

# INLINE

with Hoffer Flow Controls

## Hoffer and Gas Transmission Auxiliary Applications... Not Just Custody Transfer Anymore



After the measurement of water, natural gas is the single most frequent fluid measured by Hoffer turbine flowmeters. A significant number of Hoffer turbine meters are used in the custody transfer segment of the natural gas industry but many are used by this industry for other applications. The transportation of natural gas over great distances is a complex task, requiring specialized equipment and facilities to deliver the gas safely, efficiently and in a ready-to-use form.

Considerations include maintaining sufficient pipeline pressure, maintaining pipeline integrity and keeping moisture levels low. Hoffer's gas transportation clients have found our turbine flowmeters well suited for supporting a number of these tasks.



engines and compressors to remove excess heat. Failure of a cooling system can lead to emergency compressor shutdowns, equipment damage and loss or significant reduction in pipeline pressure. Hoffer turbine meters are on the job in several such stations monitoring the flow rate of these critical cooling fluids in order to alert personnel of either a gradual or sudden drop in flow that would require attention.

requires sufficient density and velocity to work properly with gas flows. This is the case for most gas transmission lines. By monitoring flow rates at various points along the pipeline, it is possible to determine if there are any disparities in the flow rate between points that would indicate a potential leakage problem. By using bi-directional Hoffer insertion turbine meters it is also possible to determine direction of flow which can be important in monitoring pipeline integrity in more complex configurations.

A final application for Hoffer turbine meters is the monitoring of glycol flow rates associated with gas dehydration operations. Dehydration equipment typically utilizes heated glycol to react with

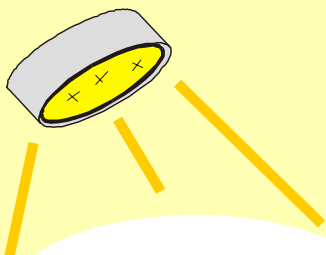
water vapor present in the natural gas and remove it from the flow stream. Significant volumes of glycol are required for these operations and need to be accounted for. In these applications, Hoffer turbine flowmeters are ideally suited for their ability to handle a wide range of flow rates and

**(continued on back)**

One of the most critical elements in transporting natural gas is maintaining sufficient line pressure from the wellhead to the pipeline delivery points. Compressor stations along the length of the pipeline supply the needed boost in line pressure to maintain flow at desired levels. A critical flow measurement in these stations is the circulation of cooling fluids used in the

Pipeline integrity is a major safety issue. Gas transportation companies employ elaborate methods to monitor and inspect pipelines for possible leaks or future leak points. One technique used in this mix in many pipelines is the use of non-custody transfer Hoffer insertion turbine meters to monitor flow rates at points along the pipeline. The insertion meter technique

### Rep Spotlight



Representation

Welcome! RITEC Enterprises and Flow-Tech Inc.

RITEC Enterprises is currently representing Hoffer products in the New York area, Zips 12000-14999. RITEC was established in 1973 and they supply and service measurement and control solutions for chemical, pharmaceutical, pulp & paper, food & beverage, and water & waste industries. Their office is located in Rochester, NY and they may be reached at 716-271-3170.

Flow-Tech Inc. now represents Hoffer products in Maryland, Washington D.C. and Virginia. Their main office is located in Hunt Valley, Maryland and a satellite office is located in Portsmouth, Virginia. Flow-Tech specializes in the industrial process and test/measurement fields. Their customers include power & chemical plants, OEM's, system integrators, municipalities, engineering firms, and research and metrology labs. Flow-Tech may be reached at 410-666-3200.


Customers in these areas please feel free to contact these Hoffer Representatives for your flow measurement needs.



(continued on from front....)

### Hoffer and Gas Transmission Auxilliary Applications....Not Just Custody Transfer Anymore

temperatures from ambient to in excess of 300°F associated with these operations.

