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APPROVAL REPORT

PIPE HANGER COMPONENTS FOR FIRE PROTECTION SPRINKLER SYSTEMS MODELS TK16 M10, TK16Ø 11, TK16 3/8", TK16 M12, TK16Ø 13, TK16 1/2", TK16 M16, TK16Ø 17 and TK16 5/8"

Prepared for:

VS Guss AG Parallelstrasse 17 D-42719 Solingen Germany

Project ID: 3018213

Class: 1951

Date of Approval:

Authorized by:

Roge L. Allard, Group Manager-Hydraulics

FM Approvals 743A Reynolds Road West Glocester, RI 02814

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PRIMARY MATER	HALS LIST	
,		1ROA6.AH
ERRINIGTE SCHLUSSELFABRIKEN AG		PHOJECT ENGINEER F. A. Lague
lass 1951		DATE
K-10 Beam Clamps K-12 Beam Clamps		May 24, 1989
MARY CONTROL DRAWINGS DESCRIPTION	Drawing No.	Material
eam Clamp	4/16/89	TK-10 3/4 through 4 in

TK-10 3/4 through 4 in.

TK-12 5 through 8 in.

4/26/89

eam Clamp

APPROVAL REPORT

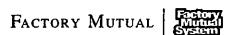
PIPE HANGER COMPONENTS FOR AUTOMATIC SPRINKLER SYSTEMS
Model TKN10 Beam Clamps

Prepared For:

VS Guss AG Parallelstrasse 17 D-42719 Solingen Germany

JI 3005242 Class 1951

Date: November 1, 2000





ctory Mutual Research

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

> 1ROA6.AH (1951)

May 24, 1989

PIPE HANGER COMPONENTS
FOR
AUTOMATIC SPRINKLER SYSTEMS
MODELS TK-10 AND TK-12

from

VEREINIGTE SCHLUSSELFABRIKEN AG 565 SOLINGEN 19 (WALD) PARALLELSTRASSE 17 P.O. BOX 190560 WEST GERMANY

I INTRODUCTION

- 1.1 Vereinigte Schlusselfabriken AG requested an Approval examination of their Models TK-10 and TK-12 beam clamps to support sprinkler system piping.
- 1.2 The Model TK-10 will support 3/4 through 4 in. sprinkler system piping using a 10 mm hanger rod and the TK-12 will support 5 through 8 in. piping using a 12 mm hanger rod.

II DESCRIPTION

2.1 The attached manufacturer's detail drawings show views of the beam clamps along with other pertinent information.

III MARKING

- 3.1 Cast on the beam clamps is the following information: Manufacturer's logo, model number, and the Factory Mutual Research Corporation (FMRC) Approval Mark.
- 3.2 The shipping carton carries the following information: Manufacturer's name and address, maximum pipe size, product designation, and the Factory Mutual Research Corporation Approval Mark.

IV TESTS AND EXAMINATION

4.1 The Models TK-10 and TK-12 were assembled with other Approved components to form hangers and were tested on a universal tensile testing apparatus to determine their holding power. The applied loads were increased beyond the required minimums in order to determine the clamps' ultimate strengths. The attached Appendix shows the satisfactory results.

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- 4.2 The samples submitted for this Approval examination were found to represent the design adequately. The applicable drawings are on file at FMRC.
- 4.3 Since this facility is currently audited in consequence of this manufacturer's currently Approved products, no special audit was required.

V CONCLUSION

The Vereinigte Schlusselfabriken AG Models TK-10 and TK-12 beam clamps, as described within the scope of this report, meet all Approval requirements. The Approval is effective when the Approval Agreement is signed and returned to Factory Mutual Research Corporation.

TESTS AND EXAMINATION BY:

Fred A. Lague

ORIGINAL DATA:

Notebook No. 89-210

ATTACHED:

Manufacturer's Detail Drawings Primary Materials List Appendix

REPORT BY:

REVIEWED BY:

Hydraulics Section

Assistant Manager Hydraulics Section

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