

Reference Data Sheet

New construction of the GDRMA Dradenau

Project owner

Gasnetz Hamburg GmbH

Construction period

08/2022 - 08/2023

Net contract value

4.8 Mio €

Contractor

FRIEDRICH VORWERK SE & Co. KG

In-house Services

Plant engineering

Civil engineering

Pipework

Drainage

Pressure and leak tests

Control and measurement technology

Subcontractor Services

Non-destructive weld inspection

Cathodic corrosion protection

Valve servicing

Building construction

Lightning protection

On behalf of Gasnetz Hamburg GmbH, FRIEDRICH VORWERK SE & Co. KG successfully completed the construction of the new Dradenau gas pressure regulation and metering plant (GDRMA) as the main contractor. The project, which was carried out from August 2022 to August 2023, comprised the complete plant construction, including structural engineering and pipework.

Whilst line one was designed as an unregulated system with a maximum allowable operating pressure of 25 bar (MOP 25 / DP 25), lines two and three are designed for an operating pressure of MOP 6 (DP 16). In addition, the fourth heating gas line is designed for MOP 25 mbar to serve the building and for preheating. In addition, an underground valve manifold was installed in front of the building, which was connected to an existing DN 500 pipe using a split ball valve. In addition, preparations have been made for connection to a new DN 400 natural gas pipeline. This connection will be carried out by FRIEDRICH VORWERK in 2025.

The new GDRM system comprises the following main components:

- EMSR technology
- Filters
- Natural gas preheating and space heating system with heat pump
- Safety shut-off device (SAV)
- Pressure and flow control
- Metering

Initially, the GDRMA will be powered by 100 % natural gas. However, the planning and choice of materials already took into account a future switch to at least 30 % hydrogen, in order to enable a forward-looking and sustainable energy supply in the long term. Some key components have also been designed to operate on up to 100 % hydrogen.