4.3 RFID Insertion System

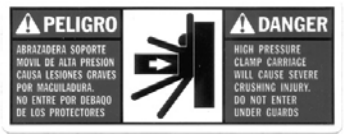
In this section, all functions of all units of the machine are illustrated including:

- Where they are
- What they are named in the operating instructions
- What their function is
- How they work together

1.0 SAFETY

Chapter 2 Observe the information in the “Safety” chapter.
Safety Rules

DANGER!



DANGER!

Access to the machine only for authorized personnel! It is extremely dangerous to enter the machine!
You must only enter the machine through the safety doors. Never go into the machine via a loading station.

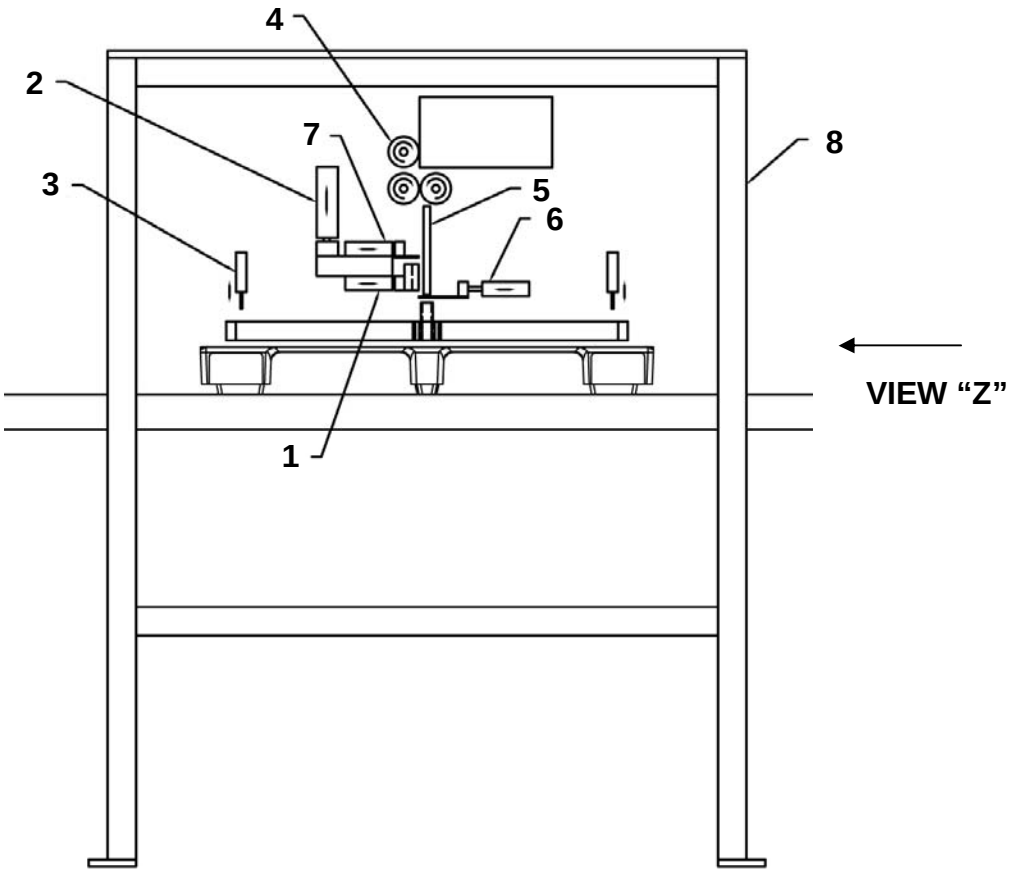
Never close one of the safety doors behind you. The machine might be switched on.

WARNING!
It is essential that you follow the chapter entitled "Safety" and the safety information given with the particular function units.

2.0 OVERVIEW

Information!
This section gives an overview of the structure of the machine and the arrangement of the various function units. This Machine is fully automated.

