



Vortab VEL elbow
flow conditioner

Sewage Lift Station Pumping System

Application Note Case Study ANCS V001

Problem

Lack of sufficient straight pipe run made it impossible to successfully apply the preferred magnetic flow meter (magmeter) to accurately measure the flow of raw sewage.

Flow Conditions

- Line size: 6" [152 mm]
- Process connection: 150 lb 6" flange
- Pressure: 40 psig [2,8 bar(g)]
- Temperature: 60 °F [16 °C]
- Media: Wastewater sludge

Solution

Install a Vortab[®] VEL elbow flow conditioner on the pump outlet and before the magmeter. The VEL achieves a repeatable and non-swirling flow profile in just six pipe diameters. The VEL produced the repeatable profile required by the magmeter, resulting in accurate and repeatable flow measurement in the application.

Vortab Model Number VEL-06001502

Benefits

- Low cost: Vortab VEL installed in same small footprint; avoided additional cost, both in material and labor, to install more piping run.
- Save time: No re-engineering work to find, specify and install alternative flow meter technology, if there was one; no engineering, procurement and installation of additional pipe run.
- Measurement confidence: The preferred magmeter technology could still be applied with accurate and repeatable results in the application.