PLASTICOLOR

DOSING UNITS

PLASTICOLOR 1500

PLASTICOLOR 2500

PLASTICOLOR 3200

PLASTICOLOR 5000

COLOUR CHANGE SYSTEMS

DOSING STATIONS

WOYWOD

Subject to alterations, even without advance notice.
Measurements and data without obligation.

Function of PLASTICOLOR Dosing Units 5

PLASTICOLOR 1500 6

PLASTICOLOR 2500 7

PLASTICOLOR 3200 8

PLASTICOLOR 5000 9

PLASTICOLOR Colour change systems..... 10

PLASTICOLOR Dosing stations..... 12

PLASTICOLOR dosing units are designed and used for the dosing of granular, free flowing and non-sticky materials, such as masterbatch, regrind materials, virgin materials and PVC dry blends.

The fields of application cover all extrusion, blow-moulding and injection moulding manufacturing processes.

The PLASTICOLOR modular system has four dosing unit sizes with a performance between 70 g/h and 3,500 kg/h.

Dosing units can be used as individual dosing units, but can also be used in

- Colour change systems
- Dosing systems
- Volumetric mixing stations
- Gravimetric mixing stations
- Gravimetric dosing-/mixing stations

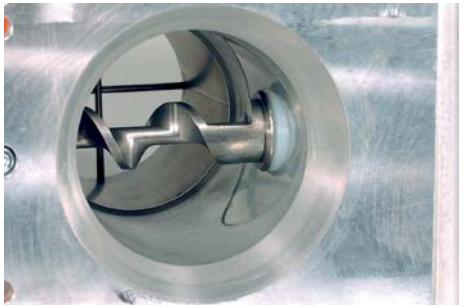
Based on our many years of experience, PLASTICOLOR dosing units are designed in an optimum way to provide quick and easy changing of material, colours, or screws/cylinders.

Quick acting latches

Quick acting latches make it possible to open PLASTICOLOR dosing units quickly and easily. Pressing bolts press the sealing washer of the screws into the housing and ensure good sealing and prevent back-pressure onto the motor and gearbox.

Quick discharge

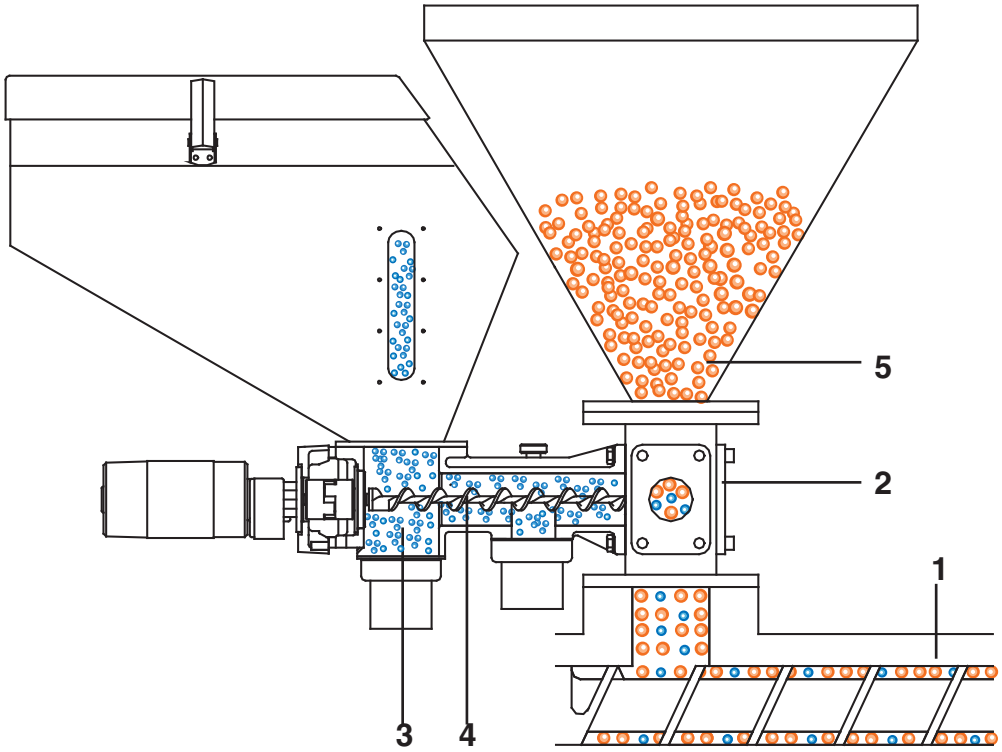
As standard, all dosing units have fitted a manual quick discharge facility. With just a few simple steps, you can discharge PLASTICOLOR dosing units and the hopper. Pneumatically operated quick discharge facilities are available options.



