

Element Materials Technology Zekeringstraat 33 1014 BV Amsterdam NL

P +31 (0) 20 556 35 55 F+31 (0) 20 556 35 56 Info.amsterdam@element.com element.com

Bank ABN AMRO, Amsterdam Acct 52.99.93.821 BTW NL0086.06.754.B01 KvK 33194077

Terwa B.V. Kamerlingh Onneslaan 1-3 3401 MZ IJsselstein

Revision date

: 29-02-2016

Date

: 25-02-2016

: -

Element report number: EAM017841-ALC-32R1

Customer reference

# **TEST REPORT**

**Project** 

: KIWA audit testing

Reference

: E. Hermus

Material connector

: 25CrMo4

Material inside thread Material reinforcing steel

: 42CrMo4 : BST550

## **RECIEVED TEST SAMPLES**

Specimen	
F17841-ALC-32-1 u/t 3	Three ALC couplers, marked: ALC 32 TW

## **DESCRIPTION TEST SAMPLES**

1x Reference reinforcing steel ø 32 mm, Element mark F17841-32-REF

3x ALC-coupler, dimensions L= 480 mm, type ALC 32-TW-43077 42959 with reinforcing steel ø 32 mm, Element mark F17841-ALC-32-1 through F17841-ALC-32-3



A side

B side





#### **DESTRUCTIVE TESTS**

Test method: Conform TO NEN 6008/BRL 0504						[Test temperatuur ° C: ambient]				
Specimen no.	Dia-	Cross-	ReH	Rm	Rm/ReH	Agt	Place of	*6	Rm Ratio	Slip
	meter	section					fracture		*7	
	[mm]	[mm²]	[MPa	[MPa]		[%]		[mm]	[%]	[mm]
F17841-REF	32	804	609	709	1.16	10.0	-	-	-	-
F17841-ALC-32-1	32	804	631	730	1.16	7.2	*3	-	103.0	0.05
F17841-ALC-32-2	32	804	630	731	1.16	9.2	*3	-	103.1	0.06
F17841-ALC-32-3	32	804	629	730	1.16	10.9	*3	-	103.0	0.04
Characteristic requirements										
acc. NEN 6008 for BST550 ≥500			≥500		≥1.08	≥5.0				
Requirements according BRL-0504					•			≥25	≥90	≤0.10

### CONCLUSIONS/REMARKS

The coupler is tested in delivered condition.

The connection is torqued up by Terwa

- \*1 The reinforcing steel is broken at A side.
- \*2 The reinforcing steel is broken at B side.
  \*3 The reinforcing steel is slipped out the ALC coupler at A side.
- \*4 The reinforcing steel is slipped out the ALC coupler at B side.
- \*5 The coupler thread sheared off.
- \*6 Distance between place of fracture and beginning of the coupler.
- \*7 Tensile strength percentage between the reinforcing steel connection and the reference reinforcing steel.

element™

- \*8 Not determined.
- \*9 The reinforcing steel is broken in the coupler at A side.
- \*10 The reinforcing steel is broken in the coupler at B side.

Element Materials Technology

Authorised: W Element Materials

assive object(s) thave vas the become the elevant, been verified by Element Materials Technology Amsterdam b.v. (Element). Other information was pro-This information was verified as far as possible and has been copied into this report, unchanged. Element does not bear responsibility for the correctness of this All characteristics vided by the put submitted information. We hereby certify that the reported test data is correct and that the above object(s) was (were) tested/examined in accordance with purchaser's requirements and/or the above procedure(s) and/or code(s)/specification(s). On occasion a test is subcontracted by Element, the accreditation number of the subcontracted party is reported. Interpretations, opinions, conclusions and advice are partly based on the examination results and partly on information supplied by the purchaser. This report has legal value only when furnished with an authorized signature. If, upon reproduction, only part of this report is copied, Element will not bear any responsibility for content, purport and conclusions of that repro-

