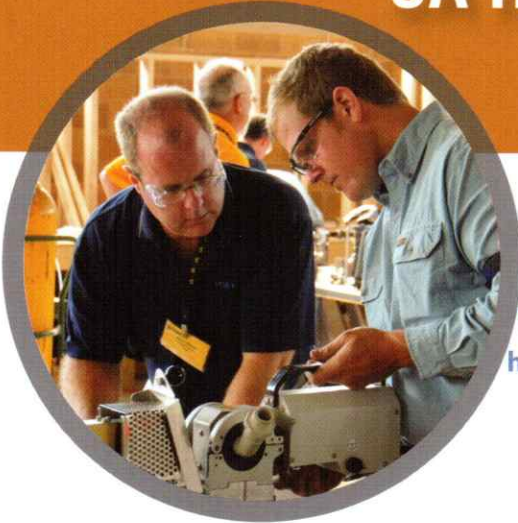


UA Training Programs



Achieving The Very Best

When you hire UA craftsmen, you're hiring the best.

It's simple: UA craftsmen are the best because we're trained to be the best. For more than a century, we've been training apprentices and journeymen to the highest standards possible. The UA operates over 300 training centers throughout North America. Every year UA apprentices and journeymen are in training, learning valuable skills and abilities that make them expert craftsmen on a wide variety of projects.

The United Association invests close to \$200 million a year to train our craftsmen. Our state-of-the-art equipment and training facilities make our commitment to training for the future a reality.

World-Class Training

UA apprentices go through a rigorous five-year program that includes both classroom and on-the-job training. They are immersed in a wide array of education courses that train them in the latest techniques and technology, with safety being integral at every step along the way.

Certification Programs

In addition, the UA International Pipe Trades Joint Training Committee has written and published more than 90 training manuals and developed certification programs for a wide variety of processes such as:

- Welding
- Refrigerant Removal and Handling
- Medical Gas Installation
- Valve Repair
- Instrumentation
- Backflow prevention
- Green Technologies
- Rigging
- Foreman

Certifications in these areas guarantee our contractors and users that the craftsmen they hire have been tested and meet the highest standards of our industry.

We offer contractors and owners in the construction industry a solid guarantee: We do the job right, the first time, every time.

It's simple: UA craftsmen are the best because we're trained to be the best. For more than a century, we've been training apprentices and journeymen to the highest standards possible.



UA Welder Certification Program



Experts In The Industry

The United Association of Plumbers, Pipefitters and Sprinklerfitters has been training qualified welders longer than anyone else in the industry.

Our Welder Certification Program provides pre-tested, certified and immediately available welders across the United States and Canada – at no cost to the construction user.

Built-In Integrity

The UA recognizes the need for absolute integrity in each of our programs. Several safeguards are built in:

- All tests are conducted by third-party testing representatives who are recognized welding inspectors.
- All completed welds are x-rayed and read by an independent laboratory.
- Certified testing procedures are developed and maintained by the National Certified Pipe Welding Bureau.

The Certification Process

UA welders are tested at local training sites across North America. Applicants are tested on the welding processes most commonly used on a majority of construction projects. Welders can seek certification in all or any of these processes. This premier program is flexible; a user can request that welders be tested and certified for a special procedure that may be needed on a project.

Upon certification, welders become part of a national database that is available electronically to any user or union contractor in North America, making it simple to access any one of our trained experts. This information is accessed through the local union in whose jurisdiction a project is being undertaken. Welders are tested and re-certified bi-annually.

Saving Money For Our Customers

The UA Welder Certification Program not only saves our customers a lot of money, it also makes our contractors competitive in the process. Testing a single pipe welder can cost more than \$1,000. On big industrial projects, this can ultimately amount to hundreds of thousands of dollars. Costs also go up when not all welders pass the test and have to be re-tested. Hiring UA certified welders is the best assurance that the job will be done with fewer mistakes meaning fewer repairs, and that's money in the bank.

Upon certification, welders become part of a national database that is available electronically to any user or union contractor in North America, making it simple to access any one of our trained experts.



Medical Gas Piping



A Strict Code of Quality

Medical gas piping is much more than just a working system. It's a patient's lifeline. Proper installation and operation of these systems – whether during construction or renovation – is critical. That's why the United Association ensures that they work properly every time. No exceptions.

Medical gas piping certifications for UA craftsmen are implemented according to the requirements of the American National Standard for Health Care Facilities (ANSI-NFPA 99), a standard that ensures that craftsmen follow closely a strict code of quality when installing these systems – and a standard that many competing installers don't follow. If mistakes are made when installing these systems, the results can be disastrous.

