

Cooling of a transparent bath circulator ME-18V with an immersion cooler FT900

The objective was to find out down to which temperature the immersion cooler FT900 can cool the ME-18V while maintaining a clear sight at the bath.



The ME-18V standard version has 2 bath openings. For the case study the unit was equipped with the optional cover # 8 970 294 which features 4 bath openings. So even after the FT900 cooling probe had been fixed using one bath opening left for use in viscosity measurement.



Results

The immersion cooler FT900 was able to cool the ME-18V from +20 °C down to -40 °C within 135 minutes. Down to a temperature of -40 °C there was a rather clear sight at the bath. Ice was only forming at the outer parts of the glass window.

Only when going below -40 °C the sight was inhibited by a stronger formation of ice.

As a summary one can say that the combination of an ME-18V with an immersion cooler Ft900 is an efficient and economic way for viscosity measurement at low temperatures..