

DESIGNED TO PRECISELY DOSE PLASTIC ADDITIVES

The SDD Digital Dosing System offers precise feeding for almost any plastics machine, whether your application is injection molding, blow molding, or extrusion. The SDD 2 dosing unit offers the ability to use dual additives at different rates. The SDD dosing unit uses a variable speed DC drive motor and a correctly sized dosing disc to precisely feed powder or pellet additives, at the set rate, into the throat of the processing machine. Precision design and closed loop control ensures high accuracy to setpoint.



Features

- Components to dose granulate, microbatch/ pellets or powder (please specify requirements)
- Quick disconnect for changeover/cleaning
- Sampling tube for simple calibration
- Ability to handle materials up to 176°F (80°C)
- Separate easy to operate control with 40" connection wire
- Connection wire to processing machine
- Operating voltage 115/1/60
- 0.2 kW operating load (SDD); 0.4 kW operating load (SDD 2)
- Weight 23 kg/51 lbs (SDD); 45 kg/100 lbs (SDD 2)
- Capable of rates of 0.3–12.4 lbs/hr (continuous)

Options

- Spare station for immediate changeover for pellets or powders
- Option for abrasive materials
- Audible alarm
- Alarm light
- Low level sensors
- Intermediate hoppers for main component
- Hopper loaders for automatic refill
- Special voltage
- Larger base piece for larger processing machines
- Capable of rates up to 800 lbs/hr (continuous)

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CONTROL FEATURES

Available for either extrusion or injection molding machines, the controller automatically calculates calibration values and allows for direct input of desired percentages. The controller features user-friendly icons and a 5 digit LED display that shows additive consumption. It stores up to 10 recipes, with memory backup for recipe and data storage.

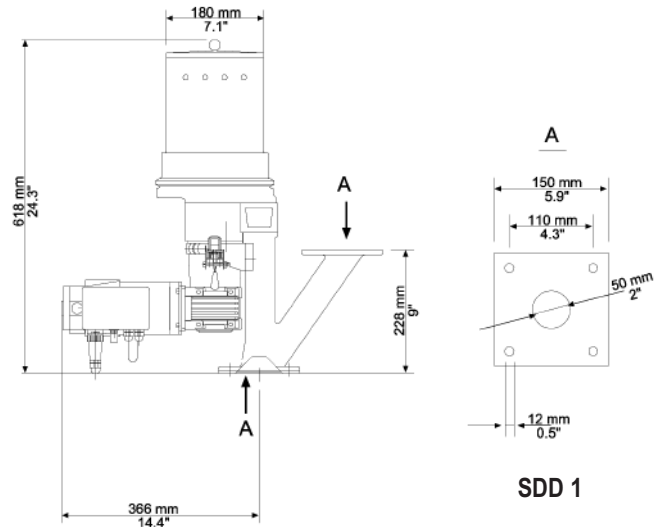
- Dry contact signal input and dry contact alarm output
- Input for level probe for both raw material and additives
- IP64 shielding
- Short circuit proof outputs
- Operates between 32 to 122°F (0 to 50°C)
- Operating voltage 115 VAC +/-10%, 50/60 Hz
- Connected load of 100 W maximum during operation
- Thermal device protection



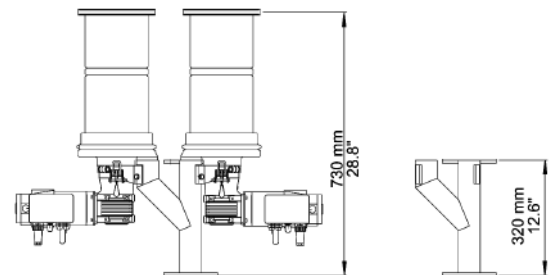
SDD 1
 Feed Rate: 0.2-800 lbs/hr
 Operating Load: 0.2 kW
 Weight: 51 lbs. (23kg)



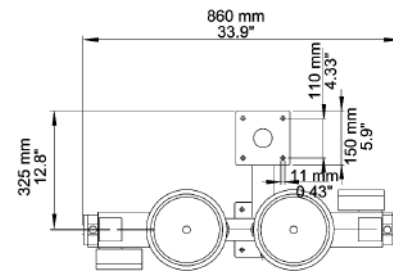
SDD 2
 Feed Rate: 0.2-800 lbs/hr
 Operating Load: 0.4 kW
 Weight: 100 lbs. (45kg)



