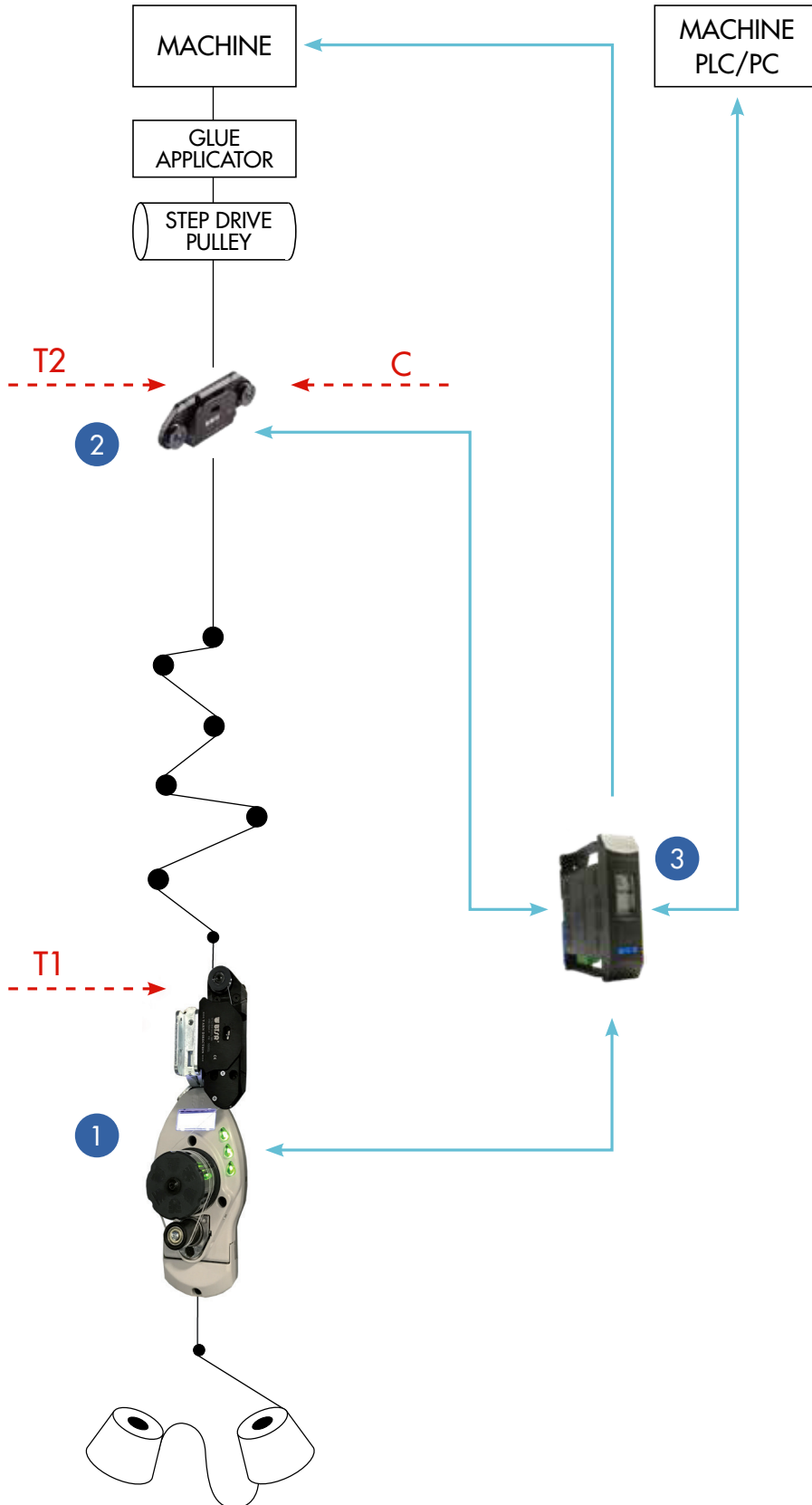


'TRIO CONTROL LOOP' Solution (BTSR Patent)

Get the most accurate Fiber Feeding Tension Control

From the creel system (through BTSR DIAPER FEEDER device ①) up to the machine fiber insertion point through (BTSR TMS ②).



HOW IT WORKS

- ① DIAPER FEEDER Fiber Feeding Device**
 - Controls and adjusts the output fiber feeding tension value according to the **T1** Set-Point value, thus automatically compensating Constant Tension from full to empty package (First Loop).
- ② TMS TENSION AND METERING SENSOR Device**
 - Measures the **T2** fiber feeding tension value and downstream fiber consumption **C** and sends information to SM-DIN MULTILoop Unit.
- ③ SM-DIN MULTILoop Management Unit**
 - Manages and controls all units.
 - Receives TMS Tension and Metering Sensor information.
 - Adjusts DIAPER FEEDER Set-Point tension value, by automatically compensating the friction arising upstream the TMS sensor during the fiber path (Second Loop) and monitoring the TMS Sensor downstream extra-frictions (Third Loop) by guaranteeing constant fiber consumption **C**.
 - Ensure the precise desired fiber feeding tension value in the last fiber machine insertion point.