



PLASTICOLOR

THROUGHPUT
MEASUREMENT
SYSTEMS





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MEASURING AND CONTROL EQUIPMENT FIELD OF APPLICATION

PLASTICOLOR measuring and control equipment is used in all areas of the plastic processing industry, for example:

- **Cable manufacturing**
- **Blown film extrusion**
- **Pipe extrusion**
- **Die cast extrusion**
- **Profile extrusion**
- **Blow moulding**

Gravimetric analysis and the measuring and control equipment associated with it, offer a wide spectrum of possibilities. They are used to improve the quality of products, save materials and ensure an ideal layer thickness ratio in co-extrusion processes.

A number of control strategies are available, for example:

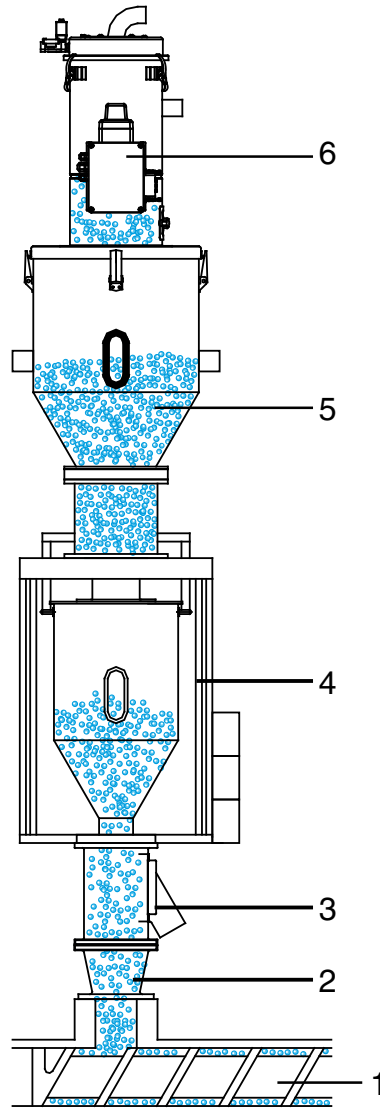
- **quantity control**
- **meter-weight control**
- **G.S.M. (Gramme per square metre control)**
- **ramp-up and ramp-down control.**

PLASTICOLOR weigh hoppers and the PPM controller can be connected to master control systems via all popular field bus systems.

The systems can be easily integrated into older/existing extrusion systems which, in effect, upgrades your system to the newest generation of measuring and control technology. Existing dosing systems (PLASTICOLOR or other brands) can also be integrated.



FUNCTION OF THROUGHPUT MEASUREMENT SYSTEMS



- 1 - Production machine
- 2 - Adapter
- 3 - Neckpiece
- 4 - Weigh hopper
- 5 - Storage hopper
- 6 - Hopper loader

A PLASTICOLOR throughput measurement system consists of the following:

1. Weigh hopper (4)
2. Neckpiece tube with quick discharge at the side (3)
3. Adapter that matches the machine feed (2)

It is possible to mount a PLASTICOLOR hopper loader (6) on the storage hopper of the throughput measurement.

In connection with a suitable personal computer, it is possible to record, display, evaluate and print all relevant data.