Medical gas piping systems are not just in operating rooms. They are found in a wide variety of healthcare facilities, including hospitals, doctors' and dentists' offices, outpatient clinics, nursing homes and more. These systems deliver medical air, nitrous oxide for anesthesia and pure oxygen to patients. They also provide air to operate surgical power tools and remove excess blood and organic debris by vacuum.

Every day, millions of our citizens depend on the proper operation of these vital systems. We have experience installing these systems in hospitals, doctors' offices and many other healthcare facilities in communities throughout North America. Our employers depend on us to install medical gas systems safely, correctly and efficiently.

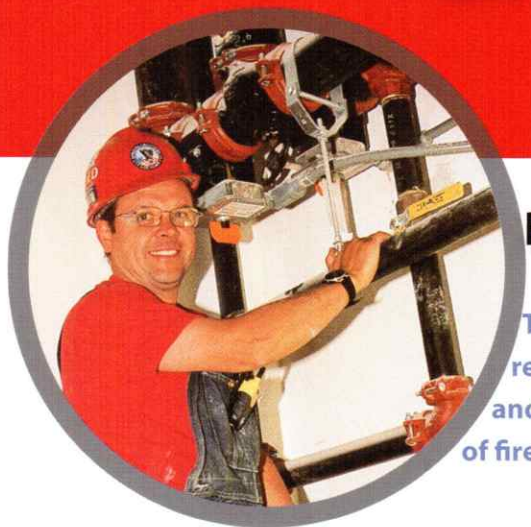
Ask For The Best

Hospital administrators require certification! With a certified United Association installer, our customers are always assured that installation is done in compliance with code.

Proper installation, it is critical to insist on the very best.



UA Sprinklerfitting



Protecting What's Important

The Sprinklerfitters of the United Association are responsible for protecting businesses, schools, homes, and, more importantly, precious lives, from the devastation of fire. It's no wonder we take our jobs so seriously.

The Benefit of Sprinklerfitting

Statistics show that buildings with a proper fire protection system will save lives and result in twenty-four percent less damage over an unsprinklered property.

According to the National Fire Protection Association, from 1983 to 1987, damage from hotel fires was seventy-eight percent less in buildings with sprinkler systems than those without. What's more, the water damage from automatic sprinkler systems is considerably less than from a fire department's hose stream because sprinkler systems require a minimal amount of water to operate. Oftentimes, a fire is brought under control by only three sprinkler heads, sometimes even fewer.

Cutting corners by not installing a reliable automatic sprinkler system can lead to immeasurable damage.

Expanding Our Skills

With so much riding on our skills, it is critical that our journeymen receive the best training available. In addition to a rigorous apprenticeship program, many UA Sprinklerfitters choose to expand their skills by voluntarily participating in advanced training programs. Some even go on to become instructors through the United Association's Instructor Training Program.

The members of the UA Sprinklerfitting local unions across the United States and Canada are committed to providing quality installation, service and repair to the piping and fixtures used in sprinkler systems. They know that when human lives are at stake, there is no room for error. That's why United Association Sprinklerfitters do the job right, the first time, every time.

The members of the UA Sprinklerfitting local unions across the United States and Canada are committed to providing quality installation, service and repair to the piping and fixtures used in sprinkler systems.



UA Backflow Prevention



Providing Clean Water For All

One of the top priorities of the United Association of Plumbers, Pipefitters and Sprinklerfitters is to ensure that our drinking water is clean, pure and safe.

In fact, our slogan is "The Plumber Protects the Health of the Nation".

Protecting Our Water

Throughout the 20th century – and into this century – the UA has embodied a key role in protecting our drinking water supplies. Through the construction and maintenance of water treatment plants, the UA has helped to ensure a steady flow of pure water into our homes, offices, schools and factories. Through our skills in the installation of backflow prevention systems and proper cross-connection controls, the UA has made sure that the water delivered to us stays clean and pure.

It is essential to our good health that no contaminants are allowed to cross over into our drinking water systems. In today's complex facilities, drinking water often supplies all kind of systems that are not healthy for us to consume, thus, there is always the risk of improper connections. The training that UA members receive in the proper installation of backflow prevention equipment assures us that these systems will be connected in such a manner that the integrity of the drinking water is safe.

