



Where life interacts with infrastructure.

NEWSLETTER

Winter 2012



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WHAT'S NEW

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Nu Flow is the World Leader for Small Diameter Pipelining Solutions

After explosive growth with our worldwide channel partners in 2011, Nu Flow has the biggest global reach in our industry. These licensees have chosen to use our patented no-dig structural liner and blown-in barrier coating technologies. This growth shows an increase in global awareness, demand and value for Nu Flow's unique, effective solutions.

The extraordinary benefit of Nu Flow's solutions is that our trenchless and non-invasive technologies allow us to rehabilitate and retrofit a wide range of pipe diameters in-place. This means that we do not have to destroy the property, close the building or relocate residents in order to do our work. Our blown-in epoxy produces a protective coating inside potable and pressurized pipe systems. Our Pull-in-Place structural liner creates a new pipe within failing drain pipes. More and more building owners and property managers worldwide are choosing Nu Flow's technology because we offer the most cost-effective, no-mess, no-hassle, prompt pipe rehabilitation service.

We are proud of our non-invasive and eco-friendly products and technologies that have made us the global leader in our industry. Our newest global partners who use our innovative solutions include the following regions: Mexico, United Kingdom, Ireland, Italy, Greece, Taiwan and Israel. We are excited for their journey to success and our journey in 2012 as we continue to dominate our field.

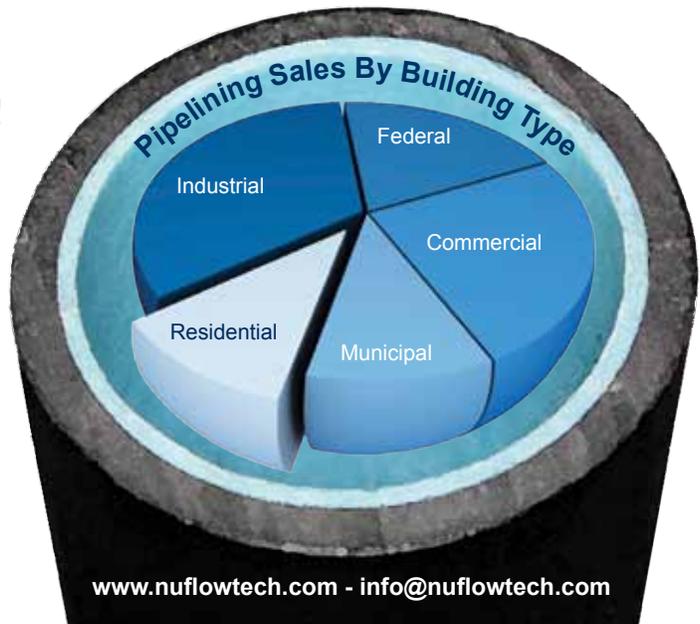
As Seen in Cleaner Magazine:

The Business Of Pipelining Is No Longer Just About The Tube.

Become a part of the number one small diameter pipelining company in the world!

Nu Flow provides a business model, business solutions, the technology and materials to build a successful application and installation business in the pipelining industry.

Call to find out more:
1-800-834-9597



www.nuflowtech.com - info@nuflowtech.com

Nu Flow's technologies are protected by U.S. Patents 6,691,741, 7,216,674, 7,849,883 and 5,707,702

Events and Conferences:

Pumper & Cleaner Environmental Expo



Indy 2012

February 27 - March 1, 2012

The 2012 Pumper & Cleaner Environmental Expo was a great success. This year, the Expo had a new venue, Indiana Convention Center in Indianapolis, Indiana. The show ran from February 28th through March 1st, 2012. We were located at booth #5049 where we answered questions about our technologies and helped companies take steps to launch their pipe lining business or add a new technology!

The Expo attracted nearly 10,000 attendees from more than 4,000 companies, making this show a great opportunity for Nu Flow. If you're interested in expanding your business with Nu Flow please contact us, www.nuflowtech.com.



2012 Every Building Conference & Expo

Come see Nu Flow at booth #241 during The 2012 Every Building Conference & Expo in Seattle, Washington. Nu Flow will show off their innovative technologies during commercial real estate's premier professional event on June 24th through 26th, 2012.