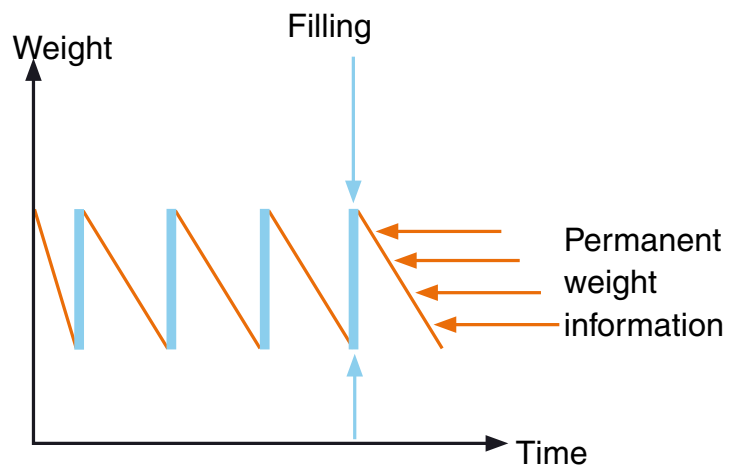
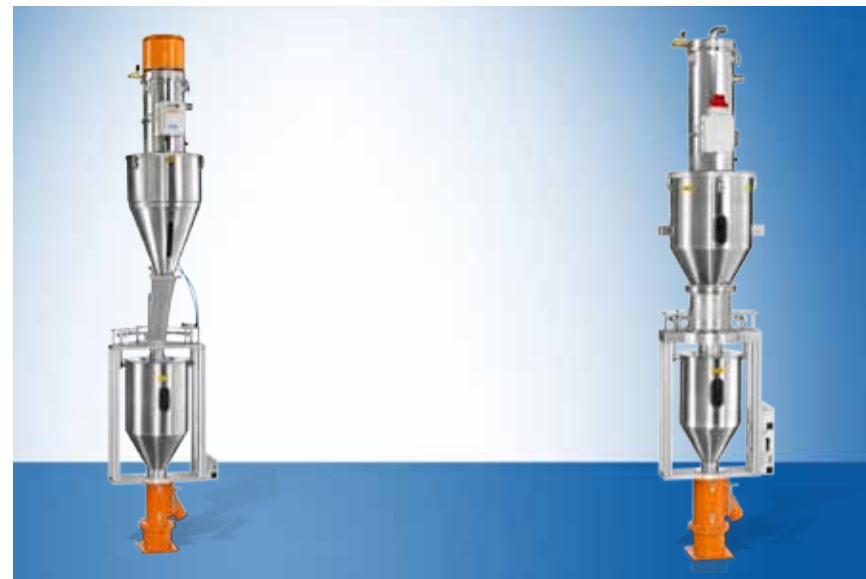
The throughput measurement can be combined easily with an existing PLASTICOLOR mixing station. Can also be connected via field Bus systems (Modbus, Profibus etc.).

CONTROL FOR THROUGHPUT MEASUREMENT SYSTEMS

PPM Control System
Connection via field Bus systems
(Modbus, Profibus etc.) is possible

PLASTICOLOR weigh hoppers are used on extrusion lines as well as on dosing units (single unit, batch dosing unit or in gravimetric mixing stations).

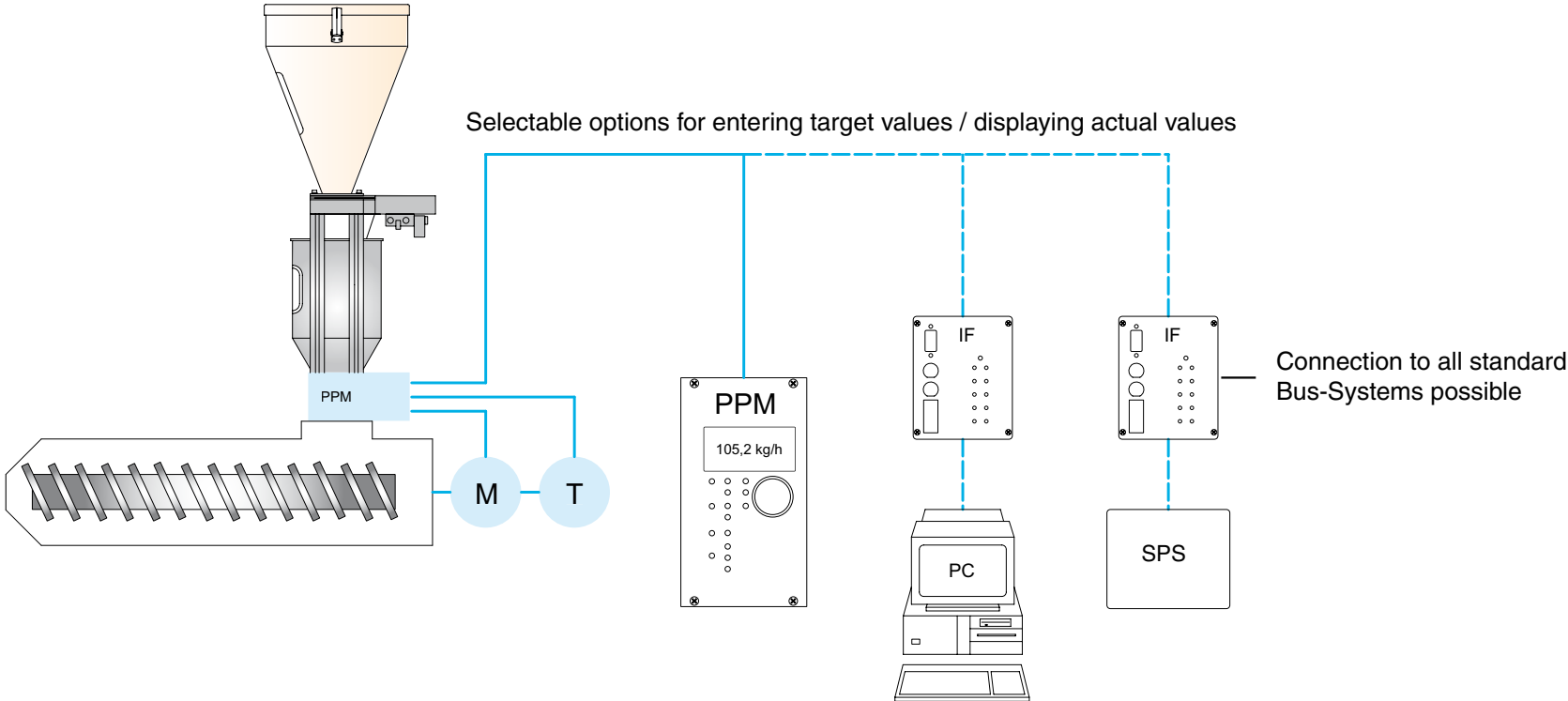
To determine the mass flow rate, the reduction of weight is recorded for each time unit. The values measured via the “loss-in-weight” procedure will be used as reference points for correcting the RPM of the extruder/ haul-off or the dosing unit. One of the advantages of the “loss-in-weight” system is the fast responding times.



