



The manufacturer **PFEIFER Seil- und Hebetchnik GmbH**
Dr.-Karl-Lenz-Strasse 66
D-87700 Memmingen

hereby declares that the following construction product with the

product designation **PFEIFER PGV connecting bolt**

in the sizes **PVB 16, PVB 20, PVB 24, PVB 30, PVB 36, PGV 42, PGV 48, PGV 56**

complies with the provisions of the following EC Directive(s), if installed in accordance with the installation instructions as set forth in the product documentation:

- *Decree (EU) No. 305/2011 of the European Parliament and Council dated 09 March 2011 regarding the determination of harmonised conditions for the marketing of construction products and the repeal of the Directive 89/106/EEC*
EC Construction Products Regulation

and that the following standards were applied during dimensioning and construction:

<i>BS EN 1990:2010-12</i>	<i>Eurocode 0: Basis of structural design</i>
<i>BS EN 1990/NA:2010-12</i>	<i>Eurocode 0: Basis of structural design</i>
<i>BS EN 1990/NA/A1:2012-08</i>	<i>National annex - nationally determined parameters incl. Amendment A1</i>
<i>BS EN 1992-1:2011-01</i>	<i>Eurocode 2: Design of concrete structures</i> <i>Part 1-1: Common rules for building and civil engineering structures</i>
<i>BS EN 1992-1/NA:2011-01</i>	<i>Eurocode 2: Design of concrete structures</i> <i>Part 1-1: Common rules for building and civil engineering structures</i> <i>National annex – nationally determined parameters</i>
<i>BS EN 1993-1-1:2010-12</i>	<i>Eurocode 3: Design of steel structures</i> <i>Part 1-1: Common rules for building and civil engineering structures</i>
<i>BS EN 1993-1-1/NA:2010-12</i>	<i>Eurocode 3: Design of steel structures</i> <i>Part 1-1: Common rules for building and civil engineering structures</i> <i>National annex – nationally determined parameters</i>
<i>BS EN 1993-1-8:2010-12</i>	<i>Eurocode 3: Design of steel structures</i> <i>Part 1-8: Design of joints</i>
<i>BS EN 1993-1-8/NA:2010-12</i>	<i>Eurocode 3: Design of steel structures</i> <i>Part 1-8: Design of joints</i> <i>National annex – nationally determined parameters</i>
<i>BS EN 1090-1:2012-02</i>	<i>Execution of steel structures and aluminium structures</i> <i>Part 1: Requirements for conformity assessment of structural components</i>
<i>BS EN 1090-1:2011-10</i>	<i>Execution of steel structures and aluminium structures</i> <i>Part 2: Technical requirements for the execution of steel structures</i>

Performance feature	Service / categorisation / classification
Geometrical tolerances	<i>BS EN 1090-2 (general) DIN 13 (metric ISO thread) DIN ISO 2768 (general) BS EN ISO 4032 (nuts)</i>
Welding suitability	<i>No performance specification (no performance determined)</i>
Fracture toughness / resistance to brittle fracture	<i>Screw material EN ISO 898 (Connecting bolts)</i>
Carrying capacity	<i>Design resistance to straight tensile/compressive force: PVB 16: $N_{Rd,max} = \pm 68 \text{ kN}$ PVB 20: $N_{Rd,max} = \pm 97 \text{ kN}$ PVB 24: $N_{Rd,max} = \pm 139 \text{ kN}$ PVB 30: $N_{Rd,max} = \pm 299 \text{ kN}$ PVB 36: $N_{Rd,max} = \pm 436 \text{ kN}$ PGV 42: $N_{Rd,max} = \pm 546 \text{ kN}$ PGV 48: $N_{Rd,max} = \pm 672 \text{ kN}$ PGV 56: $N_{Rd,max} = \pm 910 \text{ kN}$</i>
Implementation class	<i>EXC 2 pursuant to EN 1090-2</i>
Fatigue strength	<i>No performance specification (no performance determined)</i>
Deformations in the serviceability limit state	<i>No performance specification (no performance determined)</i>
Fire resistance	<i>No performance specification (no performance determined)</i>
Fire resistance	<i>Steel component, material categorised in class A1</i>
Release of cadmium and its compounds	<i>No performance specification (no performance determined)</i>
Release of radioactive radiation	<i>No performance specification (no performance determined)</i>
Durability	<i>No performance specification (no performance determined)</i>
Manufacture	<i>Acc. to drawing no. 0032403</i>
System of conformity certification	<i>2+</i>

Product description / intended use:

PFEIFER PVB or PGV connecting bolts each consist of one threaded bolt with two nuts and two washers. They are used for the load-bearing connection of PFEIFER column shoes to the associated foundation anchors.

The use of the PFEIFER PVB or PGV connecting bolts is limited to the stresses resulting from predominantly static loads.

Certificate acc. to BS EN 1090 regarding the conformity of the factory production control:

Name and address of the notified body: **GSI – Gesellschaft für Schweißtechnik International mbH
Munich branch
Schachenmeierstraße 37
D-80636 München**

Code number of the notified body: 1182

Number of the certificate: 1182-CPD-1090-1.00108.GSIMü.2013.001

Period of validity of the certificate: 13.03.2014

Authorised person responsible for the preparation and maintenance of the technical documentation:

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*PFEIFER Seil- und Hebeteknik GmbH
Memmingen, 04/10/2013*

*Dipl.-Ing. Matthias Kintscher
Manager, Business Area Connecting and Lifting Systems*

*Dipl.-Ing. Christoph Neef
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