SDD 1



SDD 2








SDD SERIES



Digital Dosing System

SPECIFICATIONS

Disc	Disc Nomenclature	Min/Max Disc RPM	Amount of Material per Disc Revolution		Minimum Throughput with Continuous Running		Maximum Throughput with Continuous Running	
			35 lbs./ft ³	44 lbs./ft ³	35 lbs./ft ³	44 lbs./ft ³	35 lbs./ft ³	44 lbs./ft ³
 <p>Default calibration # 1.50 g/rev</p>	P030672 3 mm thick 6 mm dia. 72 pockets	0.2 RPM 3.0 RPM	1.53 g/rev 0.02 g/hole	1.95 g/rev 0.027 g/hole	0.04 lb/hr 0.02 kg/hr	0.04 lb/hr 0.02 kg/hr	0.61 lb/hr 0.28 kg/hr	0.77 lb/hr 0.35 kg/hr
		0.2 RPM 8.4 RPM			0.04 lb/hr 0.02 kg/hr	0.04 lb/hr 0.02 kg/hr	1.69 lb/hr 0.77 kg/hr	2.17 lb/hr 0.98 kg/hr
	0.5 RPM 11.5 RPM	0.10 lb/hr 0.045 kg/hr			0.12 lb/hr 0.05 kg/hr	2.32 lb/hr 1.05 kg/hr	2.89 lb/hr 1.31 kg/hr	
	1.0 RPM 38.0 RPM ⁴	0.19 lb/hr 0.09 kg/hr			0.26 lb/hr 0.12 kg/hr	7.66 lb/hr 3.47 kg/hr	9.63 lb/hr 4.37 kg/hr	
 <p>Default calibration # 1.30 g/rev</p>	P050660 5 mm thick 5.7 mm dia. 60 pockets	0.2 RPM 3.0 RPM	1.35 g/rev 0.02 g/hole	1.70 g/rev 0.028 g/hole	0.04 lb/hr 0.02 kg/hr	0.06 lb/hr 0.03 kg/hr	0.42 lb/hr 0.19 kg/hr	0.54 lb/hr 0.24 kg/hr
		0.2 RPM 8.4 RPM			0.05 lb/hr 0.02 kg/hr	0.07 lb/hr 0.03 kg/hr	1.1 lb/hr 0.50 kg/hr	1.37 lb/hr 0.62 kg/hr
	0.5 RPM 11.5 RPM	0.09 lb/hr 0.04 kg/hr			0.10 lb/hr 0.05 kg/hr	1.46 lb/hr 0.66 kg/hr	1.83 lb/hr 0.83 kg/hr	
	1.0 RPM 11.5 RPM ⁴	0.17 lb/hr 0.08 kg/hr			0.22 lb/hr 0.10 kg/hr	6.48 lb/hr 2.94 kg/hr	8.54 lb/hr 3.87 kg/hr	
 <p>Default calibration # 4.00 g/rev</p>	051040 5 mm thick 10 mm dia. 40 pockets	0.2 RPM 3.0 RPM	4.24 g/rev 0.11 g/hole	5.39 g/rev 0.13 g/hole	0.11 lb/hr 0.05 kg/hr	0.15 lb/hr 0.07 kg/hr	1.68 lb/hr 0.76 kg/hr	2.14 lb/hr 0.97 kg/hr