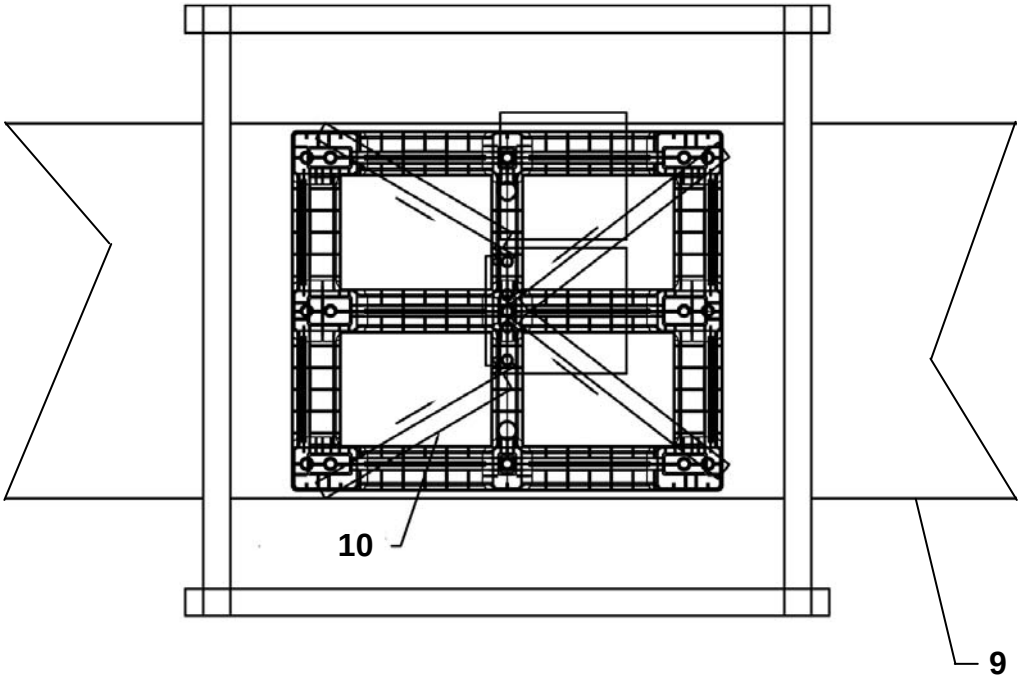
RFID Machine

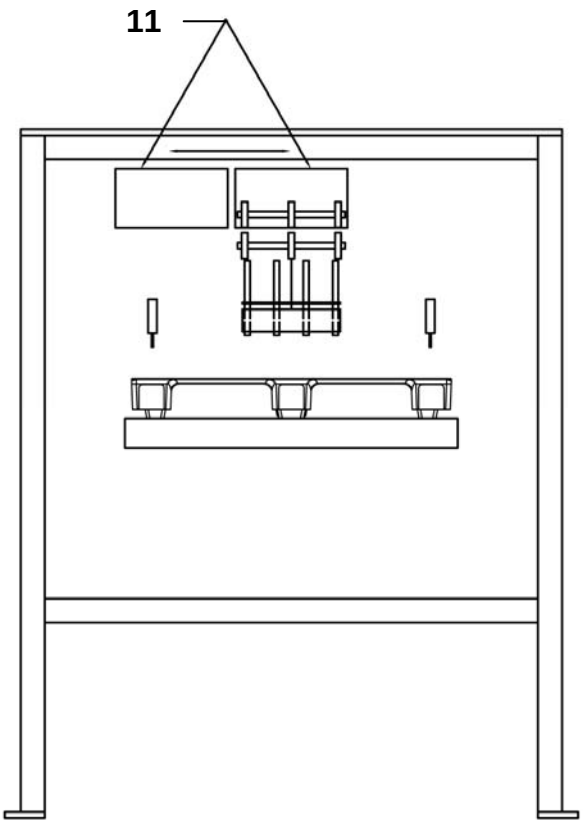


RFID Station

Pos.	Designation	Pos.	Designation
1	RFID Forming Comb	**2**	Vertical Transfer Cylinder
3	RFID Insertion Cylinder	**4**	Stripping / Slitting Unit
5	RFID Forming Rods	**6**	RFID Catch Plate
7	RFID Transfer Plate	**8**	Frame Structure
9	Conveyor	**10**	Transfer Cylinders / Tubes
11	RFID Magazines		

2.1 overview (detail)



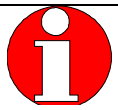


VIEW IN DIRECTION OF “Z”

3.0 SEQUENCE OF OPERATION

1. Operator loads RFID tags into magazine(s). When a magazine is empty the system will automatically shift to the next (full) magazine and the alarm alerts the operator that magazine needs to be filled.
2. A single sheet of RFID tags will be removed vertically from the magazine via a set of powered rollers and driven through an automatic slitter. The individual tags will then drop into a forming station.
3. In the forming station a pneumatically driven forming comb will bend the tags around the forming rods. Once the forming comb has extended, the catch plate will retract allowing the tags to be lowered vertically.
4. The tags will then be moved vertically into four individual Transfer Tubes. As soon as the tags enter the Transfer Tubes, the forming comb will react to allow the tags to continue to move vertically into the tubes.
5. Each individual Transfer Tube will then travel to each corner of the pallet and position the Transfer Tube over the receiving hole in the pallet.
6. Once in location a pneumatically driven Stripper Finger will push the formed RFID tag out of the Transfer Tube and into the pallet. There will be an independent Stripper Finger device located in each corner of the pallet.
7. Once the Stripper Finger has retracted the pallet will be clear to move to the next station.

Note: The next slitting and forming process will be processing simultaneous to the locating and insertion of the tags to optimize cycle time.

	**Information!** Please! Refer to purchased documentation provided by manufacturer for detailed information on maintenance and operations.