

DIN EN 17928-3:2025-02 (E)

Gas infrastructure - Injection stations - Part 3: Specific requirements regarding the injection of hydrogen

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	5
3	Terms and definitions	5
4	General requirements	6
4.1	Specific requirements for hydrogen injection stations	6
4.2	Coordination and definition of interfaces	6
4.3	Requirements on the properties of hydrogen	6
4.3.1	General	6
4.3.2	Injection of hydrogen into methane-based grids	6
4.3.3	Injection into dedicated hydrogen grids	6
4.4	Explosion protection	7
5	Operational functions	7
5.1	General	7
5.2	Mixing hydrogen with other gases	7
5.2.1	Homogeneity of the gas flow in the gas transmission or distribution system	7
5.2.2	Control of the hydrogen content	7
6	Overall safety requirements and protection against inadmissible operating modes	8
7	Specific requirements for systems and components	8
7.1	Key parameters for material selection	8
7.1.1	General	8
7.1.2	Hydrogen embrittlement (metallic materials)	8
7.1.3	Hydrogen permeation	8
7.2	Systems	8
7.2.1	Potentially hazardous atmosphere	8
7.2.2	Metrological requirements	8
7.3	Components - Requirements on buried pipelines	8
8	Testing and commissioning	9
8.1	General	9
8.2	Tightness tests	9
8.3	Commissioning	9
9	Operation	9
Bibliography		10