

TRANTER HEAT EXCHANGERS HEATING OF GREENHOUSES WITH GEOHERMAL ENERGY

Tranter International AB has supplied plate heat exchanger (PHE) equipment to V.B.; a company that specializes in energy supply for greenhouses. The application is a heating system with geothermal hot water as heating source.

The Netherlands has some of the largest greenhouses in the world. Heating is one of the most considerable costs in the operation of greenhouses across the globe. The main problem with heating a greenhouse, as opposed to a building that has solid opaque walls, is the amount of heat lost through the greenhouse covering. Since the coverings need to allow light to filter into the structure, they conversely cannot insulate very well. The greenhouses in The Netherlands thus have huge energy consumption and to reduce the consumption of fossil energy sources the government supports these geothermal projects to heat greenhouses.

VB use geothermal water to heat greenhouses. This geothermal water is coming with 92°C and 13% NaCl from more than 2000 meter deep in the ground. Eight GXD-325 are being used to separate the geothermal water from the system water and seven GX-265 are used in the heating stations in the greenhouses. All these units are 3-Pass units due to the big NTU (>50) and the small LMTD (1°C). The plates in 1.4401 can stand the high Chloride content, because there is absolutely no oxygen in this water.

The successful installation of Tranter International AB plate heat exchangers means that the very small temperature difference between the geothermal hot water and the heating water increase efficiency and reduces costs as well as CO₂ emission.

Tranter was chosen as the preferred supplier of heat exchangers because it was recognized that it could deliver high levels of efficiency and adding value when the in- and outlet temperatures are getting so close to each other. The very reliable design and the option to increase the capacity later on, when heat pumps might be installed to reduce the back flow temperature on the heating side, were other good reasons to choose Tranter International AB.



A GLOBAL TEAM WITH KNOWLEDGE AND EXPERIENCE STRETCHING ACROSS ALL CONTINENTS

The more you seek energy performance, the more you need a heat exchanger service specialist. That's Tranter and we've been in this business for almost 90 years. Tranter has been providing service for plate heat exchangers for many decades. This, combined with us having an extensive global manufacturing and a continuous research and development, gives us an extensive solid technical expertise within all kinds of applications, making us a reliable service partner for your heat transfer equipment.

Worldwide service!

Tranter Service Center service teams are available at any time to restore your plate heat exchangers to best performing condition, wherever in the world your plant or vessel is located. Whether serviced during a planned shutdown or on an emergency basis. Whatever brand of plate heat exchangers you have installed, we will ensure that you continue to get the most value out of your heat exchangers.