Keeping Skills Sharp

UA members who have certification in the installation, maintenance and repair of backflow prevention systems achieve this certification through third-party monitoring by the American Society of Sanitary Engineering.

The UA understands that mistakes can be life threatening, and we are determined to do the job right, the first time, every time.

Throughout the 20th century – and into this century – the UA has embodied a key role in protecting our drinking water supplies.



UA Service and Maintenance



Keeping Systems Clean and Safe

Virtually every building in which we live, work and play contains mechanical systems that must be maintained to the highest levels of safety and efficiency.

At the United Association of Plumbers, Pipefitters and Spinklerfitters, our goal is to keep these systems in tip-top shape.

Keeping Systems Safe

UA members, working for employers who are part of the Mechanical Service Contractors of America, have the skills, experience and dedication it takes to fix any problem that arises in these facilities. We are also able to prevent mishaps and breakdowns, through regular, scheduled maintenance on heating, air conditioning, ventilating equipment, plumbing, and refrigeration. In short, we can maintain just about any mechanical system in use today.

Highly Specialized Skills

UA members are also trained to work on the unique systems found in highly specialized facilities, such as clean rooms, pharmaceutical, food processing, precision manufacturing facilities and virtually every other building or factory where complex systems must be maintained to the highest tolerances possible.

Our members are able to operate computer equipment from remote locations in order to deal with problems or special demands that occur in a facility during times when they are not physically on-site.

World-Class Training

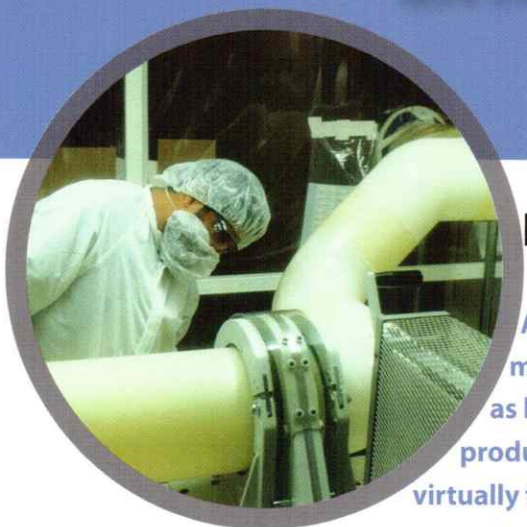
Through our comprehensive training programs, we posses the skills and expertise necessary to meet the strict environmental regulations which govern our industry.

Our apprentices must complete a rigorous five-year program which includes both classroom and jobsite instruction. Once they reach journeyman status, our members continue to expand their skills, attaining certification in such areas as refrigerant handling, backflow prevention, valve repair and welding. These certifications meet or exceed all the standards of the industry, and are monitored and validated by independent third parties.

Through our comprehensive training programs, the UA produces journeymen who possess all the skills and expertise necessary to meet the strict environmental regulations which govern our industry today.



UA High-Purity Piping



High Tech-Highly Skilled

A clean room is a place within semiconductor plants and manufacturing facilities where the atmosphere is as pure and clean as humans can make it. The computer chips and related equipment produced in these facilities must be made under conditions that are virtually free of even the smallest, microscopic contaminants.

Members of the United Association of Plumbers, Pipefitters and Sprinklerfitters have been using their skills in the installation of clean room facilities for many years. These skills are in great demand as our economy becomes more focused on industries that require a variety of high-tech systems. This includes much more than just the semiconductor and computer chip sector. Facilities that demand absolute purity in their mechanical systems include pharmaceutical, food processing, equipment for the military, manufacturing facilities, televisions, radios, other electronics and much more.

Purely Skilled

The level of purity in these facilities is staggering; it's far greater than the cleanest surgical suite found in any hospital. The skills it takes to reach this degree of purity are enormous, yet thousands of UA members have already attained this level of expertise to stay on top of the industry worldwide.

