

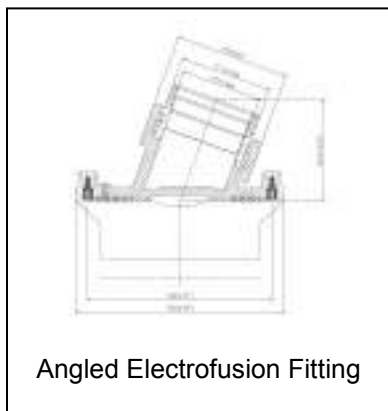
Angled Electrofusion Fitting for Live Access into PE Mains

Description: An angled electrofusion saddle fitting that enables the live entry of inspection cameras or other equipment into PE mains.

Status: Angled electrofusion fittings in 4", 6", 8", 10" and 12" sizes with 2" branch are available through NUPI Americas.

BENEFITS

NYSEARCH has developed an angled electrofusion fitting for adding to the lineup of live inspection products for PE pipe. Now, no blow inspections can be facilitated on PE pipe through the use of this new fitting coupled with devices such as the PRX250 gas camera.



Angled Electrofusion Fitting

BACKGROUND

Access to the natural gas distribution network is increasingly sought by its operators in order to perform various inspections, maintenance, and other functions. Camera inspections, flow shut-off, pipe location, and cast iron

seal inspection are some functions requiring live insertion of equipment into pipes. Until recently, most of these functions were associated with metallic pipes. Now, plastic pipe is also aging and will increasingly develop maintenance needs. In addition, new integrity management practices can potentially arise requiring more rigorous inspection and condition monitoring of the plastic piping infrastructure.

Key to the support of the functions described and the deployment of the related systems is the availability of fittings allowing live tapping and drilling of pipes. An abundance of such fittings exist in the market for metallic pipes, while a large number has been developed for plastic pipes over the last one to two decades. Of particular interest is the availability of fittings that allow the deployment of tools in plastic pipe, in a fashion requiring minimal excavation.

Members of NYSEARCH have expressed an interest in deploying inspection cameras and other tools into plastic pipe under live conditions. Present day saddle fittings are not designed to support such activities. Hence, there is a need to develop such products.

ULC Robotics together with NUPI Americas (a division of GECO SYSTEM) decided to embark on developing a solution for this growing industrial need.



Conceptual Use of Fitting with PRX250 Gas Camera

TECHNICAL APPROACH

ULC Robotics identified performance criteria and specifications to address the immediate industrial needs of participating gas distribution companies. NUPI/GECO expanded the initial request for three sizes to two additional sizes on their own accord to further service the market.

NUPI/GECO modified existing saddle fitting molds by incorporating a 20° angle to a 2" branch. The choice of this angle was based on the launching needs of ULC's PRX250 Gas Camera. The branch section was fitted with a brass insert. The insert has 2" external NPT threads for attaching a variety of devices as well as an internal completion plug and external cover. An initial run was manufactured and tested to ASTM standards F1055 and D2513. The fittings are rated at 124 psig. After successful ASTM testing, NUPI/GECO produced the final quantity of each fitting. These fittings can be installed using standard electrofusion equipment and drilling/tapping tools from GECO or Mueller (with minor modifications).



Angled Fitting with Ball Valve & PRX250 Launch

PROJECT STATUS

Angled Electrofusion fittings can be purchased through NUPI Americas Houston, TX. Available sizes are: 2" x 4", 2" x 6", 2" x 8", 2" x 10", and 2" x 12".

HIGHLIGHTS

- Installed with standard equipment
- 2" branch (@ 20°)
- Brass insert with internal & external threads
- Completion plug and cover

FOR ADDITIONAL INFORMATION

George Janega
Project Manager,
NYSEARCH
Northeast Gas Association
1515 Broadway, 43rd Floor
New York, NY 10036-5701
212-354-4790
Fax: 212-764-7014
gjanega@northeastgas.org

Greg Penza
President
ULC Robotics
160 B West Industry Court
DEER PARK, NY 11729
(631) 491-7473
gpenza@ulcrobotics.com

Marco Genoni, CEO
GECO System SPA
Via Magenta, 43
21015 Lonate Pozzolo (VA)
Italy
39-0331-302975
39-0331-302965 fax
marco.genoni@gecosystem.com