



Centrifugal Fire Pump Acceptance Test Form

Information on this form covers the minimum requirements of NFPA 20-2013 for performing acceptance tests on pumps with electric motors or diesel engine drivers. Other forms are available for periodic inspection, testing, and maintenance.

Owner: _____

Owner's Address: _____

Property on which pump is installed: _____

Property Address: _____

Date of Test: _____

Demand(s) of Fire Protection Systems Supplied by Pump: _____

Pump: Horizontal Vertical

Manufacturer: _____ Shop/Serial #: _____

Model or Type: _____

Rated GPM _____ Rated Pressure _____ Rated RPM _____

Suction From _____ If Tank, Size and Height _____

Driver: Electric Motor Diesel Engine Steam Turbine

Manufacturer: _____ Shop/Serial #: _____

Model or Type: _____

Rated Horsepower: _____ Rated Speed: _____

If Electric Motor, Rated Voltage _____ Operating Voltage _____

Rated Amps _____ Phase Cycles _____ Service Factor _____

Controller Manufacturer: _____

Shop/Serial #: _____ Model or Type: _____

Jockey Pump on System? Yes No Settings: On _____ Off _____

Note: All questions are to be answered Yes, No, or Not Applicable. All "No" answers are to be explained in the comments portion of this form.

I. Flush Test (Conduct before Hydrostatic Test)

Suction piping was flushed at _____ gpm? Yes No N/A

(See Table 14.1.1.1 of NFPA 20.)

Certificate presented showing flush test? Yes No N/A

II. Hydrostatic Test

Piping tested at _____ psi for 2 hours? Yes No N/A

(Note: NFPA 20 requires 200 psi or 50 psi above maximum system pressure whichever is greater.)

Piping passed test? Yes No N/A

Certificate presented showing test? Yes No N/A

III. People Present

Were the following present to witness the test:

A. Pump manufacturer/representative Yes No N/A

B. Engine manufacturer/representative Yes No N/A

C. Controller manufacturer/representative Yes No N/A

D. Transfer switch manufacturer/rep. Yes No N/A

E. Authority having jurisdiction/rep. Yes No N/A

IV. Electric Wiring for

Was all electric wiring including control interwiring

For multiple pumps, emergency power supply, and the jockey

Pump completed and checked by the electrical contractor

Prior to the initial start-up and acceptance test? Yes No N/A

V. Electric Wiring for

Run the pump at no-load, rated load and peak load (usually 150% of Rated load) conditions. For variable speed drivers, run the test with the Pressure limiting control "on" and then again at rated speed with the pump isolated from the fire protection system and the relieve valve closed.

A. Was a copy of the manufacturers' certified pump test characteristic curve available for comparison to the results of the acceptance test? Yes No N/A

B. Equipment and gages calibrated? Yes No N/A

C. No vibrations that could potentially damage any fire pump component? Yes No N/A

D. The fire pump performed at all conditions without objectionable overheating of any component? Yes No N/A

E. For each test, record the following for each load condition:

Test	Driver Speed	Suction Pressure	Discharge Pressure	Nozzle Size	Pitot Readings or Flow					
	rpm	psi	psi	inch	1	2	3	4	5	6
0				N/A						
100%										
150%										

F. For electric motor driven pumps also record:

Test	Voltage	Amperes
0		
100%		
150%		

G. Calculate Net Pressures and Total Flow

$$P_{Net} = P_{Discharge} - P_{Suction} \quad Q = 29.83 \text{ cd}^2 \sqrt{P}$$

Test	Net Pressure	Flow						Total Flow
		1	2	3	4	5	6	
0		0	0	0	0	0	0	0
100%								
150%								

H. For electric motors operating at rated voltage

and frequency, is the ampere demand less

than or equal to the product of the full load

ampere rating times the allowable service factor

as stamped on the motor nameplate? Yes No N/A

I. For electric motors operating under varying voltage:

1. Was the product of the actual voltage and

current demand less than or equal to the product

of the rated full load current times the rated

voltage times the allowable service factors? Yes No N/A

2. Was the voltage always less than 5%

below the rated voltage during the test? Yes No N/A

3. Was the voltage always less than 10%

above the rated voltage during the test? Yes No N/A

J. Did engine-driven units show no signs

of overload or stress? Yes No N/A

K. Was the governor set to properly regulate

the engine speed at rated pump speed? Yes No N/A

L. Did the gear drive assembly operate without excessive

objectionable noise, vibration, or heating? Yes No N/A

M. Was the fire pump unit started and brought up to

rated speed without interruption under the conditions

of a discharge equal to peak load? Yes No N/A

N. Did the fire pump perform equal to the

manufacturer's characteristic curve within the

accuracy limits of the test equipment? Yes No N/A

O. Electric motor pumps passed phase reversal test

on normal and alternate (if provided) power? Yes No N/A

VI. Controller Test

A. Did the pump start at least 6 times from

