

Natural gas experiences strong growth within the EU

Gasunie chooses Tranter and sets its sights on becoming the biggest gas distributor in Northern Europe

Demand for gas within the EU is steadily increasing, whilst extraction levels in Europe are falling. In addition to holding around 50% of the EU's natural gas reserves, the Netherlands is also focusing heavily on becoming a gas distribution hub for Northern Europe. The company leading the way in this process is state-owned enterprise **Gasunie**, which manages just over 15,000

kilometres of pipeline. These pipes carry more than 125 billion cubic metres of natural gas every year. Gasunie aims to become a leading player in the North European gas delivery market. One of the avenues through which Gasunie hopes to achieve this is by connecting its pipelines to those currently being laid by Nord Stream from the Russian gas fields, along



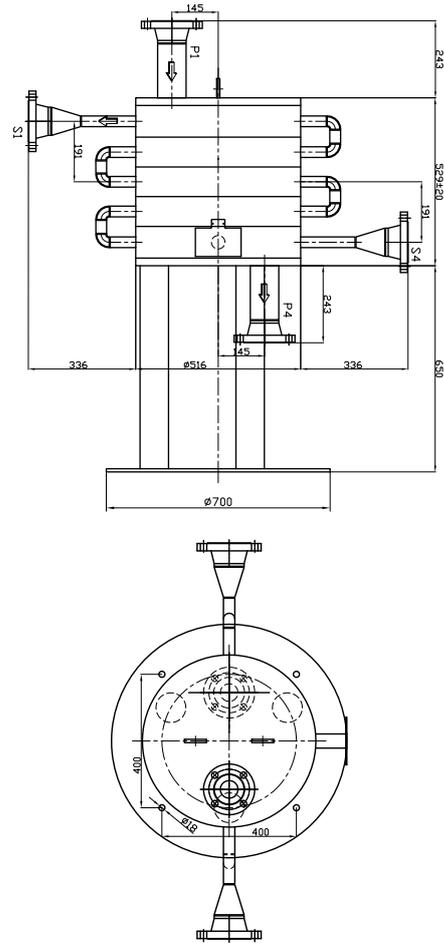
the bottom of the Baltic Sea and through Germany. Of course, natural gas is a fossil fuel, but has CO₂ emissions levels that are typically 30 - 40% below those of oil.

During 2012, Gasunie will complete work on a gigantic nitrogen buffer storage facility. Nitrogen is required as an additive for gas delivered directly to Dutch households. The site of the buffer facility is located in an area of now defunct salt mines.

Gasunie and **Petrogas gas-systems BV**, who are managing a Glycol dehydration and Regeneration Unit through **BTE Technische Handelsonderneming**, have chosen Tranter as their preferred supplier of welded plate heat exchangers. Petrogas gas-systems BV is a globally active turnkey gas facilities contractor and is also able to handle servicing and maintenance requirements.

Why welded plate heat exchangers?

All-welded plate heat exchangers are able to withstand both very high pressures and high temperatures. The contract in the Netherlands was awarded to Tranter due in no small part to the many advantages that welded plate heat exchangers have over tube heat exchangers.



“Firstly, Tranter’s welded plate heat exchangers take up significantly less space than the tube heat exchanger alternative, possibly as much as 50% less installation space. Secondly, these welded plate heat exchangers require almost no maintenance at all, which of course is a major financial benefit in both the short and long terms,” says **Hans de Groof**, head of the team responsible for Petrogas’ installation and implementation at Gasunie in Zuidbroek.

The Petrogas installation at Gasunie’s nitrogen storage facility is an advanced multi-pass solution with a long thermal length. In Tranter’s solution, glycol passes through the welded plate heat exchangers no fewer than five times. This ensures that the necessary process of regenerating glycol for the dehydration of the huge quantities of nitrogen involved is made as efficient as possible.

SUPERMAX SHELL & PLATE HEAT EXCHANGERS	
Max work pressure	100 bar
Temp. range	-195°C to +900°C
Connections	DN25-DN700
	Up to ANSI 28"

About some of the advantages of shell and plate design...

- Less than half the size of a shell and tube unit for comparable duties
- Turbulent flow even at low velocities
- Small temperature approaches contributing to higher overall heat recovery
- Easy to maintain
- Lack of corner welds makes it superior to any other type of welded heat exchanger