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Technical Rule - Standard **DVGW 497 (A)** February 2019

Compressor Stations

Verdichterstationen

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Foreword

This code of practice has been developed by the Technical Committee “Compressor Stations”. It shall be used in conjunction with the DIN standard EN 12583 “Gas infrastructure - Compressor stations - Functional requirements”. The requirements detailed in this code of practice shall fundamentally be regarded as obligatory requirements supplementing DIN EN 12583.

During the amendment of the present code of practice new legal provisions, current standards and technical rules were taken into account.

The scope of application of the German Energy laws which – according to the general understanding and in favour of a broader definition of the term “energy facilities” – also encompasses measuring, controlling, and regulating systems relevant for the safe operation of energy facilities has been taken into account. Accordingly, systems and station components of the compressor station which are connected to energy facilities in terms of function and safety, are also encompassed by the term “energy facilities”.

An expert’s duties have been explicitly detailed in paragraph 7.8

This code of practice supersedes DVGW Code of Practice G 497 in the version of January 2008 and Supplement No 1 to the DVGW Code of Practice of June 2009.

Revisions

Compared to DVGW Code of Practice G 497:2008-01 and Supplement no. 1 of 2009-06, the following changes have been made:

- a) The standard has been completely revised.
- b) Supplement no 1 has been incorporated into the standard.
- c) A clear demarcation to DVGW Code of Practice G 265-1 has been defined in the Scope of Application.
- d) For a better reading comprehension, the document structure has been adjusted to DIN EN 12583:2014. Requirements which already have been formulated in DIN EN 12583 were removed in order to avoid duplicate regulations.
- e) Normative references have been updated.
- f) The requirements for explosion protection have been rephrased based on current legal requirements.
- g) A note on information security has been added to the chapter “Asset Management and Quality Assurance”.
- h) A note on how to avoid inadmissible vibrations in pipework systems with reference to the pertinent guidelines of the Association of German Engineers (*Verein Deutscher Ingenieure – VDI*) has been added.
- i) The subchapter “Venting Systems” has been further detailed. A reference to DIN EN ISO 23251 has been added.

- j) Further details have been added to the subchapter on isolation devices.
- k) Additional requirements for surge control for turbo-compressors have been newly added
- l) Requirements for the prevention of gas leakage via cable feedthroughs in pressure-bearing enclosure walls have been newly added.
- m) Supplementary notes for the design of safety-relevant parts of the protective system have been newly added.
- n) Supplementary requirements for the monitoring of shaft sealing systems of gas compressors have been formulated.
- o) Specifics concerning the design of pressure sensors in pressure monitoring systems have been established.
- p) The requirements for the testing of plants and systems have been adjusted to the current legal situation – High Pressure Gas Pipeline Ordinance (*Gashochdrucksleitungsverordnung – GasHDrLtGV* 2011) and Industrial Safety and Health Ordinance (*Betriebssicherheitsverordnung – BetrSichV* 2015).
- q) In the chapter “Maintenance”, the requirements for occupational health and safety have been adjusted to the current legal situation.

Earlier versions

DVGW G 497:1976-09

DVGW G 497:1985-11

DVGW G 497:1994-08

DVGW G 497:2002-03

DVGW G 497:2008-01

DVGW G 497 B1:2009-06