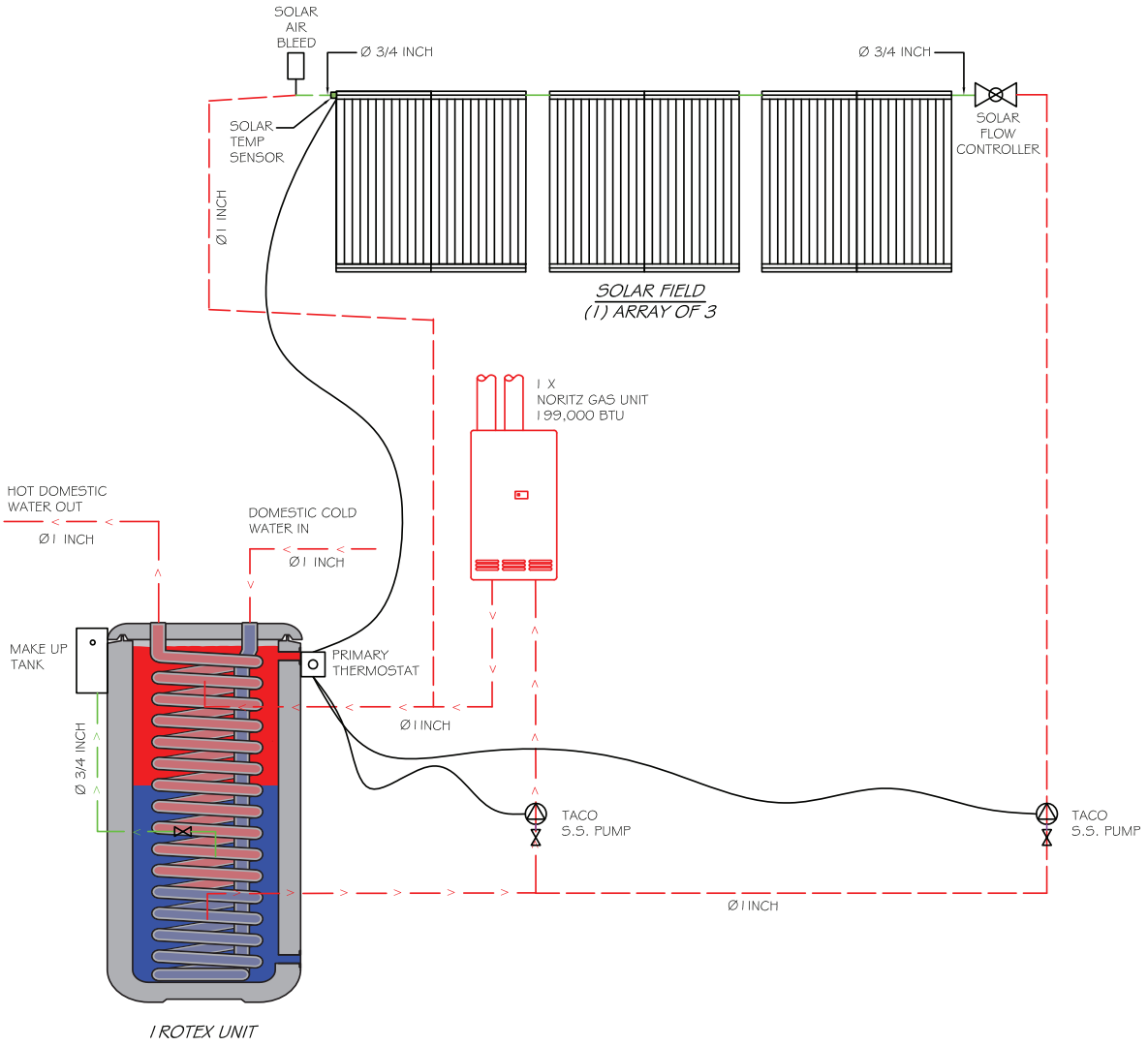

The perfect stratified storage tank

The storage tank container in the SUN Equinox is a solid plastic construction with a double shell. The space between the inside and outside container has excellent foam heat insulation. In the inside, depending on the design, there are two to three heat exchangers made of stainless steel corrugated pipe. The 500 l tank is filled up once with unpressurized tap water without additives. The SUN Equinox is divided into two main areas: The top one, always the warm part - the process water area and the lower colder part - the solar area.

The right temperature in each stratification

In thermal solar systems it is important that the heat storage tank has the best possible pronounced temperature stratification behavior. Temperature stratification is therefore possible since hot water is lighter than cold water and rises upwards. In the top part of the storage tank the process water is heated. This is where high temperatures are in control to ensure that there is always enough hot water available. The water is stored in the lower part of the storage tank and is supplied to solar operation directly to the solar panels. The colder the water which flows through the solar panels is the more efficiently they operate.

This is how we take everything out

The cold fresh water is fed into the deepest point of the storage tank container. From there, it is taken upwards to the stainless steel corrugated pipe acting as a heat exchanger and heated according to the instantaneous water heater principle. This ensures that the temperature in the lowest part of the storage tank from where the solar panels are supplied with water is cooled to the maximum. This type of water conduction generates a stable, strong and definite temperature stratification in the storage tank. The low heat conductivity of the plastic container wall favors and stabilizes the stratification behavior. Unlike metal storage tanks, practically no heat is conducted downwards in the tank wall.