Round filling zone

The completely round design of the hopper discharge, filling zone and and discharge slide makes virtually residue-free discharge possible.

FUNCTION OF PLASTICOLOR DOSING UNITS



1 - Production machine
2 - Neckpiece
3 - PLASTICOLOR dosing unit
4 - Screw
5 - Main hopper

The PLASTICOLOR neckpiece (2) is mounted between the production machine (1) and the main hopper (5).

The PLASTICOLOR screw (4) meters the additive into the main material stream passing through the neckpiece (2).

The short distance between dosing and actual processing eliminates any risk of material separation.

CONTROLS FOR PLASTICOLOR DOSING UNITS

Serie PC 90/03
Modular Controls Serie PDC
PPM-Control-System

PLASTICOLOR 1500

Area of application: Additives for all processing machines
Main materials for small processing machines

Dosing capacity: 0.06 - 53 kg/h - (HDPE granules, 4 mm)*

Available Versions: A - housing with integrated manual neckpiece slide
B - flange version/housing without neckpiece slide

Standard equipment: Quick acting latches
Quick discharge

Accessories, optional: Pneumatic neckpiece slide
Pneumatic quick discharge
Level sensors
Sensor adapter under hopper
Manual hopper slide
High capacity insert in the neckpiece
Hopper adapter on the neckpiece
Screw identification (via the PPM control system)
Special seal for processing powder

Hopper: see page 14

German Patent Number: DE 10 2008 055 756
European Pat.-Nr. 09778545.5 Countries: AT, BE, CH/LI, DK, ES, FR, GB, IT, NL, PL

Dosing outputs (kg/h)*				
Screw/cylinder assembly	6/16 yellow	8/18 grey	10/20 brown	13/25 red
Motor G 321	0.07 - 1.53	0.10 - 3.18	0.22 - 6.40	0.50 - 14.30
Motor G 251	0.15 - 4.50	0.32 - 9.50	0.58 - 17.30	1.40 - 40.60
Motor G 330 **	0.06 - 5.50	0.11 - 12.00	0.18 - 24.00	0.45 - 53.00

* HDPE granules (PE) - lenticular oval, approximately 4 mm x 4.5 mm in diameter and 3.3 mm high with a bulk density of 560 g/L

** Brushless motor with wide RPM range

PLASTICOLOR 2500

Area of application: Additives for large processing machines
Main materials for small processing machines

Dosing capacity: 0.06 - 205 kg/h - (HDPE granules, 4 mm)*

Standard equipment: Quick acting latches
Quick discharge
Manual neckpiece slide

Accessories, optional: Pneumatic neckpiece slide
Pneumatic quick discharge
Level sensors
Sensor adapter under hopper
Manual hopper slide
High capacity insert in the neckpiece
Hopper adapter on the neckpiece
Screw identification (via the PPM control system)
Special seal for processing powder

German Patent Number: DE 10 2008 055 756
European Pat.-Nr. 09778545.5 Countries: AT, BE, CH/LI, DK, ES, FR, GB, IT, NL, PL

Hopper: see page 14

Dosing outputs (kg/h)*						
Screw/cylinder assembly	6/16 yellow	8/18 grey	10/20 brown	13/25 red	17/29 green	22/34 black
Motor G 321	0,07 - 1,32	0,12 - 3,50	0,22 - 6,35	0,50 - 14,60	1,00 - 29,30	2,00 - 60,00
Motor G 251	0,15 - 3,68	0,40 - 10,20	0,58 - 16,80	1,40 - 41,20	2,80 - 83,00	5,70- 169,00
Motor G 330 **	0,06 - 5,50	0,11 - 12,00	0,18 - 24,00	0,45 - 53,00	0,70 - 100,00	1,50 - 205,00

* HDPE granules (PE) - lenticular oval, approximately 4 mm x 4.5 mm in diameter and 3.3 mm high with a bulk density of 560 g/L

** Brushless motor with wide RPM range

PLASTICOLOR 3200

Area of application: Main materials for large processing machines

Dosing capacity: 0.10 - 840 kg/h - (HDPE granules, 4 mm)*

Available versions: A - Housing open with test discharge in middle of cylinder
B - Housing closed

