



LIQUID COLORS & DOSING SYSTEMS



The smart alternative!



**ROWAMETRIC
Dosing Systems**

**DS-L1K, DS-L2K
and ESL-2K**

colorDoS®

Inject AC

**Peristaltic,
Progressive Cavity
and Gear Pumps**

**Single and Double
Piston Pumps**

**Micro Annular
Gear Pump**

**Double Gear
Pumps**

**gravimetric and
volumetric; all
Applications**

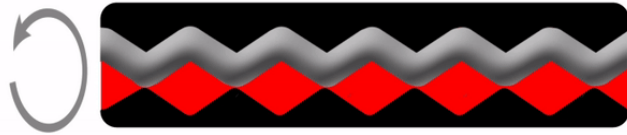
**volumetric; all
Applications**

**volumetric;
Injection Molding**

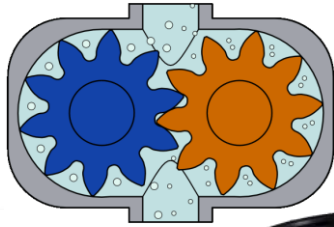
**volumetric;
Extrusion**



- Hose is squeezed
- Gravimetric or volumetric design
- 2 Pump head types (3 or 6 rollers)
- 4 Hose sizes
- Dosing via lance into the main hopper
- Fast color changes as no cleaning of pump head (hose to be changed)
- Applications:
 - Injection molding, extrusion
 - High color diversity
 - Frequent color changeovers



- Displacement pump, Rotor and stator
- Gravimetric or volumetric design
- Low-wear, pulsation-free, up to a pressure of 27 bar
- 3 Pump head sizes for color throughputs of 0.1 to 1,500 ml/min
- Color flows through pump head which must either be purged or changed for color changeover
- Applications:
 - Injection molding, extrusion
 - Pulsation-free conveying of small quantities, e.g. for tinting bottles
 - Shear-sensitive pigments, highly viscous pastes



- Gravimetric or volumetric design
- Pulsation-free, up to a pressure of 100 bar
- 3 Pump heads for color throughputs of 0.03 to 1,050 ml/min
- Color flows through pump head which either must be purged or changed for color changeover
- Applications:
 - Injection molding, extrusion
 - Injection of color into the polymer melt downstream for fast color changes in extrusion applications
 - Microdosing
 - Highly viscous pastes



- Reciprocating piston pump, up to 30 bar
- Application: Injection molding; 0.05 - 80 ml color per shot
- Volumetric dosing without calibration (input color density), dosing accuracy $\pm 1\%$
- Dosing from piston \rightarrow Buffer (80 ml) for container exchange
- One piston-set incl. hoses per color \rightarrow very fast color changeover
- Compatible with ROWASOL COLOR CUBE
- 7" Touchscreen, intuitive handling, many features (regrind, low level alarm, etc.)
- Optionally:
 - Load cell for level control
 - Barcode reader
 - LED-alarm stack light
 - Adapter flange for injection molding machine



