

TECHNICAL REPORT

14521

Firefreeze Worldwide, Inc. 270 Route 46 East Rockaway, NJ 07866

"Cold Fire"

June 26, 1998

The sample was submitted and identified by the client as:

"Cold Fire"

Summary of Results:

Performance of Thermal Measurements:

See pages 2 thru 5 for detailed data.

Reviewed by:

Albert J. Rapella
Supervisor, Technical Services

Jeffrey D. Lipko

Technical Director, Hardlines

Labrest

Firefreeze Worldwide, Inc.

Report #14521 June 26, 1998

The following are our findings of the performance testing on Submitted product, "Cold Fire". Test results are graphically printed to indicate cool down time of the various materials heated to 500°F. The Procedure listed below indicates how this was performed.

Procedure:

The following materials are heated to 500°f using a hand torch. Using a thermal couple, record the surface temperature of each of the following "HOT" materials and determine temperature change over time to reach 85°F.

Record the temperature with a Fluke Hydra Data logger (Calibrated 12/3/97).

- 1) Material in ambient Atmosphere (75°F/85% Humidity)
- 2) After spraying heated surface with "Cold Fire"
- After spraying heated surface with "Water from a spray bottle"
- 4) Letting heated surface cool down in ambient atmosphere

Results: See Attached graph Copper

Summary:

The copper was heated and sprayed for 29.89 sec. "Cold Fire" took 27sec to reached 87.378° F. It took water 4 min., 30 sec, to reach 84.624°F. It took air 11min and 6 sec to reach 95.994°F. Our findings show that it took "Cold Fire" the least amount of time.

Labtest

Firefreeze Worldwide, Inc.

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- 1) Material in ambient Atmosphere (75°F/85% Humidity)
- 2) After spraying heated surface with "Cold Fire""
- After spraying heated surface with "Water from a spray bottle"
- 4) Letting heated surface cool down in ambient atmosphere

Results: See Attached graph Sheet Metal

Summary:

The sheet metal was heated and sprayed for 15.69 sec. "Cold Fire" took 14 sec to reached 84.522° F. It took water 4 min., 50 sec. to reach 84.538°F. It took air 9min and 11 sec. to reach 90.872°F. Our findings show that it took "Cold Fire" the least amount of time.

Labtest

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Procedure:

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Record the temperature with a Fluke Hydra Data logger (Calibrated 12/3/97).

- 1) Material in ambient Atmosphere (75°F/85% Humidity)
- 2) After spraying heated surface with "Cold Fire""
- After spraying heated surface with "Water from a spray bottle"
- 4) Letting heated surface cool down in ambient atmosphere.

Results: See Attached graph Glass

Summary:

The glass was heated and sprayed for 23.47 sec. "Cold Fire" took 31 sec. to reached 84.093° F. It took water 2.min, 26 sec. to reach 85.821° F. It took air 8min and 23 sec. to reach 85.176° F. Our findings show that it took "Cold Fire" the least amount of time. Note as the glass cooled after spraying with water the glass cracked.

Labtest

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Procedure:

The following materials are heated to 500°F using a hand torch. Using a thermal couple, record the surface temperature of each of the following "HOT" materials and determine temperature change over time to reach 85°F.

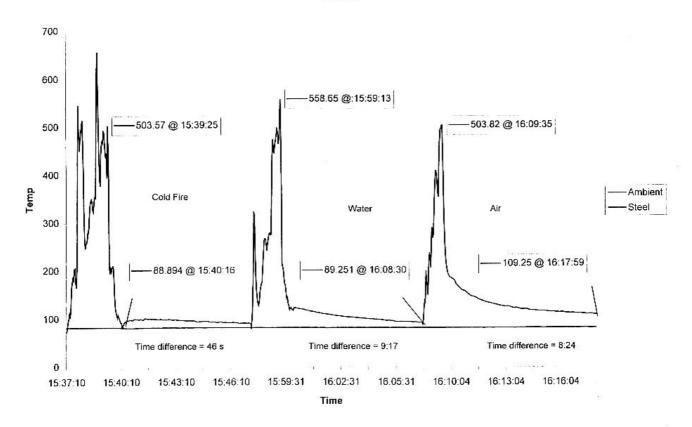
Recording the temperature with a Fluke Hydra Data logger Calibrated 12/3/97

- 1) Material in ambient Atmosphere (75°F/85% Humidity)
- After spraying heated surface with "Cold Fire"
- After spraying heated surface with "Water from a spray bottle"
- 4) Letting heated surface cool down in ambient atmosphere

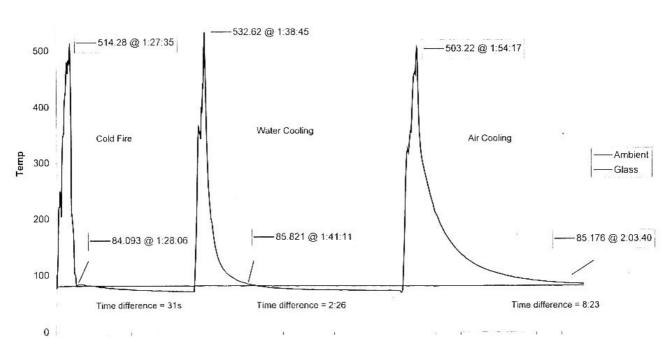
Results: See Attached graph Steel

Summary:

The steel was heated and sprayed for 48.23 sec. "Cold Fire" took 46 sec. to reached 88.894° F. It took water 9 min., 17 sec. to reach 89.251°F. It took air 8 min. and 24 sec. to reach 109.25°F. Our findings show that it took "Cold Fire" the least amount of time. Note in the graph you can see that after bing sprayed that the heat when down and came up in temperature somewhat.

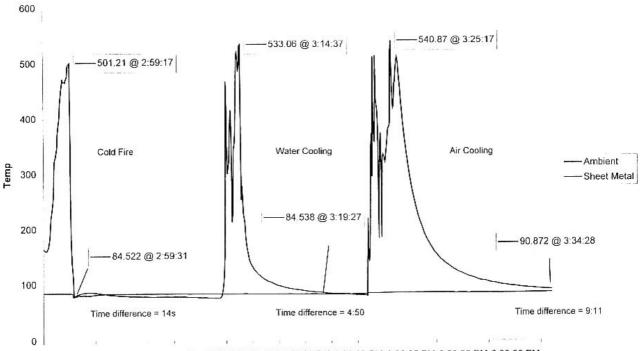






1:26:47 PM 1:29:47 PM 1:32:47 PM 1:38:58 PM 1:41:58 PM 1:44:58 PM 1:47:58 PM 1:53:55 PM 1:56:55 PM 1:59:55 PM 2:02:55 PM

SHEET METAL



2:57:47 PM 3:00:47 PM 3:03:47 PM 3:06:47 PM 3:15:22 PM 3:18:22 PM 3:21:22 PM 3:26:25 PM 3:29:25 PM 3:32:25 PM

Time

