

The Problem with Tanks

Maintaining your sensor results in a greater accuracy, lower maintenance costs and longer lifetime. To clean, service and calibrate it, the probe must be removed from the process to do the maintenance. Depending on the installation type, removing the sensor from the process can be a challenge. Nearly all installations require some sort of fixture to immerse the probe in the process. This includes a submersion arm for entry into an open vessel or a compression fitting for entry into the side of a tank or pipe.

Using a compression fitting for inserting a probe into the side of a tank or a pipe is problematic. Removing the probe requires unscrewing the fitting and withdrawing the probe, the latter of which results in spillage of the vessel contents.

The Hot Tap Solution

A hot tap assembly allows the user to simply turn a valve and slide the probe out through a tube. Spillage is a few drops at most. It's safe, quick and easy. There is no need to stop whatever processing is going inside the container.

AquaMetrix re-engineered its probe architecture so that the probe you already have for fixed or variable insertion can also be used in a hot tap assembly. No longer do you need a special probe with an extended back-end. One size truly fits all.

Hot the Hot Tap Works

The figure on the right shows an AM-HTA-R5 inserted into the side of a tank. The probe is our signature 1" differential pH probe, P60R5. Other hot taps accommodate other probes (**SPECIFY**).

The figure below shows how the hot tap is installed. The valve comes with both a female (FNPT) threaded and a socket connector to offer you a choice of a slip fit or threaded installation. One simply drills a hole into the tank and glues a male socket or MNPT fitting that attaches to the fitting at the end of the valve.

The probe screws into the end of long push rod using the probe's 1" MNPT threads. Removing the probe is simple: One opens the hot tap valve and slides the push rod—probe assembly through the hot tap valve in the open position. To remove the probe for service and calibration one slides the push rod—probe back through and closes the valve behind it.

The probe can be left inserted into the push rod or unscrewed for easier maneuvering.

Applications

- Large pipe
- Closed tank
- High tank
- Container with hazardous liquid
- Pressurized container