		0.2 RPM 8.4 RPM			0.11 lb/hr 0.05 kg/hr	0.15 lb/hr 0.07 kg/hr	4.71 lb/hr 2.12 kg/hr	5.99 lb/hr 2.72 kg/hr
	0.5 RPM 11.5 RPM	0.27 lb/hr 0.12 kg/hr			0.35 lb/hr 0.15 kg/hr	6.33 lb/hr 2.87 kg/hr	8.00 lb/hr 3.62 kg/hr	
	1.0 RPM 38.0 RPM ⁴	0.55 lb/hr 0.25 kg/hr			0.70 lb/hr 0.32 kg/hr	21.19 lb/hr 9.61 kg/hr	27.08 lb/hr 12.28 kg/hr	
					Consult factory - 40 pocket and 35.5 RPM motor for small pellets and coarse powder only			
 <p>Default calibration # 7.30 g/rev</p>	051725 D5 mm thick 17 mm dia. 25 pockets	0.2 RPM 3.0 RPM	7.37 g/rev 0.30 g/hole	9.38 g/rev 0.38 g/hole	0.20 lb/hr 0.09 kg/hr	0.24 lb/hr 0.11 kg/hr	2.92 lb/hr 1.32 kg/hr	3.70 lb/hr 1.68 kg/hr
		0.2 RPM 8.4 RPM			0.20 lb/hr 0.09 kg/hr	0.24 lb/hr 0.11 kg/hr	8.18 lb/hr 3.71 kg/hr	10.37 lb/hr 4.70 kg/hr
	0.5 RPM 11.5 RPM	0.48 lb/hr 0.22 kg/hr			0.61 lb/hr 0.27 kg/hr	11.0 lb/hr 4.99 kg/hr	14.0 lb/hr 6.36 kg/hr	
	1.0 RPM 38 RPM ⁴	1.00 lb/hr 0.44 kg/hr			1.25 lb/hr 0.57 kg/hr	37.04 lb/hr 16.80 kg/hr	47.10 lb/hr 21.36 kg/hr	
 <p>Default calibration # 13.50 g/rev</p>	051818 5 mm thick 18 mm dia. 18 pockets	0.2 RPM 3.0 RPM	13.42 g/rev 0.75 g/hole	17.08 g/rev 0.95 g/hole	0.35 lb/hr 0.16 kg/hr	0.44 lb/hr 0.20 kg/hr	5.34 lb/hr 2.42 kg/hr	6.80 lb/hr 3.08 kg/hr
		0.2 RPM 8.4 RPM			0.35 lb/hr 0.16 kg/hr	0.44 lb/hr 0.20 kg/hr	14.96 lb/hr 6.79 kg/hr	19.03 lb/hr 8.63 kg/hr
	0.5 RPM 11.5 RPM	0.85 lb/hr 0.39 kg/hr			1.12 lb/hr 0.51 kg/hr	19.60 lb/hr 8.89 kg/hr	25.63 lb/hr 11.62 kg/hr	
	1.0 RPM 38.0 RPM ⁴	1.76 lb/hr 0.80 kg/hr			2.20 lb/hr 1.00 kg/hr	67.44 lb/hr 30.59 kg/hr	85.90 lb/hr 38.95 kg/hr	

