

Pressure specification for Hydrogen Network Netherlands

The design of Gasunie pipelines (including HNS pipelines) is defined in the Gasunie Technical Standards (GTS), which are in line with national and international pipeline standards, regulations and laws. The pipeline network of HNS is subject to the design conditions, including:

- The design pressure (Pd) of the pipelines of 66.2 bar(g), which is the maximum operational pressure
- Design temperature (Td): minimum -20.0 °C and maximum +50.0 °C

Summary table design conditions HNS network:

Design pressure (Pd), the maximum operational pressure:	66.2 bar(g)
Temporary operational pressure regime (*):	30.0 bar(g) – 50.0 bar(g)
Announcement period by HNS to increase operational pressure regime:	48 months
Design temperature (Td), the maximum operational temperature range:	-20.0 °C - +50.0 °C
Temporary operational temperature regime:	+5.0 °C - +30.0 °C

() Future developments can cause an increase of the operational pressure to a maximum of 66.2 bar(g) with a corresponding operational pressure regime.*

New or reused pipelines for hydrogen transport must comply with the Pd of 66.2 bar(g) so that no restrictions arise in the hydrogen network when the current temporary operational pressure regime of 30-50 bar(g), as determined by HNS, will be increased towards the maximum operational pressure of 66.2 bar(g). If HNS decides to increase the temporary operational pressure, HNS will apply an announcement period of 48 months. The temperature regime of the HNS network is +5.0 °C - +30.0 °C and has temporary been determined by the Dutch government. The temperature range might be changed by the government due to new insights including international alignment, but cannot exceed the design temperature of the HNS network.