Standard equipment: Quick acting latches
Quick discharge

Accessories, optional: Manual/pneumatic neckpiece slide
Pneumatic quick discharge
Level sensors
Sensor adapter under hopper
Manual hopper slide
High capacity insert in the neckpiece
Hopper adapter on the neckpiece
Screw identification (via the PPM control system)
Special seal for processing powder

Hopper: see page 14

Dosing outputs (kg/h)*					
Screw/cylinder assembly	8/17 yellow	13/22 brown	17/27 red	25/36 green	40/50 black
Motor G 321	0.12 - 3.35	0.42 - 12.50	0.95 - 28.00	2.70 - 79.00	9.50 - 285.00
Motor G 322	0.22 - 6.60	0.80 - 24.20	1.80 - 53.50	5.00 - 151.00	17.50 - 525.00
Motor G 327	0.32 - 9.75	1.25 - 36.50	2.70 - 82.00	7.60 - 228.00	24.50 - 735.00
Motor G 323	0.36 - 10.70	1.50 - 44.00	3.40 - 100.00	9.10 - 273.00	27.00 - 815.00
Motor G 330 **	0.10 - 11.00	0.35 - 47.00	0.80 - 105.00	2.00 - 300.00	7.00 - 840.00

* HDPE granules (PE) - lenticular oval, approximately 4 mm x 4.5 mm in diameter and 3.3 mm high with a bulk density of 560 g/L

** Brushless motor with wide RPM range

PLASTICOLOR 5000

Area of application: Main materials for very large processing machines specially designed for large quantities, regrind, flakes, etc.

Dosing capacity: 10 - 3290 kg/h - (HDPE granules, 4 mm)*

Standard equipment: Quick acting latches
Quick discharge

Accessories, optional: Pneumatic quick discharge
Level sensors
Manual hopper slide
Screw identification (via the PPM control system)
Special seal for processing powder