With more than 450 exhibitors at the show, make sure to visit Nu Flow to get the answers to your piping problems!

2012 EVERY BUILDING CONFERENCE & EXPO

Presented by BOMA International and BUILDINGS

WASHINGTON STATE CONVENTION CENTER
June 24-26, 2012 • Seattle, Washington

Case Study: Niels Esperson Building

The historic Niels Esperson Building had leaking storm drain pipes, which leaked into part of the Houston Tunnel System below the skyscraper. Nu Flow was able to successfully clean and line these aged, underground pipes using our no-dig, in-place solution. Our unique technology prevented the need to destroy the building's marble floor and close down businesses and a section of the Houston Tunnel System.

Project: Rehabilitate the aged and leaking roof drain main in-situ, without having to close down a section of the busy Houston Tunnel System that is located below the pipe line.

Customer: The Seligman Group is a leading U.S. real estate management company that owns prestigious properties in several western states. This family-owned business was founded in 1954 and went public in 1971.

Site: Niels Esperson Building, a 32-story commercial skyscraper and one of the most recognizable buildings in Downtown Houston, Texas. It was built in 1927 and named after a local real estate and oil pioneer. The office building had a major remodel in 2001.

System: The 6" horizontal roof drain pipes that lead from the building's main stack to the city main. These original cast iron pipes are more than 80 years old and run beneath the main floor of the building, which is also located above the Houston Tunnel System.

Problem: Over the years, these original cast iron roof drain pipes became corroded and brittle, which caused leaks. After it would rain, the water leaked from the pipe, into the Houston Tunnel System below the building.

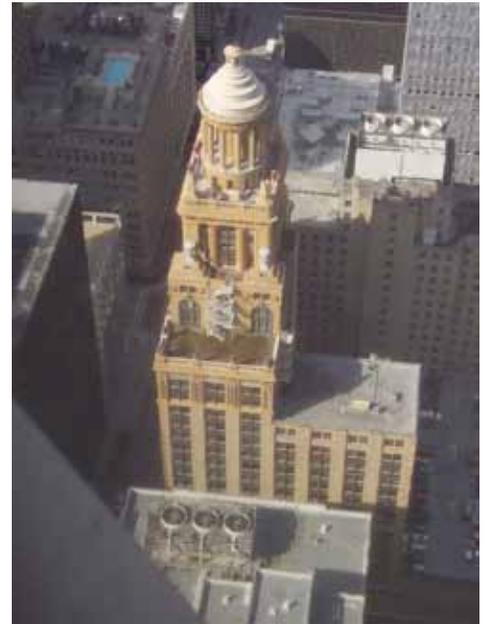
Circumvention: The customer wanted to fix the leaking pipes, but had many obstacles to overcome. First, the building had a major remodel in 2001, so the customer did not want to tear up the marble lobby floor, which would cause expensive destruction to the finished building and disruption for the tenants. The extensive excavation process would involve digging up the marble floors, concrete slab, dirt and pipes, which would form a big mess and disruption.

Also, if the customer had chosen a traditional method to fix the leaking pipes, a chiropractor's office in the Niels Esperson Building would have to close, as well as a section of the Houston Tunnel System. This underground tunnel system connects office buildings, banks, hotels and shopping centers for the bustling Downtown Houston area, so closing a section of it would be a huge inconvenience.

Solution: Nu Flow used existing access points to rehabilitate the failing roof drain system. Our no-dig technology allowed our technicians to install our Pull-in-Place liner in-place. This protective liner is pulled through the pipe system and cures to form a new, seamless pipe within the original host pipe.

Nu Flow's innovative pipe lining technology prevented the closure of businesses within the Niels Esperson Building and part of the Houston Tunnel System. Our no-dig technology also prevented the destruction of expensive marble floor and walls in the recently renovated skyscraper.

Nu Flow saved the customer, the tenants and the Houston Tunnel System from the expense, logistics and hassle that would have occurred with a repipe. Nu Flow's unique, no-dig solutions can provide these benefits to your residential, commercial, industrial or municipal property.



