

HYDRANT PAINTING - A BETTER WAY

By Steve Freeman

Hello again Aquafacts readers! Many systems routinely paint fire hydrants or should. In this article I would like to share the method employed by the water department crew with the Village of Morrisville, NY. They are a small 2-man crew led by Superintendent David Commins and his assistant, Dave Pushlar. They are responsible for many duties in the village including water, wastewater, streets, parks, buildings, grounds and basically anything else that may arise.

The day I stopped by for a live demonstration the weather was uncooperative with light showers. The crew was gracious enough to perform the demo on a parts hydrant they had in storage. This worked out quite well as the old hydrant had several coats of paint on it. When the demo was finished, I was certainly convinced their method was much more effective than the steel scraper and paint brush that I used to use! This unique hydrant painting system was built quite affordably in house. It starts with a small hay style wagon, pulled by the village's side by side. Two plastic water tanks, plumed in tandem, are attached holding a maximum capacity of 600-gallons. The tanks are filled via a hose connected to a fire hydrant. Water is fed through a 3-horse pump raising the water pressure to about 30-psi. A garden hose feeds water from the pump to a 5,000-psi pressure washer located in the bed of the side by side. The gun of the pressure washer is connected to the pressure washer abrasive blasting kit which was purchased through a tool catalog. The blasting kit hose intake portion is put into a 5-gallon pail containing a steel slag aggregate. Commins explained that steel aggregates are much more effective than sand. When the washer handle is deployed, the pressure siphons the steel aggregate through the hose mixing it with the water delivering an extremely fast, effective and dust free method of paint removal. Paint is removed in under ten minutes. Once the hydrant is completely dry, a coat of fresh paint is applied using a handheld hydraulic 24-volt cordless sprayer. Two coats are recommended with each coat taking less than five minutes to apply. Remember, do not paint the chains, this will cause them to bind when the caps are removed. Commins suggests using a water based high gloss direct to bare metal enamel paint. No primer is needed. He also added that they will clean a few in the morning and paint in the afternoon when the hydrants are thoroughly dry. A warm day with little or no wind is preferred. Remember to use face, ear, eye protection and gloves. Hydrant painting is not the only use for the water wagon, some other uses include, watering the village flowers, manhole cleaning and dust control for pavement cutting. Below is a picture of their set-up:



Water Wagon with paint removal system

Below are some pictures from start to finish. Notice in the final picture how legible the manufacturers stamped information on the hydrant is.



Before paint removal



Dave Pushlar removes paint



After old paint has been removed



Pushlar spray painting the hydrant



New paint

Hydrant painting is also a good opportunity for operations specialists to inspect their hydrants. May I suggest printing out a check list sheet to carry along with you. Some items you may want to include are:

- 💧 Remove caps, lubricate nozzle threads using a food grade grease.
- 💧 Check oil level or grease >>>

- 💧 Look for corroded nuts, bolts or break away flanges.
- 💧 Remove cap, install pressure gauge, open hydrant fully, record pressure, look for leaking gaskets or stem. Close hydrant, remove pressure gauge, check to make sure hydrant is draining by placing hand over nozzle, you should feel a slight amount of suction. Replace cap. Make sure all caps are slightly loose for easy removal in an emergency.
- 💧 Record a physical and GPS location for mapping purposes.
- 💧 Check and clean the guard valve box to make sure the valve nut is accessible.

These are just a few ideas, feel free to add to your checklist. If the hydrant is not in working order, use some form to identify with, i.e., out of service bag or sign. Be sure to inform your fire department as well.

Hopefully this article will be helpful in your hydrant painting exercise. A thanks to Dave and Dave for being so accommodating and sharing their method. Together we will continue to provide safe, affordable, reliable Quality on Tap! 💧💧

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