

INLINETM

Winter 1999

1969 - 1999
30 years
in Flow
Measurement

with Hoffer Flow Controls

HOFFER INSERTION METERS USED FOR LEAK DETECTION IN PIPELINE

Hoffer Flow Controls continues to supply many "insertion" type turbine flowmeters to the petroleum pipeline industry. This type of meter is commonly used for leak detection and not custody transfer. Custody transfer applications are addressed with "in-line" axial flowmeters such as the Hoffer API Series. Leak detection flow applications, for checking the integrity of the pipeline, can be addressed with the HP Series of insertion turbine flowmeters.

The principle of operation for an insertion type turbine flowmeter is much the same as an in-line turbine flowmeter. The insertion meter includes a rotor assembly and pickup coil. The flowmeter measures velocity at a specific point in the fluid stream. Volumetric flow can be inferred provided the I.D. of the line is known. Accuracies can approach $\pm 0.25\%$ depending on the type of transmitter specified with the flowmeter.

Insertion turbine meters provide multiple advantages when compared both to in-line turbine flowmeters and other types of flowmeter technologies. These advantages include low cost, negligible pressure drop, low installation costs, minimal potential points of leakage, and avoidance of high pumping costs. Additionally, the HP insertion turbine flowmeter can be specified for use in velocities up to 50 FPS. This allows pipeline companies to move a maximum amount of product in the shortest time possible.

Leak detection and pipeline integrity is not only essential to the bottom line for the pipeline company, it is an environmental issue. In California, in particular, Hoffer has supplied insertion turbine flowmeters for pipeline integrity verification. Many of the petroleum products being measured include the additive MTBE. Proper selection of the flowmeter seal is essential for any application, however, is sometimes more challenging with various additives factored into the equation. Hoffer has successfully specified and supplied the insertion turbine flowmeter for a wide cross section of pipeline applications.

The HP Series flowmeters are available in both low pressure and high pressure versions. The unit produces a frequency pulse output. Hoffer can supply either a pulse producing preamplifier or an analog signal converter with the HP meter. The recent introduction of the HIT-1 smart signal converter allows user to take advantage of the excellent repeatability of the HP flowmeter. This means that users can achieve $\pm 0.25\%$ linearity over a 10:1 flow turndown range when they specify the HIT-1 transmitter with the HP insertion turbine flowmeter.



Whether your flow application calls for a linearity of $\pm 0.15\%$, $\pm 0.25\%$, $\pm 0.5\%$ or $\pm 1\%$ turbine flowmeter, call us. We design and manufacture a wide variety

of turbine flowmeter solutions for gas and liquid applications. Let us put our flow expertise to work for you.



TALON Technical sales provides representation for the Hoffer product line in South Texas. They have handled our line in this region for just over a year's time. Within this short period of time, they have proven to be one of our most active rep groups in the US. As a rep group, they don't come any better than the folks at TALON. Their group includes technically capable individuals who support their selling efforts both inside and outside of their office. Customers in South Texas, feel free to contact TALON to discuss any of your flow measurement needs. Their local phone number is 281-999-8588.

Redi-pulse Coil Now Intrinsically Safe

For intrinsically safe requirements, Hoffer has introduced an intrinsically safe Redi-Pulse coil. This coil meets intrinsic safety to CSA (with NRTL/C) and CENELEC. The I.S. Redi-pulse features a self-contained preamplifier in magnetic and modulated carrier types. The I.S. Redi-pulse coils are beneficial by allowing the user to produce a conditioned pulse output without a separate signal conditioner. The I.S. Redi-Pulse allows users to eliminate bulky junction boxes and running long lengths of conduit. Additionally, these pickup coils offer noise immunity and greater transmission capability. Pulse output signal options include TTL/CMOS and open collector. A user supplied power of 7.5-28 VDC is required to support the low power DC version and 13-28 VDC to support the high power DC version. Now available. Call today.



Low Cost Flow Solution

Looking for a low cost industrial flow solution? Try Hoffer Economizer Series, featuring a stainless steel paddle wheel rotor design. The Economizer offers a rugged, dependable solution to users at the price of plastic paddle wheel meters.

Great for Liquid Utility and OEM applications. Call for more information on this new series.



Personal Glimpse



Mary Austin joined the Hoffer team as the Order Entry Clerk in March of 1995. Mary processes all new and repair orders while staying busy on the phone with customers expediting and checking status on orders. She is also responsible for sending and receiving demo equipment that is issued to our representatives.

Mary and her husband have been married 12 years. They have two children Regina, 11 and Brian, 6. When not at work, Mary spends her time with her family and their pets (two cats and two aquariums of fish).

PRODUCT CATALOG ON CD

It's convenient, it's easy to use, it's a great reference tool - the Hoffer Flow Controls CD-ROM Product Catalog. The CD includes all Hoffer Technical Data Sheets, our popular Engineering Guide, the Collection Brochure, and more. If you need information on turbine flowmeters and electronics, request this CD for comprehensive data. Provide your gas flow information and the Hoffer gas sizing program will size your gas meter. This CD also includes installation drawings for your reference. Request your Hoffer Product Catalog on CD by either calling us at 800-628-4584 or visiting our website www.hofferflow.com.



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