“Nu Flow saved us more than 50% in costs and 90% of disruption, versus what it would have taken to replace the leaking pipes.”

- Mike Goza, Chief Engineer,
Seligman Group

Case Study: Delta Toronto East Hotel

The indoor pool in this beautiful hotel experienced unidentifiable leaks, so the customer was burdened with the cost and inconvenience to refill the pool daily. The customer was also greatly concerned about where this leaking water was going and what negative effect it could have on the property. While a traditional repipe would have caused a messy nightmare for the hotel, Nu Flow's long-term, in-place pipe lining technology was the ideal solution.

Project: Line the indoor pool's entire supply and return pipe system to stop and prevent leaks.

Customer: Delta Hotels and Resorts is Canada's first-class hotel leader. Founded in 1962, Delta now has several prestigious resorts across Canada, including the Delta Chelsea, which is the largest hotel in Canada.

Site: Delta Toronto East Hotel's indoor swimming pool. This 10-story, luxurious hotel is located in Toronto, Canada.

System: The entire supply and return pipes for the hotel's indoor pool. These pipes are 1.5" in diameter and the system consists of PVC, copper and galvanized pipes. These 25-year-old pipes run about 10 feet under concrete and tile, from the pump room to the pool.

Problem: This pool lost several gallons of water each day and constantly had to be refilled, which was expensive, inconvenient and time-consuming. Also, the customer was not sure which pipes were leaking or where the leaked water was going, so the customer was concerned about what effect this would have on the structure. When the customer decided to change the pool's water from fresh water to salt water, they decided to seek out a long-term solution.

Circumvention: A traditional repipe would cause the excavation of the indoor pool and surrounding landscape. Since the location of the leak was unknown, all of the supply and return pipes would have to be dug up and replaced. This would create an enormous construction site, with loud jackhammers breaking up the ground and trucks hauling away the concrete, dirt and pipes. The indoor pool's surrounding area would have to be blocked off for weeks or months, which would be an inconvenience and eye sore for visitors. After the messy and laborious pipe replacement, the customer would have to get the pool refinished and surrounding area repaved.

Solution: Nu Flow's no-dig, in-situ pipe lining technology was installed in both the indoor pool's plumbing systems within 5 days. Nu Flow technicians first pressurized all of the pool's supply and return lines to locate which ones were leaking and which lines lead to each pool jet. Then they applied our blown-in epoxy coating to the pool's pipe system. This epoxy created a protective barrier throughout the inside of the pipes to prevent future corrosion or leaks.

Nu Flow's pipe system rehabilitation process was effectively completed without having to excavate the pool, dig up the surrounding pool area or cause disruption to the hotel guests. Our unique, no-dig technology can rehabilitate plumbing systems in your residential, commercial, industrial or municipal building, saving you money and time, while preventing hassle and destruction.



"This customer went through the financial burden of refilling a leaking pool every day. Since no one knew where the leaking water was going, this also caused anxiety about what negative effect it could have on the property. Nu Flow's epoxy coating will prevent leaks from occurring, saving the customer money, stress and inconvenience."

- Travis Taylor, Regional Manager,
Nu Flow

Case Study: Target

An underground drain line for this Target's food court had been failing for years. This customer paid for temporary fixes, such as jetting (cleaning) the pipes, only to have the problem reappear. Nu Flow installed our innovative pipe lining technology without having to excavate the floor or move any of the kitchen's appliances. This liner will prove to be an effective, long-term solution for pipe failures.

Project: Rehabilitate an aged and failing sanitary branch line without moving kitchen appliances or causing destruction to the food court's finished floors.

Customer: Target stores, with around 2,000 locations across the United States, sell department-store items at discount-store prices. These popular stores have been around for 50 years.

Site: The Target Café food court inside a one-story Target store located in Chula Vista, California. The building was built in the 1960s and converted to a Target in the early 1980s.

System: The 3" to 4" horizontal branch line from the food service area to the building's main drain. These cast iron pipes are located 3.5 feet beneath the ground and are about 46 years old.

