



Automatic injection system (timing management)

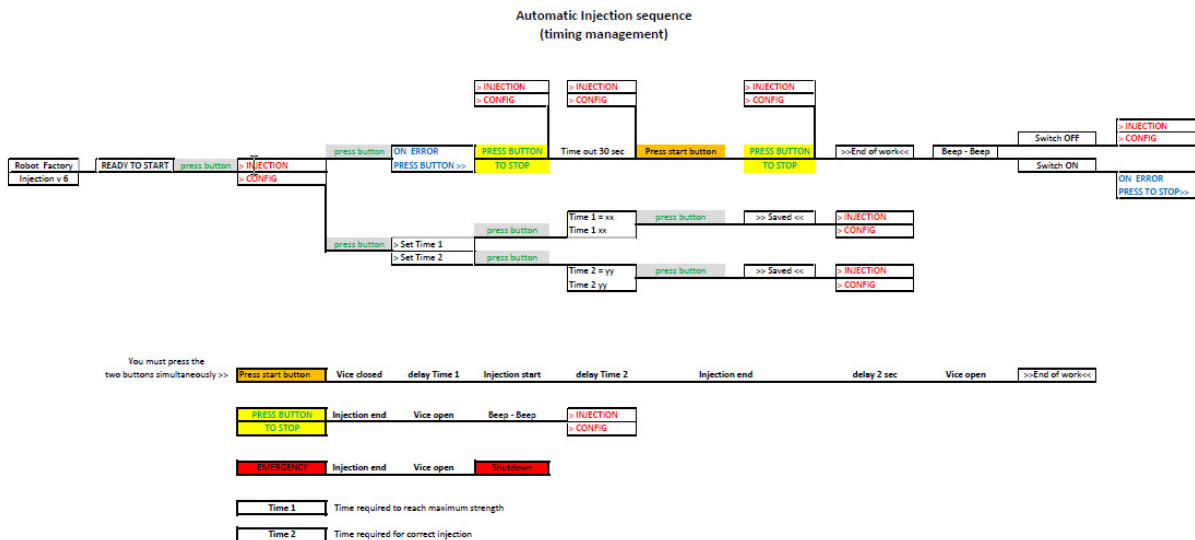
The **Automatic Injection System** is a new device which, when using **Pneumatic Injection Molding** with a **Pneumatic Vice**, differently from the standard version, it allows to obtain the constancy of processing times with the opportunity to facilitate and improve the quality of the work.

The **Automatic Injection System** allows you to manage both the **timing of the closing vice** and the **timing of the descent of the piston** for the injection.

The **Automatic Injection System** consists of the following components:

- Vice management solenoid valve (in place of the manual one)
- Piston management solenoid valve (in place of the manual one)
- Two buttons (need to be installed as to be pressed simultaneously with two hands)
- Electronic control case (microprocessor, display, emergency button, etc.)

Once installed, the **Automatic Injection System** allows you to set the time necessary to reach the maximum clamp pressure of the vice by introducing a delay before giving consent for the injection piston to descend, keeping it under pressure for the set time necessary for correct injection, once the set time is reached, the piston retracts and the vice opens with a short delay set in the firmware.



Here is a summary of the setting and usage steps:

- 1) Set the injection pressure as usual
- 2) Set the material temperature as usual
- 3) Load the material to be used
- 4) Set the vice delay time in the automatic control system (only needed initially)
- 5) Set the injection time in the automatic control system (only needed initially)
- 6) Place the mold
- 7) Give consent for the start of work in the automatic control system
- 8) Press the two start buttons with both hands at the same time
- 9) Wait for the cycle to complete
- 10) Remove the mold

Repeat steps from 6 onwards for the next cycle and so on.

Naturally, in the firmware of the microprocessor, all the precautions have been implemented to ensure the operator's safety in the various operations.

The **Automatic Injection System** is supplied already installed on the **Pneumatic Injection Molding** system equipped with a **Pneumatic Vice** if required **at ordering**, or it can be **supplied in kit** to be installed for those who already have **Pneumatic Injection Molding**.