



Product Service

Mehr Sicherheit.
Mehr Wert.

**Technical Report No. 028-71325856-400 Rev. 1
of 12.08.2010**

Client: Lukas Hydraulik GmbH
Weinstraße 39
D-91058 Erlangen

Herr Bertleff

Manufacturing location: Lukas Hydraulik GmbH
Weinstraße 39
D-91058 Erlangen

Object of evaluation: Spreaders
SP 310 ; SP 510; SP 512

Test specification: NFPA 1936:2010
Standard on Powered Rescue Tool Systems

Purpose of the evaluation: Testing in accordance with the test specification

Test result: The presented tools meet the demands of the mentioned test specification

Dieser Technische Bericht darf nur in vollständigem Wortlaut wiedergegeben werden. Die Verwendung zu Werbezwecken bedarf der schriftlichen Genehmigung. Er enthält das Ergebnis einer einmaligen Untersuchung an dem zur Prüfung vorgelegten Erzeugnis und stellt kein allgemeingültiges Urteil über Eigenschaften aus der laufenden Fertigung dar.

1 Description of the test subject

1.1 Function

A powered rescue tool that has at least one movable arm that opens to move material.

1.2 Technical Data

See attachment 1 till 3

2 Order

2.1 Date of the order, sign of the client

27.07.2007 and 13.01.2010

2.2 Test sample receipt, location

On-site testing

2.3 Date of the testing

2007-09-11 – 2007-09-14

Upgrade testing

2010-02-01 – 2010-02-03

2.4 Location of the testing

LUKAS Hydraulik GmbH

Weinstraße 39

D-91058 Erlangen

2.5 Variation or exemption of the test procedure

none

3 Test results

The presented tools meet the demands of the NFPA 1936:2010

4 Remark

The operating instruction has been checked according to the minimum standards described in the product standard. The producer is responsible for the correctness of all other content as well as the design and the layout.

4.1 Remark for manufacturing



The setup of the tool must correspond with the documentation. Before safety-relevant changes of the product will be transfer into the current manufacturing, these require a check for evaluation, for the admission in the documentation and if necessary actualization of the certificate.

5 Summary

The presented tools meet the demands of the NFPA 1936:2010

TÜV PRODUCT SERVICE GMBH

Test Engineer



i.A. Gerhard David
VT 3

Checked by



Manfred Fürgut
VT 3



Product Service

Attachment 1 Technical data
Order number 028-71325856-400

Parameter

Type:	SP 310
Art. No.:	111 010 000 171 010 000
Technical data	
Width of opening:	720 mm
Pulling distance:	575 mm
Spreading force:	
1 - Highest spreading force (HSF)	53,0 KN
2 - Lowest spreading force (LSF)	39,0 KN
Pulling force:	
1 - Highest pulling force (HPF)	30,5 KN
2 - Lowest pulling force (LPF)	23,0 KN
Dimension:	
Length:	790 mm
Width:	350 mm
Height:	190 mm
Total Weight:	19,9 kg
Nominal pressure:	70 MPa



Attachment 2 Technical data
Order number 028-71325856-400

Parameter

Type:	SP 510
Art. No.:	111 030 000 171 030 000
Technical data	
Width of opening:	800 mm
Pulling distance:	665 mm
Spreading force:	
1 - Highest spreading force (HSF)	79,9 KN
2 - Lowest spreading force (LSF)	54,6 KN
Pulling force:	
1 - Highest pulling force (HPF)	44,4 KN
2 - Lowest pulling force (LPF)	31,1 KN
Dimension:	
Length:	900 mm
Width:	380 mm
Height:	215 mm
Total Weight:	25,0 kg
Nominal pressure:	70 MPa



Attachment 3 Technical data
Order number 028-71325856-400

Parameter

Type:	SP 512
Art. No.:	111 040 000 171 040 000
Technical data	
Width of opening:	610 mm
Pulling distance:	437 mm
Spreading force:	
1 - Highest spreading force (HSF)	108,0 KN
2 - Lowest spreading force (LSF)	77,0 KN
Pulling force:	
1 - Highest pulling force (HPF)	67,0 KN
2 - Lowest pulling force (LPF)	49,0 KN
Dimension:	
Length:	795 mm
Width:	380 mm
Height:	216 mm
Total Weight:	26,3 kg
Nominal pressure:	70 MPa