Note 1: This guide is to be used for general disc selection for Digital Dosing unit applications. All rates shown are based on continuous throughput of free-flowing materials. Consult factory for regrind, powder and all hard-to-flow materials.

Note 2: Minimum recovery time is one (1) second, and maximum feeder disc revolutions in one screw recovery cycle (injection mode) is 9.5 revolutions. Use proper disc sizing for injection molding applications to ensure proper dispensing of material during the recovery cycle.








Note 3: Feeder should not be sized to run continuously below 15% of maximum speed - use lower RPM motor or disc with smaller pockets.

Note 4: 35.5 and 38 rpm motors can only be used with soft pellets - may not have enough torque to cut hard pellets, i.e. PC, PET, nylon, etc. especially when the shear gets dull.

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Disc	Disc Nomenclature	Min/Max Disc RPM	Amount of Material per Disc Revolution		Minimum Throughput with Continuous Running		Maximum Throughput with Continuous Running	
			35 lbs./ft ³	44 lbs./ft ³	35 lbs./ft ³	44 lbs./ft ³	35 lbs./ft ³	44 lbs./ft ³
 DT30-101820 Default calibration # 28.00 g/rev	101820 10 mm thick 18 mm dia. 20 holes CT23056	0.2 RPM	28.0 g/rev	35.6 g/rev	0.75 lbs./hr	1.00 lbs./hr	11.11 lbs./hr	14.10 lbs./hr
		3.0 RPM			0.34 kg/hr	0.43 kg/hr	5.04 kg/hr	6.40 kg/hr
		0.2 RPM			0.75 lbs./hr	1.00 lbs./hr	31.11 lbs./hr	39.50 lbs./hr
		8.4 RPM			0.34 kg/hr	0.43 kg/hr	14.11 kg/hr	17.90 kg/hr
 DT30-102025 "Sure-shot" Default calibration # 33.00 g/rev	P102025 10 mm thick Oval Hole 18 mm x 25 mm 20 holes CT66707	0.2 RPM	33.6 g/rev	42.7 g/rev	0.87 lbs./hr	1.12 lbs./hr	13.10 lbs./hr	16.60 lbs./hr
		3.0 RPM			0.40 kg/hr	0.50 kg/hr	5.94 kg/hr	7.50 kg/hr
		0.2 RPM			0.87 lbs./hr	1.12 lbs./hr	36.67 lbs./hr	46.60 lbs./hr
		8.4 RPM			0.40 kg/hr	0.50 kg/hr	16.63 kg/hr	21.10 kg/hr
 DT30-203012 Default calibration # 95.00 g/rev	203012 20 mm thick 30 mm dia. 12 holes CT23060	0.2 RPM	95.0 g/rev	118.7 g/rev	2.51 lbs./hr	3.13 lbs./hr	37.73 lbs./hr	47.10 lbs./hr
		3.0 RPM			1.14 kg/hr	1.42 kg/hr	17.11 kg/hr	21.30 kg/hr
		0.2 RPM			2.51 lbs./hr	3.13 lbs./hr	105.66 lbs./hr	131.9 lbs./hr
		8.4 RPM			1.14 kg/hr	1.42 kg/hr	47.93 kg/hr	59.80 kg/hr
 DT30-204010F Default calibration # 150.00 g/rev	204010F 20 mm thick 40 mm dia. 10 pockets CT18405	0.2 RPM	151.1 g/rev	188.7 g/rev	4.00 lbs./hr	5.00 lbs./hr	60.00 lbs./hr	75.00 lbs./hr
		3.0 RPM			1.80 kg/hr	2.25 kg/hr	27.22 kg/hr	34.00 kg/hr
		0.2 RPM			4.00 lbs./hr	5.00 lbs./hr	168.00 lbs./hr	210.00 lbs./hr
		8.4 RPM			1.80 kg/hr	2.25 kg/hr	76.20 kg/hr	95.20 kg/hr
 DP30-250940 Default calibration # 7.80 g/rev	P250940 2.5 mm thick 9 mm dia. 40 pockets CT100864	0.2 RPM	7.8 g/rev	9.7 g/rev	0.20 lbs./hr	0.26 lbs./hr	3.07 lbs./hr	3.87 lbs./hr
		3.0 RPM			0.093 kg/hr	0.115 kg/hr	1.40 kg/hr	1.76 kg/hr
		0.2 RPM			0.20 lbs./hr	0.26 lbs./hr	8.61 lbs./hr	10.83 lbs./hr
		8.4 RPM			0.093 kg/hr	0.115 kg/hr	3.91 kg/hr	4.91 kg/hr
 DP30-050940 Default calibration # 15.00 g/rev	P050940 5 mm thick 9 mm dia. 40 pockets CT100863	0.2 RPM	15.6 g/rev	19.5 g/rev	0.41 lbs./hr	0.51 lbs./hr	6.19 lbs./hr	7.73 lbs./hr
		3.0 RPM			0.187 kg/hr	0.23 kg/hr	2.81 kg/hr	22.26 kg/hr
		0.2 RPM			0.41 lbs./hr	0.51 lbs./hr	17.33 lbs./hr	21.66 lbs./hr
		8.4 RPM			0.187 kg/hr	0.23 kg/hr	7.86 kg/hr	9.82 kg/hr
 DP30-050940 Default calibration # 15.00 g/rev	P050940 5 mm thick 9 mm dia. 40 pockets CT100863	0.5 RPM	0.39 g/hole	19.5 g/rev	1.00 lbs./hr	0.12 lbs./hr	22.62 lbs./hr	28.65 lbs./hr
		11.5 RPM			0.45 kg/hr	0.57 kg/hr	10.62 kg/hr	13.80 kg/hr
		1.0 RPM			2.00 lbs./hr	2.60 lbs./hr	78.57 lbs./hr	98.16 lbs./hr
		38.0 RPM ⁴			0.94 kg/hr	1.17 kg/hr	35.64 kg/hr	44.52 kg/hr

Note 1: This guide is to be used for general disc selection for Digital Dosing unit applications. All rates are based on continuous throughput of free-flowing materials. Consult factory for regrind, powder and all hard-to-flow materials.

Note 2: Maximum Minimum recovery time is one (1) second, and maximum feeder disc revolutions in one screw recovery cycle (injection mode) is 9.5 revolutions. Use proper sizing for injection molding applications to ensure proper dispensing of material during the recovery cycle.