Though the Hoffer turbine meter is perhaps best known for custody transfer applications in the natural gas transportation industry, as we can see there are many other places in this industry where they are successfully utilized. Natural gas transportation companies around the world have found the versatility, reliability and cost-effective nature of the Hoffer turbine meters ideally suited for these auxiliary requirements. 

# Hoffer Flow Controls and System Integration

Hoffer Flow Controls has been providing system integration solutions for many years. Hoffer recently completed a metering system for a gas fired turbine power generation plant. The AES Uruguiana power station was commissioned in October.

pressure transmitters, valves and pipeworks.

The system provides outputs to the DCS system for plant control, while the local flow computer and chart recorder provides secondary backup to the critical data, via extensive data logging capabilities.

Hoffer supplied a 10" natural gas metering skid to the power station to provide gas usage information. The data is being used for plant optimization. In addition, it forms the basis for comparison between the gas utility meters and the power plant usage figures.



10" Natural gas fuel metering skid, referred to as "Big Blue" by our staff, just before shipment.

If you have an application for metering clean liquids or gases, call us. Hoffer handles simple off-the-shelf designs as well as custom flow metering systems like "Big Blue."

System designs from Hoffer allow near-custom applications at moderate costs. Hoffer offers a wide

range of process operations such as indicating, blending, controlling, telemetering, and data logging.

The system consisted of a 10" Premier Series gas turbine, as well as a strainer, flow computer, chart recorder, specific gravity transmitter, local indicators, temperature and

The next time your application calls for complete measurement solutions, Think Hoffer.

## Personal Glimpse



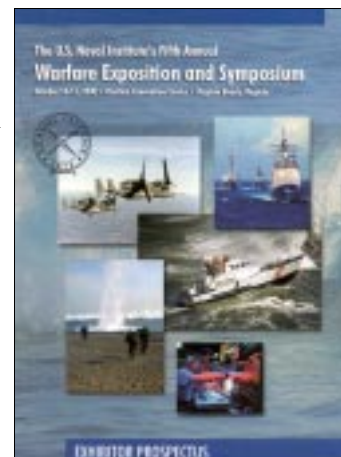
Jeanne Balduf is part of Hoffer's Technical Processing Center (TPC). She has a multi-task job but her primary responsibility is shipping. Jeanne coordinates and traces shipments, handles import/export logistics, invoicing, typing test certificates and test calibrations. This job keeps Jeanne jumping but she is used to it because Jeanne has 15 year old twin sons to keep up with.

Jeanne has been with Hoffer for seven years. She is married and has three sons. Jeanne is very creative and one of her many talents is quilting. She is youth director at her church which includes a puppet ministry.

## Hoffer Attends U.S. Naval Institute Exposition and Symposium

The Norfolk/Hampton Roads area of Virginia has become one of the world's most recognized and strategically important military communities. More than 120,000 military professionals are located in this area. Hoffer Flow Controls is located in Elizabeth City, NC which is about one hour south of the Norfolk area.

Hoffer recently attended the Naval Warfare Exposition and Symposium which was held October 10<sup>th</sup> and 11<sup>th</sup> at the Pavilion Convention Center in Virginia Beach, VA. This show highlighted potential government projects for the upcoming year and the chance to speak with top military and government leaders. This show provided a forum where future government projects and completed projects could be discussed.



### HOFFER FLOW CONTROLS, INC. The Turbine Flowmeter Company™

107 Kitty Hawk Lane, Elizabeth City, NC 27909

[www.hofferflow.com](http://www.hofferflow.com)

Inline with Hoffer Flow Controls is published in Elizabeth City, North Carolina quarterly by Hoffer Flow Controls, Inc. The contents of this newsletter may not be reproduced in whole or in part without the consent of the trademark owner. All correspondence should be directed to:

Janna Jones – Inline Editor

at the address above

or [jjones@hofferflow.com](mailto:jjones@hofferflow.com)

(252)331-1997 (252)331-2886 fax