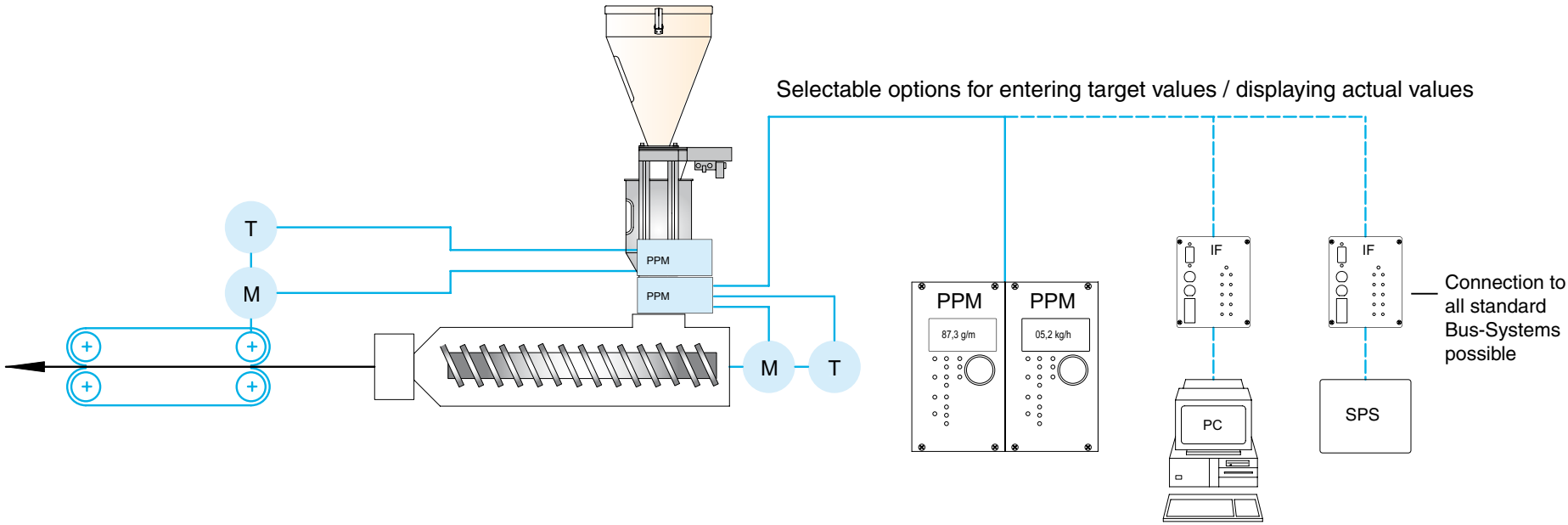
Delivery program for the weigh hopper

Output	Volume	Valve cross-section
300 l/h	8 l	80 mm
600 l/h	17 l	80 mm
1100 l/h	29 l	80 mm
1100 l/h	29 l	120 mm
1800 l/h	46 l	80 mm
1800 l/h	46 l	120 mm
2800 l/h	69 l	120 mm

