- 2. The press with the stamp;
- 3. The Cartesian manipulation of the coin/ingots.

There are two other elements in the T-Robomint: The Control Panel (with PLC installed) and the PTF exit tray located on the opposite side of the press from the loader. The exit tray is in turn composed of three smaller trays.

The Loader / Feeder

The lower part of the loader or feeder (capacity around 600 blank coins/ingots, depending on coin/ingot shape and size) is made up of a cabinet with the electronic and pneumatic assemblies. Sitting on this is a circular base component supporting six vertical slots where the blank coins/ingots are placed by the operator. The slots are pre-configured to accommodate the blank coins/ingots and can be customized to meet the client's needs. The circular base with its vertical slots may be easily removed and replaced by another which has been filled by the operator to avoid any delay in production. The rotation of the circular base is controlled by a brushless motor. The coins/ingots are continually raised within their slot to make them available to the Cartesian manipulator by a stepping linear motor. This is activated by a sensor which recognizes when the top coin/ingot has been picked up by the Cartesian transfer system, thus making available the next blank coin/ingot in the raised transfer position. A stream of compressed air removes any dust from each raised coin/ingot just before the Cartesian manipulator picks it. The cabinet contains a compressed air system to assure a clean air supply.

The press

The die of the press stamps the logo onto the blank coin/ingot. There is no loss of metal.

As mentioned Tera can supply the Press Machine with T-Robomint applied. Or the client may provide their own Press Machine on which apply the T-Robomint.

Cartesian manipulation

After being dusted by a compressed air stream a blank coin/ingot is picked up from the top of one of the slots of the rotating loader by a vacuum cap rubber grip. The blank is then placed underneath the press die where it is stamped. Then a second vacuum cap picks it up and places it in the exit tray. The grip of the pick-up is from the vacuum pressure rather than a mechanical movement. Consequently there is no danger of marring the coin/ingot.

PTF Exit Tray

The exit tray, equipped with 3 removable smaller trays, is synchronized with the entire system to be consistently available for the next stamped coin/ingot. It has a stepping movement over its horizontal axis with an adjustable inclination to welcome the minted coins/ingots.

Version	Power	Production (pcs/h)	Max Number loading feeder	Managing and control	Voltage supply	Dimensions (mm)	Weight
STANDARD	7 kW	450	6	Touch control panel & PLC	400 V, 60 Hz, 3 Ph	2450 x 1380 x 2600 h	11000 Kg

The Production Capacity varies on the basis of the Press Machine performances.

It can be customized at the client's request.

The Press Machine element can also be supplied by the client rather than by Tera.















PTF exit trays



HMI touch screens



Placing blank coin



Vacuum cap rubber grip





Rotating feeder









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