HYDRANT CAPACITY vs. MAIN CAPACITY



HYDRANT CAPACITY FLOW TEST

The information derived from this test is used by the fire service to plan for fighting fires. If all hydrants in a system are tested, partially closed valves and other obstructions will become known. This test uses a single hydrant as both the test hydrant and the flow hydrant.

SETUP

- 1. Attach gauge cap.
- 2. Attach hydrant slow-close gate valve and tighten all other caps.
- 3. Set the Little Hose Monster[™] with Pitotless Nozzle[™] in an appropriate location for flowing water.
- **4.** Attach hose to Pitotless Nozzle[™] and Little Hose Monster[™] assembly.
- 5. Attach Remote Reader assembly to gauge to Pitotless Nozzle[™].

CONDUCT THE TEST

- **1.** Slowly open the hydrant using the gauge cap to purge air from the hydrant. Close it when air is vented.
- 2. Record static pressure from gauge cap.
- **3.** Fully open hydrant gate valve.
- 4. When the flow-rate stabilizes
 - a. Record nozzle pressure from the Remote Reader.
 - **b.** Record the residual pressure reading from the gauge cap.

At this point, the test is complete



MAIN CAPACITY FLOW TEST

A Main Capacity Test evaluates the water supply of the fire main at the location of the test hydrant. The information derived from this test is used by city planners and contractors to consider the water supply for general use and fire sprinkler systems.

SETUP

- At the test hydrant (pressure hydrant, static/residual hydrant):
- **1.** Attach gauge cap to test hydrant. Tighten all other caps.
- **2.** Open test hydrant, vent air from hydrant body through the valve on the gauge cap assembly. Close it when air is vented.

AT THE TEST HYDRANT

- 1. Set the Little Hose Monster[™] with gauge to the Pitotless Nozzle[™] in an appropriate location for flowing water.
- 2. Attach Remote Reader and gauge to the Pitotless Nozzle™.
- 3. Attach hydrant gate valve to the hydrant.
- **4.** Tighten other caps.
- 5. Attach hose to Pitotless Nozzle[™] and Little Hose Monster[™] assembly.

CONDUCT THE TEST

- **1.** Record static pressure reading from gauge cap. (Test hydrant)
- 2. Open flow hydrant fully.
- 3. When the flow-rate stabilizes,
 - **a.** Record nozzle pressure from the Remote Reader. (Test hydrant)
 - **b.** Record the residual pressure reading from the gauge cap. (Test hydrant)

At this point, the test is complete

AFTER TEST COMPLETION

- L Close all open hydrants and remove testing equipment. Replace and tighten caps. If the hydrant is a dry barrel type, note that the water drains properly from the hydrant.
- Record the number of minutes that the water was flowing. This is used to account for the amount of water used during the flow test.