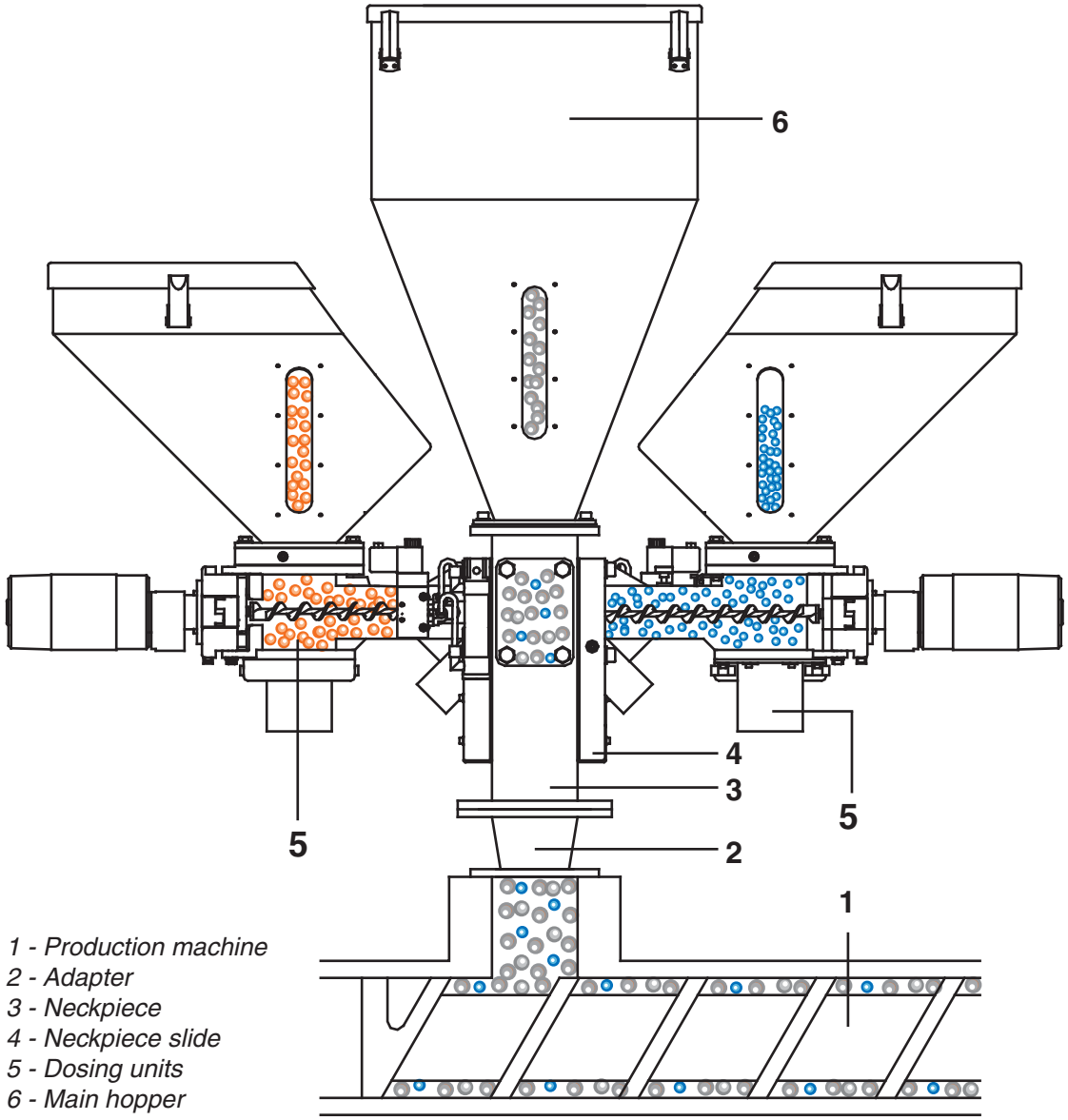
Hopper: see page 14

German Patent Number: DE 10 2008 055 756
European Pat.-Nr. 09778545.5 Countries: AT, BE, CH/LI, DK, ES, FR, GB, IT, NL, PL

Dosing outputs (kg/h)*		
Screw/cylinder assembly	50/65 red	65/80 green
Motor G 321	19.00 - 560.00	36.50 - 1090.00
Motor G 322	35.20 - 1055.00	70.00 - 2100.00
Motor G 323	57.50 - 1725.00	118.00 - 3290.00
Motor G 330 **	15.00 - 2050.00	30.00 - 3100.00

* HDPE granules (PE) - lenticular oval, approximately 4 mm x 4.5 mm in diameter and 3.3 mm high with a bulk density of 560 g/L
** Brushless motor with wide RPM range

PLASTICOLOR COLOUR CHANGE SYSTEMS



1 - Production machine
2 - Adapter
3 - Neckpiece
4 - Neckpiece slide
5 - Dosing units
6 - Main hopper

Changing colours by a flip of the switch: this feature is provided by using 2 or more PLASTICOLOR units.

Standard colour change systems consist of 2 to 8 PLASTICOLOR units, mounted at a common neckpiece. Special colour change systems for more than 8 components can be designed and supplied.

Every single unit is provided with a slide. The control enables you to shut down one dosing unit and to start another one at the same time. This means that the system can switch from one colour to another one without interruptions. The pneumatic neckpiece slides open and close automatically, which prevents material from trickling out. As a result, safe closing of the dosing unit that is not involved in the recipe means that it can be prepared for the next production run. This minimises set up costs.

