The application

In a condensate return tank of a steam supply water levels have to be maintained within a certain Min / Max range. Usually conductive rod probes are used for this measurement task.

Because of the low conductivity of the condensate, this measurement method always create difficulties. A hydrostatic measurement is also not recommended, as there is always a slight overpressure in the boiler.

The process data

- Contents: condensed water
- Container: horizontal cylindrical tank
- Temperature: 90 °C
- Process connection: flange or thread
The solution

An interesting alternative is the capacitive rod probe FMI 51. The DK-value of the condensate is over 50 and therefore makes no problems. The probe may e.g. be mounted on an existing flange, any existing neck tube can be cleared using an inactive length. Even in an existing bypass tube the probe could be installed - it only needs to be fully washed with water. The output 4-20 mA signal can be easily evaluated using the process indicator DPA in order to realize the feeding.

The advantages

- Quick and easy installation
- Temperature stability up to 200 °C
- Pressure resistant -1 .... +100 bar
- Continuous measurement without dead zone, (thus the tank can be completely filled)
- Also suitable for hygienic applications
- For critical applications is a mass pipe available

The customers

- Breweries
- Dairies
- Clinics
- Glass industry

Rod probe

FMI

Display DPA