Situation: The aged sanitary branch line that connects the Target's food court to the building's sanitary main constantly experienced backups and slow flow. These failures occurred because the pipe line had cracks and significant mineral deposits. The minerals in water naturally collect on cast iron, so mineral deposits are commonly found in cast iron pipes.

This Target had experienced low flow and backups for several years. In 2008, the sanitary pipes were jetted and cleaned, but this only fixed the problem temporarily. Since nothing was changed inside the pipes, the problem returned. The facility's management team decided that a long-term solution was needed to prevent the recurrence of these pipe system failures.

Solution: Nu Flow was chosen to rehabilitate the failing drain line because we did not have to move any kitchen appliances in order to do our work. Nu Flow technicians also worked at night while the Target store was closed and the drain lines were functional during working hours, so there was no disruption to normal operations.

Our technicians first cleaned the sanitary branch line and restored it to its original diameter. Then our Pull-in-Place structural liner was installed. This seamless, protective liner covers up all cracks and breaks in the pipe line, and will also prevent mineral deposits and scale build-up.

Even though this pipe line is located 3 feet below the 6"-thick concrete floor, our no-dig technology prevented the need for us to have to dig up the existing floor and dirt in order to access the pipe. Therefore, the food court's floor was preserved and no appliances had to be moved in order for our work to be done. Nu Flow also installed double sweep cleanouts for full access of the pipe line for any future maintenance.

This customer chose Nu Flow's innovative, no-dig technology and benefited greatly. The store did not have to close or block off a large area for Nu Flow's work. The appliances in the food court did not have to be unplugged and moved. We also saved the customer the money, time and hassle that would have come with a traditional re-pipe job.



“The food court was able to operate normally during the day while Nu Flow worked at night so the customer didn't lose revenue. The most amazing part of the job was our ability to rehabilitate the existing line without any disruption or damage to Target's assets or property.”

- Bill Turner, Regional Manager,
Nu Flow

Case Study: Elbow Room Dive Bar

Put an end to your property's pipe system problems as soon as possible. The longer the issue continues, the more damage it can cause to your property. Nu Flow recently rehabilitated underground sewer pipes during a dive bar's renovation and found that the pipes were heavily corroded and had holes. Our technicians were able to successfully clean and line the pipes to greatly enhance their useful life without disrupting the contractors or causing damage to the renovated building.

Project: Rehabilitate the failing sewer pipes without having to dig up the parking lot or building's concrete foundation.

Customer and Site: Elbow Room is a contemporary dive bar in San Diego, California. The newly renovated Elbow Room will feature a full bar, homemade food, pinball machines, a live golden tee game, pool tables, darts, shuffleboard, a jukebox and an outdoor patio with a fire pit for a more vivacious atmosphere.

System: The cast iron sewer line runs underneath the parking lot and through the middle of the building, beneath the concrete foundation. The pipes are 4" wide in diameter and are more than 40 years old.

Situation: The drain system experienced backups and leaked sewage into the ground. During a pipe line camera inspection, the sewer pipes were found to be heavily corroded, cracked and pieces of the pipe were missing. The customer decided to rehabilitate the pipes during the dive bar's scheduled renovation in order to prevent future drain failures for the new kitchen and restored bathrooms.

Solution: Nu Flow was selected to rehabilitate the sewer pipes because our trenchless technology permits us to clean and line the pipes without causing destruction or disruption to the remodeled building and contractors.

Our technicians first cleaned the sewer pipes to rid them of the heavy scale build-up that was causing the drain system failures. Then we installed our Pull-in-Place structural liner, which cures in place to form a new, seamless pipe within the host pipe. This liner covers all cracks and holes in the pipe and it will also protect the pipe system from future leaks and other failures.

Nu Flow had the best long-term solution for this dive bar and restaurant, which saved the customer from the cost, time and damage of a traditional re-pipe.



The underground sewer pipes were heavily corroded and pieces of the pipe were missing. The customer wanted a long-term fix that would not interrupt or sabotage the renovation to the dive bar.



Licensee Corner: Accurate Leak and Line

REPAIR CONTRACTS BOOST BUSINESS VOLUME

Under the diagnostic-and-repair business model, work is split evenly between residential and commercial clients, including apartment buildings, condominiums, shopping centers, and strip malls. Business-to-business diagnostics-only jobs are limited to less than 20 percent of volume.

