FOAMPRO®
A Safe Fleet Brand

OEM NFPA 1901/1906 Foam Single-Point Injection Proportioner Test Procedure

2000 / 3000 Series Foam Systems

1) Foam pump and water flowmeters must be calibrated per Installation and Operation Manual before testing (Concentrate viscosity must be within the foam proportioner manufactures limits)

2) Tools needed for the test are a pitot tube or other calibrated flowmeter to test the system water flow rates. A graduated bucket to collect and calibrate foam concentrate. A stop watch to measure volume unit/time of foam concentrate flow. A load valve to control system back pressure capable of maximum flow of the foam system pump. Appropriate pressure gauge to measure back pressure.

   On larger systems, it may be practical to use a calibrated flowmeter instead of a graduated collection container and recirculate the foam concentrate.

3) System performance is dependent on flowmeter/pipe size. Identify applicable OEM test points based on size of flowmeter installed. Maximum water flow is determined by the flowmeter range or the maximum water pump output, whichever is less.

4) Water and foam concentrate can be tested separately on FoamPro 2000 and 3000 series systems as follows:

   A) Test main waterway flowmeter at the three (3) test points shown on applicable OEM Certification test chart (If the water pump cannot reach the maximum flowmeter rate at 150psi use maximum flow rate of the pump). Water flow rates displayed on the control head should be within 10% of pitot tube measurements.

   B) Test the foam pump at three (3) test points shown on OEM Certification test chart.
      1) Turn the “Cal/Inject” valve to the Calibrate position (Foam system should be primed with no air in the lines).
      2) Attach pressure gauge and load valve to the “cal/inject” valve with a hose running to graduated bucket.
      3) Enter “Simulated Flow” mode and set the water flow rate to the value listed in the chart for the flowmeter size.
      4) Set the percent (%) concentrate to the corresponding value specified in the chart.
      5) Press the “ON” button to start the proportioner.
      6) Set the load valve back pressure to the corresponding value specified in the chart.
      7) Run the system for short period (Not less than 5 seconds electric driven, 20 seconds hydraulic) to assure prime and stabilization. Note the volume of concentrate in the bucket and start the stop watch.
      8) Run the system for several minutes. Note the volume in the bucket and time on the stop watch. (Note: Longer run time will increase measurement accuracy)
      9) Divide the volume change in the bucket (total concentrate pumped during the timed period) by the number of minutes on the stop watch. The result must match the corresponding Foam (GPM) listed in the chart within NFPA accuracy requirements. (Note: NFPA allows -0% to +40% for solutions of less than 1% and -0% to +30% for solutions greater than 1%; or 1 percentage point whichever is less)
      10) Repeat this process for remaining two (2) rows of the OEM Certification Test chart. All three scenarios must meet NFPA guidelines without re-calibrating.

5) If system has multiple concentrate tanks, repeat step B for each additional tank.

FOAMPRO®
A Safe Fleet Brand
26 Southern Blvd. • Nesconset, NY 11767 USA
Phone 800-533-9511 • FAX 816-892-3178
www.foampro.com

NFPA 1901 Model AccuMax 3060
Foam System Certification

FOAMPRO®
A Safe Fleet Brand

AccuMax 3040

Manufacturer Type Test

System Capacity

Range	Water PSI	Range	Foam Cap. (gpm)
Min	0	Min	5
Max	250	Max	40
Max	250	Min	5
Min	0	Max	40
Mid	125	Mid	20

Individual Line Controllers

1/2" Line Control

Range	Water PSI	Range	Foam Cap. (gpm)
Min	0	Min	3
Max	250	Max	26
Max	250	Min	3
Min	0	Max	26
Mid	125	Mid	15

3/4" Line Control

Range	Water PSI	Range	Foam Cap. (gpm)
Min	0	Min	6
Max	250	Max	60
Max	250	Min	6
Min	0	Max	60
Mid	125	Mid	30

1" Line Control

Range	Water PSI	Range	Foam Cap. (gpm)
Min	0	Min	6
Max	250	Max	60
Max	250	Min	6
Min	0	Max	60
Mid	125	Mid	30

Flowmeter

2" Pipe

Range	Water PSI	Range	Waterflow (gpm)
Min	0	Min	15
Max	250	Max	520
Min	0	Max	520
Max	250	Min	15
Mid	125	Mid	60