CONTROLS FOR COLOUR CHANGE SYSTEMS

Modular Controls Serie PDC
PPM-Control-System

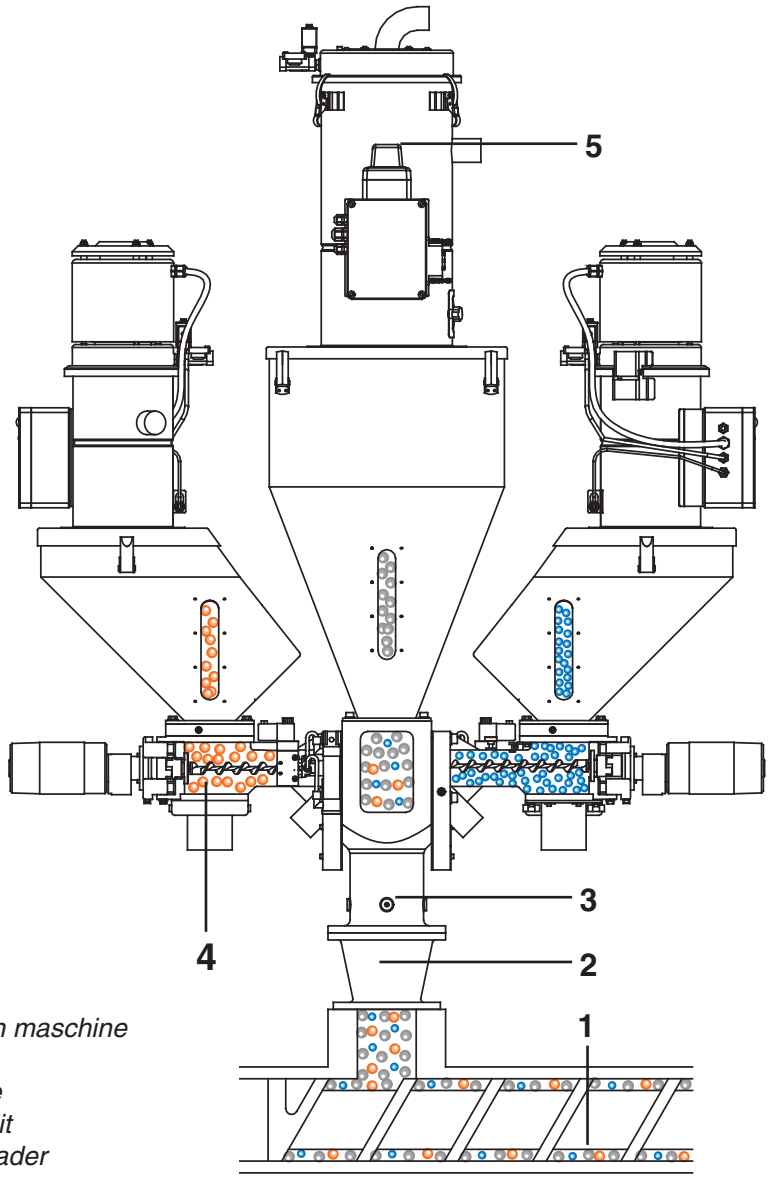
Benefits of colour change systems:

- Immediate colour change during production
- Simple handling and operation
- Small amount of pre-mixed material
- Reduction in set up costs
- Avoidance of production waste and rejects

Highest accuracy by precise control

The speed of the dosing screw is synchronised with the processing machine. A membrane keyboard ensures easy operation of the system. The system shows operating status conditions, actual values and alarms on easy-to-read displays.
You can optionally install the controls in desktop housings or in 19” racks.

PLASTICOLOR DOSING STATIONS



1 - Production maschine
2 - Adapter
3 - Neckpiece
4 - Dosing unit
5 - Hopper loader

The scope of supply of PLASTICOLOR dosing stations includes all the components from the material intake of the processing machine onwards.

In the same way as with individual units, the main material flows freely into the extruder's screw. All the additive components are dosed into the main material flow.

The speeds of the dosing screw are synchronised with the speed of the processing machine.

Homogenisation of the materials is carried out in the production machine.

CONTROLS FOR DOSING STATIONS

Modular Controls Serie PDC
PPM-Control-System

Dosing stations are designed for process machines which have a constant material consumption.

MATERIAL FEED HOPPER

			PLASTICOLOR			
			1500	2500	3200	5000
CIRCULAR SLOPED HOPPERS, VA		6 L	○	-	-	-
		10 L	○	○	-	-
		20 L	○	○	○	-
		50 L	-	○	○	○
ASYMMETRICAL HOPPERS, VA		6 L	●	-	-	-
		20 L	-	●	-	-
		50 L	-	-	●	-
ROUND HOPPERS, VA		2 L	○	-	-	-
		9 L	○	○	-	-
		19 L	○	○	-	-
		21 L	○	○	○	-
		32 L	○	○	○	-
		50 L	○	○	○	-
		70 L	-	○	○	○
		100 L	-	-	○	○
		130 L	-	-	○	○
		150 L	-	-	-	●
		250 L, 350 L, 500 L	-	-	-	○

● = Standard ○ = Optional

Woywod production site in Seefeld

Woywod Kunststoffmaschinen GmbH & Co. Vertriebs-KG
Hauptsitz / Head Office:
Bahnhofstraße 110 • 82166 Gräfelfing • Germany
Tel.: +49 89 854 80 - 0 • Fax: +49 89 854 13 36
Internet: www.plasticolor.de • E-Mail: woywod@plasticolor.de

Produktion / Factory: Niederlassung Seefeld
Lindengasse 2 - 4 • 16356 Werneuchen OT Seefeld • Germany
Tel.: +49 33398 696 3 - 0 • Fax: +49 33398 696 3 - 1336
E-Mail: woywod.seefeld@plasticolor.de

© Woywod Kunststoffmaschinen GmbH & Co. Vertriebs-KG