- Double-stroke piston pump, up to 30 bar
- Application: Extrusion
- Volumetric dosing without calibration (input color density), dosing accuracy $\pm 1\%$
- Dosing from piston \rightarrow Buffer (100 ml) for container exchange
- One piston-set incl. hoses per color \rightarrow very fast color changeover
- Compatible with ROWASOL COLOR CUBE
- 7" Touchscreen, intuitive handling, many features (regrind, low level alarm, etc.)
- Optionally:
 - Load cell for level control
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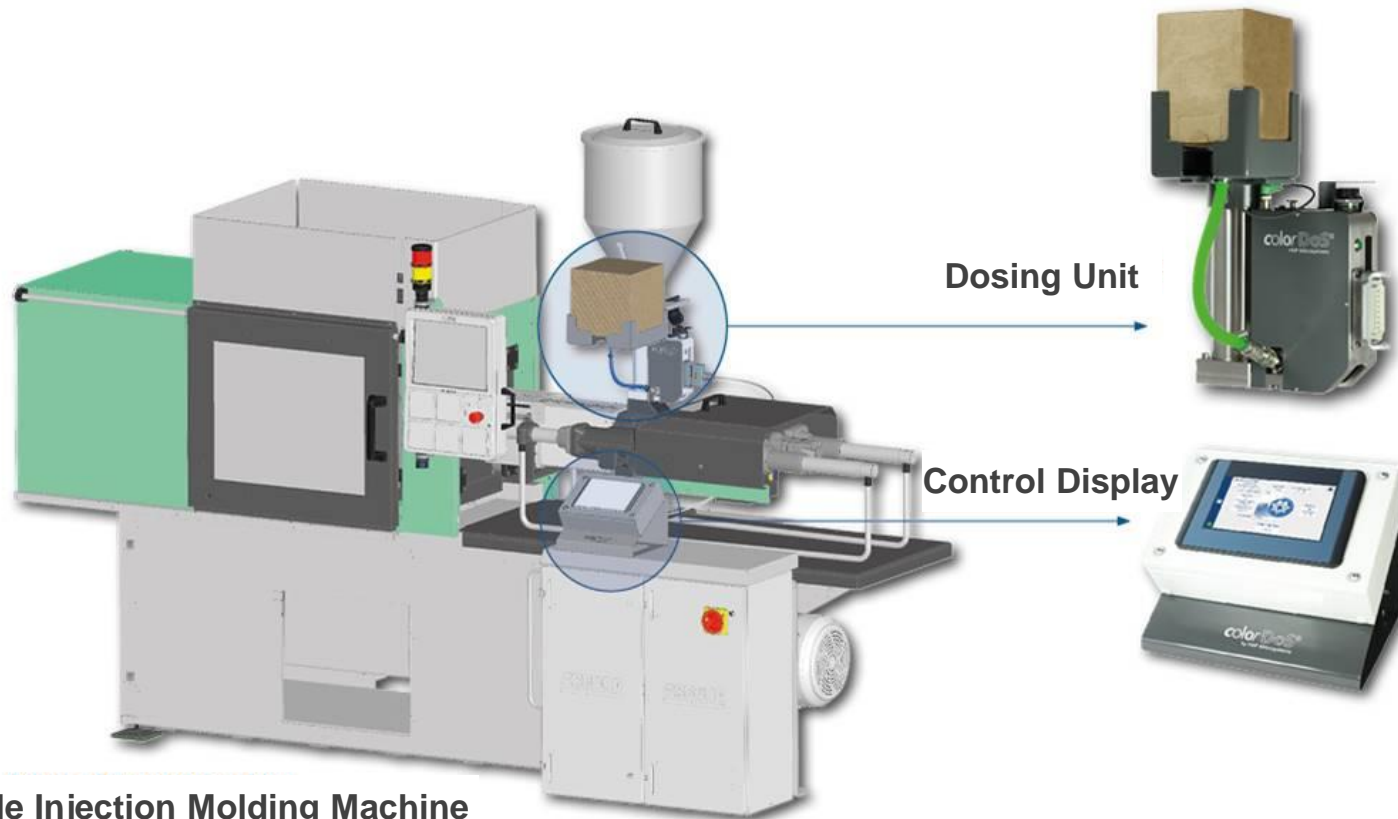
- Extraction station for various bulk container (e.g. IBC)
- Double-stroke piston pump, up to 30 bar
- Application: Extrusion up to 120 l/h color throughput
- Volumetric dosing without calibration (input color density), dosing accuracy $\pm 1\%$
- 100 l-buffer with integrated level control for container exchange
- Central control unit for controlling up to 10 extraction stations
- Optionally:
 - Tilting device
 - Agitator

MICRO ANNULAR GEAR PUMP COLORDOS®



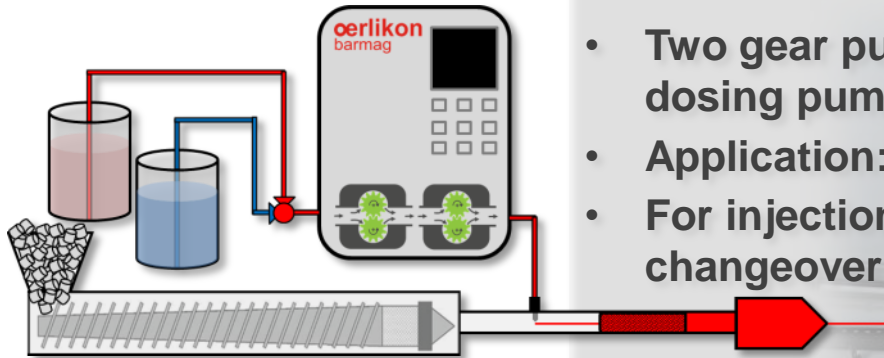
- High precision micro annular gear pump (eccentrically mounted rotors, cycloidally toothed)
- Application: Injection molding, 0.02 ml to 100 ml color per shot
- Extremely compact system, Mounting above the main hopper of the injection molding machine
- Volumetric dosing without calibration (input color density)
- Incl. load cell for level control
- Compatible with ROWASOL COLOR CUBE
- Separate operating unit with different operating levels, residual running time, recipe management, cleaning mode, alarm manager, etc.

MICRO ANNULAR GEAR PUMP COLORDOS®



Example Injection Molding Machine
Arburg ALLROUNDER 320C

Source: Arburg / HNP Mikrosysteme



- Two gear pumps connected in series (booster and dosing pump)
- Application: Extrusion > 1.5 ml/min color throughput
- For injection into polymer melt for very fast color changeover
- Up to a pressure of 300 bar
- Volumetric dosing
- Easy touchscreen control
- Optional equipment for continuous production and seamless color changeover:
 - Connection of up to three pressure tanks simultaneously
 - Level sensors
 - Automatic valve control
 - ROWASOL non-return valve
 - Purging valve with bypass
 - Synchronization with extrusion throughput

**Container holder for COLOR
CUBE and Politainer**



**Drip-free Politainer
connection set**



**Non-return valve for
extrusion application**



Drip-free extruder connection sets





**THANK YOU VERY
MUCH FOR YOUR
INTEREST!**