2-1/2" Pipe

Range	Water PSI	Range	Waterflow (gpm)
Min	0	Min	20
Max	250	Max	750
Min	0	Max	750
Max	250	Min	15
Mid	125	Mid	250

3" Pipe

Range	Water PSI	Range	Waterflow (gpm)
Min	0	Min	30
Max	250	Max	1150
Min	0	Max	1150
Max	250	Min	30
Mid	125	Mid	375

4" Pipe

Range	Water PSI	Range	Waterflow (gpm)
Min	0	Min	55
Max	250	Max	1980
Min	0	Max	1980
Max	250	Min	55
Mid	125	Mid	625

5" Pipe

Range	Water PSI	Range	Waterflow (gpm)
Min	0	Min	80
Max	250	Max	3000
Min	0	Max	3000
Max	250	Min	80
Mid	125	Mid	1000

6" Pipe

Range	Water PSI	Range	Waterflow (gpm)
Min	0	Min	117
Max	250	Max	4500
Min	0	Max	4500
Max	250	Min	117
Mid	125	Mid	1440

8" Pipe

Range	Water PSI	Range	Waterflow (gpm)
Min	0	Min	200
Max	250	Max	7800
Min	0	Max	7800
Max	250	Min	200
Mid	125	Mid	2560

OEM Certification Test

Discharge Waterway

2" Pipe

Range	Water PSI	Range	Waterflow (gpm)	Quantity Certified
Min	0	Min	15	
Max	250	Max	520	
Mid	125	Mid	160	

2 1/2" Pipe

Range	Water PSI	Range	Waterflow (gpm)	Quantity Certified
Min	0	Min	20	
Max	250	Max	750	
Mid	125	Mid	250	

3" Pipe

Range	Water PSI	Range	Waterflow (gpm)	Quantity Certified
Min	0	Min	30	
Max	250	Max	1150	
Mid	125	Mid	375	

4" Pipe

Range	Water PSI	Range	Waterflow (gpm)	Quantity Certified
Min	0	Min	55	
Max	250	Max	1980	
Mid	125	Mid	625	

5" Pipe

Range	Water PSI	Range	Waterflow (gpm)	Quantity Certified
Min	0	Min	80	
Max	250	Max	3000	
Mid	125	Mid	1000	

6" Pipe

Range	Water PSI	Range	Waterflow (gpm)	Quantity Certified
Min	0	Min	117	
Max	250	Max	4500	
Mid	125	Mid	1440	

8" Pipe

Range	Water PSI	Range	Waterflow (gpm)	Quantity Certified
Min	0	Min	200	
Max	250	Max	7800	
Mid	125	Mid	2560	

Type tested to all known foam concentrate viscosities

Foam Injection Test Points

1/2" Line

Range	Sim Flow (gpm)	Back Press. PSI	Range	Foam %	Range	Foam Cap. (gpm)	Quanity Certified
Min	500	0	Min	0.6%	Min	3.0	
Max	500	250	Max	5.2%	Max	26.0	
Mid	500	125	Mid	3.0%	Mid	15.0	

3/4" Line

Range	Sim Flow (gpm)	Back Press. PSI	Range	Foam %	Range	Foam Cap. (gpm)	Quanity Certified
Min	1000	0	Min	0.6%	Min	6.0	
Max	1000	250	Max	4.0%	Max	40.0	
Mid	1000	125	Mid	2.0%	Mid	20.0	

1" Line

Range	Sim Flow (gpm)	Back Press. PSI	Range	Foam %	Range	Foam Cap. (gpm)	Quanity Certified
Min	1000	0	Min	0.6%	Min	6.0	
Max	1000	250	Max	4.0%	Max	40.0	
Mid	1000	125	Mid	2.0%	Mid	20.0	

System Capacity

Range	Back Press. PSI	Range	Foam Cap. (gpm)
Min	0	Min	5
Max	250	Max	40
Mid	125	Mid	20

System Certified

Note: Optional equipment available to achieve lower concentrate flow rates. Contact FoamPro for specific test points and information.

If full flow capacity of the foam pump cannot be reached with one Line Controller selected, combine multiple Line Controllers to test full capacity of foam pump.
If minimum flow capacity of the Line Controller cannot be reached with the AccuMax system, then combine multiple Line Controllers to test minimum capacity of the Line Controller.

_____
Installer Certification
Installed, Calibrated and Tested to FoamPro's Installation Recommendations and Purchaser's Performance Specifications

Tester _____

Date _____