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Technical Rule – Standard

DVGW G 213 Oktober 2013

Plants for the Preparation of Combustible Gas Mixtures

GAS

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Foreword

This Standard has been elaborated by the "Revision of Standard G 213" project group of the Technical Committee on "Gaseous Fuels". It serves as a basis for the design and construction as well as the operation of gas mixing plants in long-distance and distribution networks.

The significance of plants for the preparation of combustible gas mixtures has changed in recent years. Until a few years ago, the role of gas mixing plants was mainly to cover local gas consumption peaks, though with diminishing significance over the course of the years. The increasing use of gases produced from renewable sources, and in particular the use of treated biogas for injection into natural gas distribution grids has brought about a change, however. Gas mixing plants condition the treated gas to match the natural gas properties in a specific grid prior to injection. This has not only entailed a change in requirements on the construction and operation of gas mixing plants but has also led to major advancements in gas analyser technology and mixing plant control options and, eventually, brought about the need to revise this Standard. Last but not least, amendments to the Federal Control of Pollution Act and the pertinent ordinances and amendments to the Operational Safety Ordinance and the pertinent technical rules as well as new findings regarding explosion protection also required updating this Standard.

This DVGW Standard supersedes DVGW Standard G 213:1995-10.

Amendments:

The following amendments have been made compared to DVGW G 213:1995-10:

The order of clauses has been changed to reflect the current structure of the DVGW Set of Rules.

Requirements already mentioned in other DVGW standards – in particular DVGW Standard G 491 – have been deleted, causing the omission of e. g. the chapters on construction technology and general electrical engineering. The chapter on e. g. plant testing is now considerably shorter.

Recent developments have made the recruitment of a dedicated in-house technical plant inspection expert in accordance with this Standard obsolete. Instead, experts in accordance with DVGW Standard G 491 and/or VP 265-1¹ shall be responsible for the technical inspection of combustible gas mixing plants.

The clauses on instrumentation, control and automation systems have been thoroughly revised and a new clause on emergency energy supply has been included.

¹ VP 265-1 is currently being transposed into a Standard G 265-1.

The clauses on vaporisers and liquefied petroleum gas storage have been updated and pooled into one chapter on Liquefied Petroleum Gas Plants.

Earlier editions

DVGW G 213: 1974-09

DVGW 213: 1995-10