“We started out offering traditional dig-and-replace repairs,” says Montgomery. “That included tunneling underneath the slab, breaking the slab for isolated repairs or rerouting the plumbing or drain system. But in 2005, we expanded into epoxy drain pipelining, which really pushed the business along. When you tell a customer that you’re either going to have to bust the slab to fix their problem, or do it nondestructively with epoxy, they tend to go with the nondestructive solution.”

The company licensed with Nu Flow Technologies, which supplies them with their epoxy barrier coating system and products. Using the system, the drain line is first cleaned using the proprietary Scorpion Cutter, a high-torque air-driven 28,000 rpm chain cutter that can clear and ream lines of varying diameters.

“Running off high-volume air, the Scorpion Cutter is much more effective and the pipe preparation process achieved much faster than with traditional cutters,” says Montgomery.

The cutter includes a mount for the company’s RIDGID camera inspection system. Once the camera reveals that the cutter has done its job, crews jet the line clean and begin the relining process.

An epoxy-impregnated felt liner is inserted inside the line and held in place by an inflatable bladder, creating an epoxy coating 1/8- to 1/4-inch thick. Accurate Leak and Line has found the repairs equally effective on PVC, concrete, clay and cast-iron drain lines.

EPOXY RELINING SERVICE EXPANDS CLIENTELE

Epoxy repairs soon began to drive at least 75 percent of the company’s business, leading to rapid expansion. Montgomery hired three additional pipelining technicians in 2005 and hired another four in 2009. Along with the additional high-tech employees, the company expanded its excavation and tunneling crews. In 2009, the company also added three locations serving Austin/San Antonio, Houston and Tyler. The company’s corporate office is currently located in Gun Barrel City.

“With offices at each of these locations, we’re able to handle demand over the vast majority of Texas, serving clients as far south as Corpus Christi and north of Dallas-Fort Worth,” says Montgomery.” The system was developed by the U.S. Navy and patented by Nu Flow, which currently holds distribution rights to the technology.

To read the full article, visit: http://www.cleaner.com/editorial/2012/01/on_target



In Situ Pipe Repairs Save Time and Money

Buildipedia.com featured Nu Flow to highlight several different in situ pipe repair techniques available to facility managers and building owners.

The use of epoxy coatings and epoxy-coated structural liners can save both time and money over traditional pipe repair methods.

Damaged or deteriorating pipe systems can be expensive to replace, particularly those that are located in hard-to-reach locations or inaccessible without selective demolition. Fortunately, common pipe systems can be rehabilitated from within, using cured-in-place epoxy coatings or epoxy-coated structural liners. These in situ pipe repair techniques can offer cost savings of up to 60% and time savings of up to 30% when compared to traditional pipe repair methods. We've partnered with Nu Flow to highlight several different in situ pipe repair techniques available to facility managers and building owners.



PIPE SYSTEMS, SIZING, AND TYPES

In situ pipe repair techniques can be used on a wide array of small-diameter pipes: compressed air and gas systems, HVAC systems, chemical supply lines, potable water pipes, sea-water cooling systems, storm drains, and sanitary sewer lines. The idea is to fortify and protect pipe walls from within without creating obstructions while minimizing repair costs and reducing system down time. Just about any pipe material can receive these treatments: PVC, cast iron, galvanized steel, copper, and even concrete in some cases.

The two categories of piping systems where these repair techniques can be used are those with drains and cleanouts, such as gravity-flow sanitary sewer lines or roof drains and pressurized piping systems, like those supplying compressed air or other gases.

Cured-in-place epoxy coatings and epoxy-coated structural liners can be used on either piping system (those with drains or pressurized), with the exception that only specific epoxy coating types are compatible with NSF/ANSI Standard 61, approved for use in potable water pipes.

Nu Flow's technology can be applied in pipe systems that range from 1/2" to 12" diameter. Nu Flow's structural liners can be placed in 3/4" through 12" diameter pipes. Nu Flow's epoxy coatings can be installed in 1/2" through 12" diameter pipes and are used almost exclusively in 1/2" to 2" diameter pipes.

