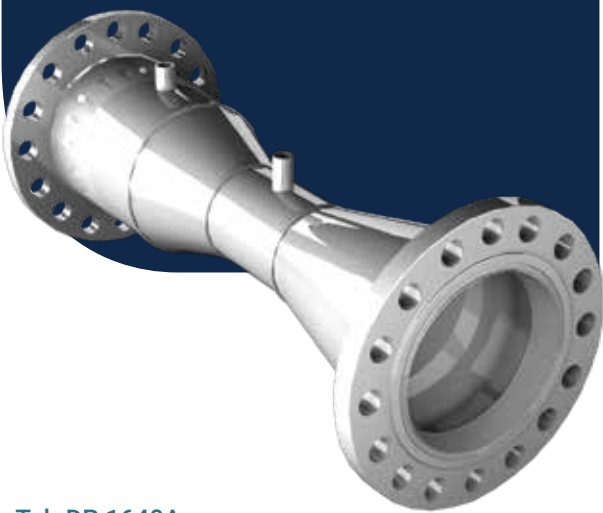


Tek-DP 1640A Venturi Tube Meters provides consistent accuracy, repeatability with maximum pressure recovery, and sustained performance.

Application Note Measure Wastewater with Venturi Flow Meter

Application

To keep systems working correctly, Municipal wastewater treatment plants and industrial facilities treating wastewater need reliable and accurate flow measurements. Over a century, waste treatment plants have measured wastewater and sewage using Venturi Flow Meters with differential pressure indicators.



Tek-DP 1640A

Venturi Tube Meters



Challenges

In recent years Magnetic Flow Meters have replaced existing venturi in plants and specifications. The reason is that they offer a lower entry cost and claim to be maintenance-free. While this may be true, it doesn't tell the whole story. There is no dispute that the purchase price of a Mag Meter is lower than that of a Venturi.

Solution

Venturi Meters are physical devices, with no moving parts that create a pressure difference, which is measured by a differential Tek-Trol Tek-Bar 3110B Differential Pressure Transmitter. The transmitter is an electronic device with lower cost and easy replacement, unlike breaking into the mainline to replace a Mag Meter. Venturi Flow Meters offers lifespan reliability that is unmatched by any other metering technology on the market.

There is no doubt that Magnetic Flow Meters have come a long way and offer reliable flow measurement. Even with such excellent reliability, they still cannot be compared to the robustness of a venturi with a differential pressure transmitter.

Now consider that many of the wastewater treatment plants built in the United States opened in the mid-50s. Those plants have been in operation for over 70 years, where many cast iron venturi meters, which were installed back then, are in working condition even as of today.