

APPROVAL REPORT

PIPE HANGER COMPONENTS FOR AUTOMATIC SPRINKLER SYSTEMS

PRAKTICA S-VA

Pipe Sizes 1, 1¼, 1½, 2, 2½, 3, 4, 5, 6, and 8-inch NPS

Prepared For:

Sikla GmbH
Schillerstr 5
78595 Hausen o.V.
Germany

JI 3002064
Class 1951
Date: August 31, 1999

FACTORY MUTUAL



1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, Massachusetts 02062



Factory Mutual Research

1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, Massachusetts 02062

J.I. 3002064
Class 1951

August 31, 1999

**PIPE HANGER COMPONENTS FOR AUTOMATIC SPRINKLER SYSTEMS
PRAKTICA S-VA
Pipe Sizes 1, 1¼, 1½, 2, 2½, 3, 4, 5, 6, and 8-inch NPS**

FROM

**SIKLA GMBH
SCHILLERSTR 5
78595 HAUSEN O.V.
GERMANY**

I. INTRODUCTION

- 1.1** Sikla GmbH requested FMRC Approval of their Praktica S-VA Loop hangers for use with pipe sizes 1, 1¼, 1½, 2, 2½, 3, 4, 5, 6, and 8-inch NPS.
- 1.2** These devices were examined in accordance with the requirements of the draft FMRC Approval Standard 1951, 1952, 1953 dated June 1990.

**FACTORY MUTUAL RESEARCH CORPORATION
JOB IDENTIFIER 3002064**

II. DESCRIPTION

The Praktica S-VA loop hangers are manufactured from DIN 1.4571 stainless steel. These devices are Approved when installed in accordance with the manufacturer's installation instructions, the installation requirements that are detailed in the current FMRC Loss Prevention Data Sheet 2-8N, and when installed with the specific threaded rod sizes specified by the manufacturer and shown in **Table 2.1**.

Table 2.1

<i>Model 32N Clevis Hangers – Pipe Sizes versus Rod Sizes</i>										
<i>NPS, in.</i>	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8
<i>Rod Size, mm</i>	10	10	10	10	10	10	10	12	12	16

**nominal sizes*

III. MARKINGS

Praktica S-VA Loop Hangers

The following pertinent information is indented on the body of the Praktica S-VA Loop Hangers:

- Manufacturer's trademark
- Model Designation
- Pipe Size, NPS
- FMRC Approval Mark

IV. TESTS/EXAMINATIONS

4.1 Pull Tests

Pull tests were conducted in accordance with the requirements of the Approval Standard referenced in section 1.2 of this Report. These test were conducted on a group of representative samples of the entire line of pipe hanger components that are covered by this Report. The results of these tests, all of which are satisfactory, are shown in **Table 4.1a**.

Table 4.1a

<i>Pipe Size NPS</i>	<i>Rod Size mm, nominal</i>	<i>Preload lbf (kN)</i>	<i>Test Load lbf (kN)</i>	<i>Elongation at Test Load in (mm)</i>
2	10	80 (0.355)	635 (2.825)	0.005 (0.127)
2	10	80 (0.355)	635 (2.825)	0.004 (0.102)
2	10	80 (0.355)	635 (2.825)	0.010 (0.254)
4	10	250 (1.110)	1475 (6560)	0.052 (1.321)
4	10	250 (1.110)	1475 (6560)	0.041 (1.040)
4	10	250 (1.110)	1475 (6560)	0.024 (0.610)
6	12	475 (2.115)	2615 (11.63)	0.093 (2.360)
6	12	475 (2.115)	2615 (11.63)	0.118 (2.997)
6	12	475 (2.115)	2615 (11.63)	0.110 (2.794)
8	16	750 (3.335)	3800 (16.91)	0.146 (0.654)
8	16	750 (3.335)	3800 (16.91)	0.165 (0.739)
8	16	750 (3.335)	3800 (16.91)	0.136 (0.609)

**FACTORY MUTUAL RESEARCH CORPORATION
JOB IDENTIFIER 3002064**

4.2 Design Examination

Representative samples of the pipe hanger components covered in this Report were examined and found to adequately meet the design and were found to be in compliance with the general requirements of the Approval Standard, including the requirements for corrosion resistance.

V. MANUFACTURER'S RESPONSIBILITIES

5.1 Design Control

Sikla GmbH shall advise Factory Mutual Research of all proposed changes to the documents listed in the Primary Materials List attached to this Report. This will be done prior to implementation of any changes via the Approved Product Revision Report (Form 797).

5.2 Installation Instructions

Sikla GmbH shall provide adequate instructions for the proper installation, maintenance, and operation of these devices.

VI. REMARKS

Facilities and Procedures Audit

The pipe hanger components covered in this Report are Approved when manufactured at the following location:

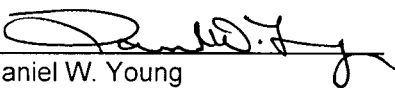
SIKLA GMBH
SCHILLERSTR 5
78595 HAUSEN O.V.
GERMANY

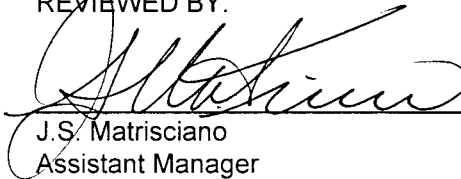
This location is currently included in the Factory Mutual Research follow-up F&PA program.

VII. CONCLUSION

The Praktica S-VA loop hangers discussed in this Report, meet Factory Mutual Research Approval requirements. Approval is effective when the Approval Agreement (Form L-15) is signed by the Client and received by Factory Mutual Research.

TESTS BY:	Daniel W. Young
ORIGINAL DATA:	Project Data Record 3002064
ATTACHMENTS:	Primary Materials List Appendix I
EXAMINATIONS BY:	Daniel W. Young
REPORT BY:	


Daniel W. Young
Associate Engineer
Hydraulics Section

REVIEWED BY:

J.S. Matrisciano
Assistant Manager
Hydraulics Section