

# HydraPol™

*Dry Polymer Make-up Systems*

**WATER TECHNOLOGIES**

## Overview

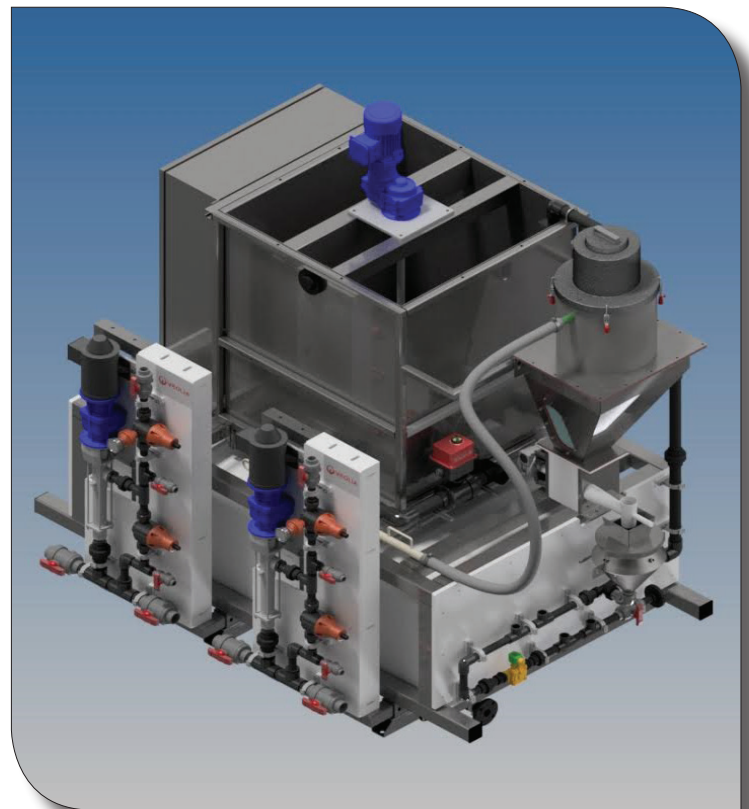
Veolia's HydraPol™ dry polymer make-up and dosing systems are designed to prepare and activate any type of dry polymer. Equipped with a volumetric feeder, the HydraPol™ introduces dry polymer (from 25 kg/50 lbs bags or super sacks) into the dampening system. The output of the volumetric feeder is equipped with an automatic shut-off valve which prevents all contact between the dry polymer and moisture.

The optimal activation of the dry polymer is ensured by multiple shearing zones, initiated through an effective high shear pre-wetting stage to enhance the reaction of polymer chains. This eliminates the formation of polymer lumps and greatly reduces the risks of clogging. The pre-wetting stage consists of a cone shaped stainless steel vortex for instantaneous dry polymer dispersion in water. Pre-wetted particles of polymer are then transported via an eductor, to the mixing tank.

In the mixing tank, the polymer solution is continuously activated with a low shear agitator. Veolia customizes the speed of the agitator and the diameter of the propeller, based on the geometry of the tank, to ensure optimal activation of polymer. Once the polymer is properly mixed, the solution is transferred to the storage tank. The mixing and storage tanks are mounted on top of each other to reduce total footprint (up to model HP4000). All operations are fully automated through a customizable control panel for easy management of polymer preparation.

## HydraPol™ Compact

- Compact integrated design for specific applications
- Standard pre-engineered models with defined packaged options
- Small footprint, all pre-wired and pre-piped
- Manual or vacuum dry polymer handling
- Easy to install, operate and maintain
- Easy integration of dosing skids



## HydraPol™ Flex

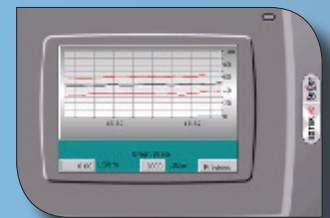
- Modular design to suit a wide range of applications requirements
- Customizable control panel to govern operational sequences
- Handling system adapted to customer needs: vacuum or super-bag unloader
- Stacked tank design resulting in a reduced footprint
- Easy maintenance



System Capacity		0.2% Solution				0.5% Solution			
MODEL	Concentration	45 min		90 min		45 min		90 min	
	Maturation Time	kg/h	(lb/h)	kg/h	(lb/h)	kg/h	(lb/h)	kg/h	(lb/h)
HydraPol™ Compact 500		1.5	(3.3)	0.78	(1.7)	3.7	(8.1)	1.9	(4.2)
HydraPol™ Compact 1000		2.3	(5.0)	1.2	(2.6)	5.4	(11.8)	2.9	(6.4)
HydraPol™ Flex 250		0.72	(1.6)	0.37	(0.8)	1.8	(3.9)	0.92	(2.0)
HydraPol™ Flex 500		1.1	(2.4)	0.58	(1.3)	2.7	(6.0)	1.4	(3.1)
HydraPol™ Flex 750		1.6	(3.6)	0.87	(1.9)	4.0	(8.7)	2.1	(4.7)
HydraPol™ Flex 1000		2.1	(4.7)	1.2	(2.5)	5.1	(11.2)	2.8	(6.2)
HydraPol™ Flex 1250		2.6	(5.6)	1.4	(3.1)	6.1	(13.3)	3.4	(7.5)
HydraPol™ Flex 1500		3.0	(6.5)	1.7	(3.7)	7.0	(15.4)	4.0	(8.8)
HydraPol™ Flex 1750		3.4	(7.5)	1.9	(4.2)	7.9	(17.4)	4.6	(10.2)
HydraPol™ Flex 2000		4.1	(9.0)	2.2	(4.9)	10.0	(22.1)	5.5	(12.1)
HydraPol™ Flex 2500		4.9	(10.8)	2.7	(6.0)	12.1	(26.6)	6.8	(14.9)
HydraPol™ Flex 3000		5.8	(12.7)	3.3	(7.2)	14.1	(31.0)	8.1	(17.7)
HydraPol™ Flex 3500		6.5	(14.2)	3.7	(8.2)	15.7	(34.6)	9.2	(20.1)
HydraPol™ Flex 4000		7.2	(15.8)	4.2	(9.2)	17.5	(38.5)	10.3	(22.7)
HydraPol™ Flex 9000		14.5	(31.9)	8.9	(19.5)	34.3	(75.5)	21.4	(47.1)
HydraPol™ Flex 15000		19.1	(41.9)	12.9	(28.4)	44.4	(97.6)	30.8	(67.7)

## Hydra-Stat

- Real-time polymer activation monitoring
- Prevents process downtime
- Validates operation and system performance
- Optimizes polymer consumption (ROI)



# Resourcing the world

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