I. INTRODUCTION

1.1 Akron Brass Company requested an Approval examination of their Styles 721 (Akrojet), 1741, 3716, 3718, 3719, and 3721 1-1/2 in. nominal size combination fire nozzles.

1.2 The nozzles included in this examination are limited to those described in Section 2.

1.3 The tests were conducted in accordance with the Factory Mutual Research Corporation Approval Standard for Approval Class 5511, dated September 15, 1970.

II. DESCRIPTION

2.1 The Style 721 (Akrojet) is a brass combination fog and straight stream nozzle for use on hose racks.

2.2 Style 1741 is an aluminum shut off body, brass tip, constant gallonage fog and straight stream nozzle. A multiple gallonage selection ring allows for changing flows to 60, 95, and 125 gallons per minute (230, 360, and 475 liters per minute) at 100 psi (689 kPa) without shutting down. The nozzle has a pistol grip.

2.3 Styles 3716 and 3721 are brass constant gallonage fog and straight stream nozzles. A multiple gallonage selection ring allows for changing flows to 60, 95, and 125 gallons per minute (230, 360, and 475 liters per minute) at 100 psi (689 kPa) without shutting down. The Style 3721 nozzle has a pistol grip.

2.4 Styles 3718 and 3719 are brass constant gallonage fog and straight stream nozzles, rated at 95 gallons per minute (360 liters per minute) at 100 psi (689 kPa). The Style 3719 has a pistol grip.
V MARKINGS

5.1 The following markings are cast on the Style 721 (Akrojet) fire nozzle: manufacturer's name, "Akrojet", the words "shut", "fog", and "ss" (with the appropriate directional arrows), and the Factory Mutual Research Corporation Mark of Approval.

5.2 The following markings are cast on the Style 1741, 3716, 3718, 3719, and 3721 fire nozzles: manufacturer's name, style number, flow control settings, flow pattern settings, the words "open" and "closed", and the Factory Mutual Research Corporation Mark of Approval.

VI REMARKS

The Styles 721 (Akrojet), 1741, 3716, 3718, 3719, and 3721 fire hose nozzles described in this Report are Approved only when manufactured at the following facility:

Akron Brass Company
1450 Spruce Street
Wooster, OH 44691

This facility has been audited and found to be satisfactory.

VII CONCLUSION

The Akron Brass Company Styles 721 (Akrojet), 1741, 3716, 3718, 3719, and 3721 fire hose nozzles described in this Report, and as manufactured at the above location, meet Factory Mutual Research Corporation Approval requirements. The Approval is effective when the Approval Agreement is signed by Akron Brass Company and received by Factory Mutual Research Corporation.

ATTACHMENTS:
Primary Materials List

EXAMINATION BY:
P. W. Johnson

TESTS BY:
P. W. Johnson

REPORT BY:
P. W. Johnson
Senior Engineering Assistant
Hydraulics Section

REVIEWED BY:
J. S. Matrisano,
Assistant Manager
Hydraulics Section
APPROVAL AGREEMENT

The Agreement is made by and between FM Global Technologies LLC (herein called FM Approvals) and Akron Brass Company, Wooster, OH 44691 (herein called the Client). The Client is making a product or providing a service known and described as:

STYLE 4450 AQUASTREAM
MASTER STREAM NOZZLE
FOR USE WITH 2-1/2 INCH NOMINAL SIZE
FIXED MONITORS

This product or service has been examined by FM Approvals as described in a report bearing Project Identifier 3011681, dated 24 July 2002.

In consideration of FM Approval of the product or service, the Client is authorized to indicate such Approval, as stated by the above report, and agrees to the following and terms stated on the reverse side of this Agreement:

1. The Client shall place a unique identification mark (i.e. model or type number) on the product as stated in the above report and shall not place this mark on any other product unless covered by a separate Agreement with FM Approvals.

2. The Client shall use the FM Approval Mark on the product, but shall not use this mark on any other product unless such other product is covered by separate Agreement with FM Approvals.

3. The Client shall not use, reproduce or distribute the above referenced report by FM Approvals except in its entirety without any change, deletion or addition thereto. The Client agrees that FM Approvals may distribute the referenced report and related information within FM Approvals and its affiliates. (See Over)

Akron Brass Company

D. T. Peters

Daniel T. Peters

PRESIDENT

343 Venture Blvd, Wooster, OH 44691

August 5, 2002

FM GLOBAL TECHNOLOGIES LLC

Signature

George A. Smith

Name

Group Manager – Materials

Title

July 30, 2002

Date
APPROVAL AGREEMENT

The Agreement is made by and between FM Global Technologies LLC (herein called FM Approvals) and Akron Brass Company, Wooster, OH 44691 (herein called the Client). The Client is making a product or providing a service known and described as:

STYLE 3525 ARIES MONITOR
STYLE 3526 OMEGA MONITOR
STYLE 3529 4-WAY MONITOR MANIFOLD

This product or service has been examined by FM Approvals as described in a report bearing Project Identifier 3011678, dated 31 July 2002.

In consideration of FM Approvals’ approval of the product or service, the Client is authorized and indicated to use such Approval, as stated by the above report, and agrees to the following and terms stated on the reverse side of this Agreement:

1. The Client shall place a unique identification mark (i.e. model or type number) on the product as stated in the above report and shall not place this mark on any other product unless covered by a separate Agreement with FM Approvals.

2. The Client shall use the FM Approval Mark on the product, but shall not use this mark on any other product unless such other product is covered by separate Agreement with FM Approvals.

3. The Client shall not use, reproduce or distribute the above referenced report by FM Approvals except in its entirety without any change, deletion or addition thereto. The Client agrees that FM Approvals may distribute the referenced report and related information within FM Approvals and its affiliates. (See Over)

Akron Brass Company

D. R. Pat

Daniel T. Peters

President

343 Venetian Blvd, Wooster, OH 44691

August 12, 2002

FM Global Technologies LLC

Roger L. Allard

Group Manager – Hydraulics

August 5, 2002