



CERTIFICATE OF CONFORMITY

No. SPSC-9030

Granted to

Halfen GmbH,
Liebigstrasse 14, 40764 Langenfeld, Germany
AG Dusseldorf HRB 55272

This is to certify that
type

reinforcement couplers for mechanical splices of bars
coupler system HBS-05 for reinforcing bars of diameters
12, 14, 16, 20, 25, 28 and 32 mm and mechanical
properties $R_e = 500-650$ MPa, $R_m/R_e \geq 1,08$, $A_{gt} \geq 5,0$ %

produced by

Halfen GmbH,
Otto-Brunner Str. 3, 06556 Artern, Germany,

conforms to obligatory
requirements of

IST ISO 15835-1:2010 / ISO 15835-1:2009 and declared by
the producer values (see annex I)

This certificate of
conformity is based on
production control
assessment and

1. Test reports No. 2008-0780-006 (November 2008),
No. 2009-0669-002 (2009-09-18), No. 2009-0669-003
(2009-09-15), No. 2009-0669-004 and No. 2009-0669-005
(2009-11-04), No. 2010-0367-001 and No. 2010-0367-002
(2010-03-26), No. 2010-0367-004 (2010-10-11), issued by
BAS Research & Technology, Neatherlands.

2. Test report issued April 2, 2007 by Technische
Universitat Darmstadt, Institut fur Massivbau, Germany.

This certificate of conformity authorises applicant to mark above mentioned
products certification mark form PSZ-01.

Valid until

2014-10-15

Date of issue

2011-10-15

Director

Robertas Encius



ANNEX 1 TO CERTIFICATE No. SPSC-9030

Issued 2011-10-15

Product

reinforcement couplers for mechanical splices of bars

type

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Characteristics and values

Characteristics	Test method	Unit of measurement	Declared value
Tensile strength of mechanical splice	ISO 15835-2:2009 LST EN ISO 15630-1:2011	MPa	≥ 550
Ductility of mechanical splice: A_{gt} – percentage total elongation at maximum tensile force of spliced bars	ISO 15835-2:2009 LST EN ISO 15630-1:2011	%	$\geq 3,0$
Slip of mechanical splice, ΔL (under a force corresponding $0,6 R_{eH, spec}$ – specified yield strength of the reinforcing bar)	ISO 15835-2:2009	mm	$\leq 0,10$
Fatigue with upper stress $0,6 R_{eH, spec}$ and a stress range of: - 80 MPa for diameters 12, 14, 16 and 20 mm; - 70 MPa for diameters 25 and 28 mm; - 60 MPa for diameter 32mm	ISO 15835-2:2009	number of stress cycles	2×10^6 2×10^6 2×10^6

Director

R. Encius

