



Declaration of performance Nr. 336/PCC/01-2023

1. Unique identification code of the product-type:

PFEIFER Column Shoe PCC

2. Intended use:

PFEIFER Column Shoes are generally used in conjunction with PFEIFER-Foundation Anchors PGS to anchor reinforced concrete precast columns by means of screws. The Column Shoes are either installed into the corners or on the long sides of the columns or alternatively also in circular precast columns, while the foundation anchors are anchored in previously prepared foundations, base plates or column heads. The connection, consisting of Column Shoe and Foundation Anchor, allows the formation of hinged as well as rigid connections. Even when the columns are designed to form a hinged connection, the tensile and compressive forces can be absorbed by each Column Shoes during the assembly state. During the construction, mounting supports can be avoided.

Product sizes:

PCC 16, 20, 24, 27, 30-1, 30-2, 36, 39-1, 39-2

Material components and properties:

PCC 16 – 30-1 → Steel S355J2+N according to the EN 10025-2

PCC 30-1 – 39-2 → Steel S460N according to the EN 10025-3 (or)

→ Steel S460ML according to the EN 10025-4

Steel concrete reinforcing bars B500B

Definition of loading:

Static and quasi-static loading – tensile and compression forces

3. Manufacturer:

*PFEIFER Seil- und Hebeteknik GmbH
Dr.-Karl-Lenz-Straße 66
D-87700 Memmingen, Germany*

4. Authorised representative:

5. System/s of AVCP:

System 2+

6. Harmonised standard:

EN 1090-1:2012-02

7. Design basis:

DIN EN 1990:2021-10

Eurocode 0: Grundlagen der Tragwerksplanung

DIN EN 1990/NA:2010-12

Eurocode 0: Grundlagen der Tragwerksplanung

DIN EN 1990/NA/A1:2012-08

Nationaler Anhang - National festgelegte Parameter incl. Änderung A1

DIN EN 1992-1-1:2011-01

Eurocode 2: Bemessung und Konstruktion von Stahlbeton- und Spannbetontragwerken

DIN EN 1992-1-1/A1:2015-03

Teil 1-1: Allgemeine Bemessungsregeln und Regeln für den Hochbau, incl. Änderung A1

DIN EN 1992-1/NA:2013-04

Eurocode 2: Bemessung und Konstruktion von Stahlbeton- und Spannbetontragwerken

DIN EN 1992/NA/A1:2015-12

Teil 1-1: Allgemeine Bemessungsregeln und Regeln für den Hochbau

Nationaler Anhang - National festgelegte Parameter, incl. Änderung A1

DIN EN 1993-1-1:2010-12

Eurocode 3: Bemessung und Konstruktion von Stahlbauten

DIN EN 1993/A1:2014-07

Teil 1-1: Allgemeine Bemessungsregeln und Regeln für den Hochbau, incl. Änderung A1

<i>DIN EN 1993-1-1/NA:2018-12</i>	<i>Eurocode 3: Bemessung und Konstruktion von Stahlbauten Teil 1-1: Allgemeine Bemessungsregeln und Regeln für den Hochbau Nationaler Anhang - National festgelegte Parameter</i>
<i>DIN EN 1993-1-8:2010-12</i>	<i>Eurocode 3: Bemessung und Konstruktion von Stahlbauten Teil 1-8: Bemessung von Anschlüssen</i>
<i>DIN EN 1993-1-8/NA:2020-11</i>	<i>Eurocode 3: Bemessung und Konstruktion von Stahlbauten Teil 1-8: Bemessung von Anschlüssen Nationaler Anhang - National festgelegte Parameter</i>
<i>DIN EN 1993-1-10:2010-12</i>	<i>Eurocode 3: Bemessung und Konstruktion von Stahlbauten Teil 1-10: Stahlsortenauswahl im Hinblick auf Bruchzähigkeit und Eigenschaften in Dickenrichtung</i>
<i>DIN EN ISO 17660-1: 2006-12</i>	<i>Schweißen –Schweißen von Betonstahl –Teil 1: Tragende Schweißverbindungen (ISO 17660-1:2006)</i>

8. Declared performances:

Essential characteristic	Performance of the product
Design resistances under tension load for static and quasi-static loading	<i>PCC 16</i> ± 68 kN
	<i>PCC 20</i> ± 97 kN
	<i>PCC 24</i> ± 139 kN
	<i>PCC 27</i> ± 180 kN
	<i>PCC 30-1</i> ± 220 kN
	<i>PCC 30-2</i> ± 299 kN
	<i>PCC 36</i> ± 436 kN
	<i>PCC 39-1</i> ± 384 kN
	<i>PCC 39-2</i> ± 521 kN
Geometrical tolerances	<i>EN 1090-2 (general) ISO 2768 (general) EN ISO 13920 EN 10029</i>
Weldability	<i>PCC 16 – 30-1</i> → Steel S355J2+N according to the EN 10025-2
	<i>PCC 30-1 – 39-2</i> → Steel S460N according to the EN 10025-3 (or) → Steel S460ML according to the EN 10025-4 <i>Steel concrete reinforcing bars B500B</i>
Fracture toughness / Brittle fracture resistance	<i>Steel S355J2+N: 27 Joule at-20°C Reinforcing steel bars B500B</i>
Execution class	<i>EXC 2 according to the EN 1090-2</i>
Fatigue strength	<i>No performance information</i>
Deformation in the serviceability limit state	<i>No performance information</i>
Fire resistance	<i>No performance information</i>
Fire behaviour	<i>Steel component, material classified in class A1</i>
Release of cadmium and its compounds	<i>No performance information</i>
Release of radioactive radiation	<i>No performance information</i>
Durability	<i>No performance information</i>

9. Certificate of conformity of the factory production control according to the DIN EN 1090:

Name and address of the notified body: *DVS ZERT GmbH*
Aachener Straße 172
D-40223 Düsseldorf

Identification number of the notified body: *2451*

Number of the certificate: *2451-CPR-EN1090-2015.0045.003*

10. Appropriate Technical Documentation and/or Specific Technical Documentation:

<https://www.pfeifer.info>

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Georg Hanz
Sales Department LIFTING

Christoph Neef
Technical Department LIFTING

Memmingen, January 24th, 2023

Memmingen, January 24th, 2023