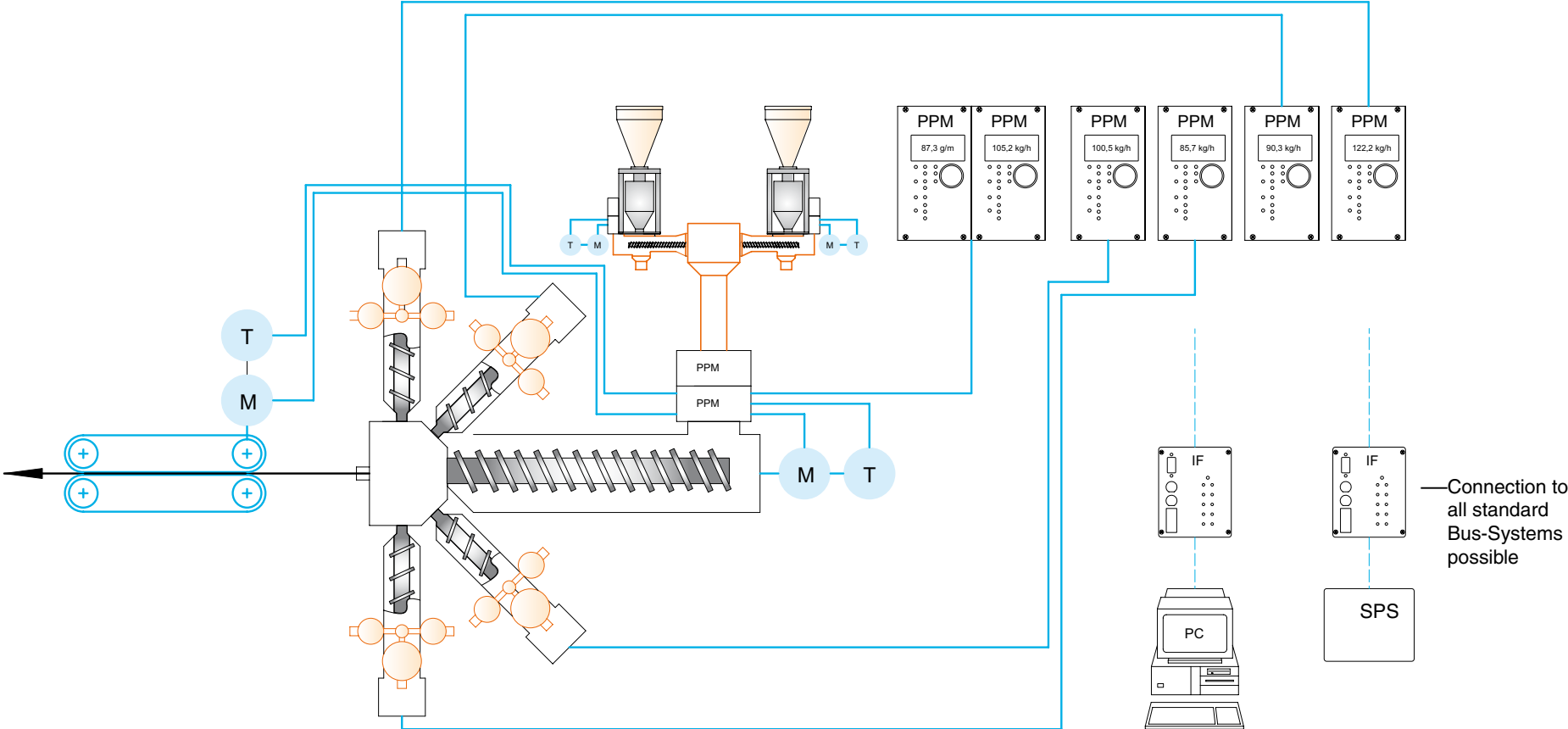
CONTROLLING A DOSING UNIT OR EXTRUDER



CONTROLLING AN EXTRUDER AND/OR HAUL-OFF



CONTROLLING 1...N CO-EXTRUDERS AND A HAUL-OFF
CONTROLLING 1...N MIXING STATIONS WITH 2 TO 8 COMPONENTS



PLASTICOLOR THROUGHPUT MEASUREMENT SYSTEM - EXAMPLES





Woywod production site in Seefeld



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