Regardless of the type of pipe system, figuring out the extent of the repairs required is the first step. Systems can be bypassed if necessary with temporary piping and can then be shut down, cleaned, and inspected.

CLEANING AND INSPECTION

For pressurized pipe systems, hot, clean, compressed air is run through the pipe network. The starting air temperature at the compressor is around 130 degrees but typically decreases 85–90 degrees by the end of a pipe run. A dry garnet rock abrasive is added to the compressed air flow and then the abrasive and debris is captured by a cyclonic vacuum collector. The abrasive additive provides an anchor tooth (close to 6 mils) throughout the pipe's interior surface for better adhesion of the epoxy resins.

For drain pipe systems, existing drain lines and cleanouts are taken advantage of and provide convenient access points for cleaning tools, so there is no need to dig or create holes for access points. Where cleanouts don't exist, they can be installed in a pipe run to better facilitate access for cleaning. Cleaning is accomplished with pneumatic tools or by hydro-jetting, depending on the type of pipe and severity of buildup within. Different cleaning heads can be placed on the cleaning tools depending on the system conditions.

To read the full article, visit: <http://buildipedia.com/operations/facilities-maintenance/in-situ-pipe-repairs-save-time-and-money>

Case Study: Welk Resort San Diego

Small, Band-Aid-type repairs on leaking pipes might sound like a cost-effective approach at the time, but as the leaks continue to occur, the expenses add up. Welk Resort San Diego spent hundreds of thousands of dollars on these types of constant repairs for leaking pipes, but eventually decided to invest in a long-term solution that will prevent future leaks.

Project: Line the older time shares' entire potable system to stop and prevent all pinhole leaks and other failures without causing destruction to the picturesque property.

Customer and Site: Welk Resort San Diego is a luxurious vacation destination in San Diego, California, that features beautiful timeshares, golf courses, tennis courts, a theatre, a shopping center, a fishing pond, barbecues, pools and recreational facilities. This resort and three other similar resorts were established by Lawrence Welk, a famous musician and TV personality. Welk is most commonly known as being the host of The Lawrence Welk Show from 1955 to 1982.

System: The aged hot and cold potable system has copper pipes that range from 1/2" to 1.5" in diameter. These failing pipes are located throughout the walls, ceilings and floors of about 300 time share units.

Situation: The time share units that were built in the 1980s experienced chronic pinhole leaks and slab leaks, which caused mold damage and destruction to the rooms. Welk Resort was spending hundreds of thousands of dollars per year on Band-Aid-type fixes to these problems. In order to alleviate that financial burden and constant annoyance, the customer decided to invest in an effective, long-term solution to prevent future pipe system failures for the residents.

Solution: A re-pipe and re-route was crossed off as an option because the process would be very expensive and time consuming, it would cause extensive damage to the property and new metal pipes would continue to corroded just like the existing leaking, metal pipes. Nu Flow's in-place pipe restoration technology was selected because our benefits are precisely what the customer wanted.

Nu Flow was able to work within the tight time constraints of the customer, due to the time shares schedules. Our technicians successfully cleaned, lined and reinstated the potable water systems in the affected units with our blown-in, patented epoxy. This special epoxy creates a protective coating inside the host pipes, which will prevent future corrosion-build up and pinhole leaks. Nu Flow technicians used existing access points, so there was very little disruption to the finished units.

Nu Flow is proud to have provided Welk Resort San Diego with an effective, long-term solution to prevent potable pipe system failures. Our non-invasive technology is chosen by prestigious customers, because they have recognized the value in saving money, time and preventing destruction.



"We were spending hundreds of thousands of dollars each year from pinhole leaks and slab leaks on 30-year-old piping. Nu Flow was able to assist us in alleviating that financial hardship, for which our association is grateful. The benefit of not having to rip out dry wall and replace piping has also allowed us to turn the rooms in a timely manner, resulting in smoother operations for our resort guests."

- Sean Coogan, General Manager,
Welk Resorts



Where life interacts with infrastructure.

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