World-Class Training

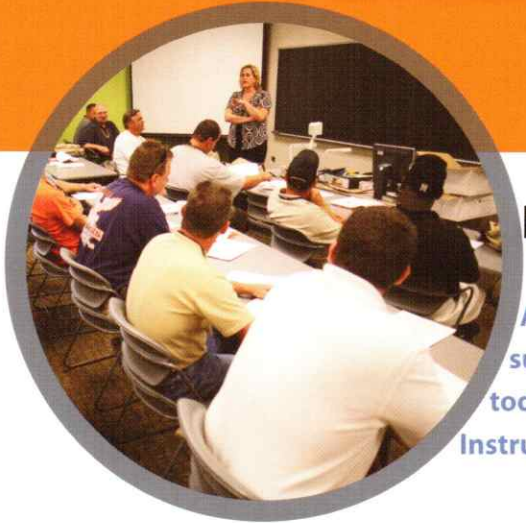
UA members complete a demanding and comprehensive five-year training program. These members continue to learn and expand their skills as the industry develops new processes. Through the development of a specialized training program leading to certification in the installation of high purity systems, our members can assure their employers that they are getting the very best tradesmen available in the industry. This segment of our industry continues to grow rapidly. The UA has pledged to meet the most stringent standards of excellence in the installation of these systems.

United Association skilled and qualified manpower enable our employers to stay on top of the industry worldwide. The UA remains committed to doing the job right the first time, even in an industry that is rapidly transforming.

The skills it takes to reach this degree of purity are enormous, yet thousands of UA members have already attained this level of expertise.



The UA Instructor Training Program



Ensuring A Successful Future

At the United Association, we believe that the success of our future depends upon what we do today. That's why we developed our aggressive Instructor Training Program.

With this program, apprentices and journeymen are taught by certified UA instructors. Only after completing a comprehensive and demanding program developed by the United Association is an instructor certified through Washtenaw College in Ann Arbor, Michigan. Over a period of five years, instructors obtain the coveted title of "Certified Instructor of the United Association."

Specialized System

The UA operates training centers across North America that are designed to supplement the local unions training programs. Specialized courses for certifications in various areas within our craft are held in these training centers. We also provide courses to instructors who want to obtain certification or who want to expand their knowledge into new areas. These state-of-the-art facilities enhance our existing programs throughout the U.S. and Canada.

Each training program is designed to give our craftsmen the skills and abilities they need to complete every project successfully. Contractors and owners can rely on UA trained craftsmen because they know that with the United Association we are continually striving to do it right, the first time, every time.

The College Degree Program

All UA members are eligible to earn college degrees as part of their training. Members can choose from a wide variety of degrees to complete, ranging from an Associates degree to a Bachelor of Science degree. Each degree is conferred by a nationally accredited and recognized community college or a four-year university.

Only after completing a comprehensive and demanding program developed by the United Association is an instructor certified through Washtenaw College in Ann Arbor, Michigan.



UA Valve Repair



Efficient Operations

In today's competitive environment, all industrial facilities must operate efficiently and productively while keeping up with environmental and safety regulations.

A company's money can literally be going down the drain as a result of leaking valves. Such leaks can also be releasing pollutants into the atmosphere that, under today's tough environmental regulations, can result in large fines and even jail terms.

The UA Valve Repair and Maintenance Program

Our Valve Repair and Maintenance Program is the answer to this growing problem. This program is an intensive course of study that includes both classroom and hands-on instruction using the latest test materials, equipment and valves. Instructing the proper techniques of disassembly, inspection and repair for different types of valves is our goal. The high standards of our programs are uniform throughout the United States and Canada.

Specialized Procedures

The UA also offers a pressure relief valve course that includes troubleshooting, repair, lapping and calibration. This part of the valve repair program covers the National Boiler Board Inspection Code required for pressure relief valves.

Motor Operated Valves Actuator Maintenance is also a course that covers the removal, disassembly, inspection, repair, re-assembly and installation of all kinds of actuators.

Training On-The-Go

The UA's Valve Repair Program includes two mobile training facilities, so the program can be brought to any corner of the U.S. or Canada. These fully equipped trailers enable us to bring the UA Valve Repair Program to even the remotest location.

Saving Our Customers Money

Our craftsmen are highly skilled mechanics. UA valve repair training comes at no cost to the facility owner. Moreover, using local tradesmen eliminates the cost of per diem for out-of-state workers, an expense that is normally passed directly on to the owner or user. For a contractor or plant owner, choosing valve repair journeymen from the United Association is a guarantee that the job will be done right, the first time, every time.

This program is an intensive course of study that includes both classroom and hands-on instruction using the latest test materials, equipment and valves.



National Substance Abuse Testing and Treatment Program



The United Association and the Mechanical Contractors Association of America (MCAA) have jointly developed a National Substance Abuse Testing and Treatment Program in support of the UA Standard for Excellence. The goal of the Program is to provide a pre-qualified, drug-free workforce to contractors and their customers.

The Program allows members with a current eligibility status to move from one contractor to another and from one customer to another without requiring another drug test. The objective of the Program is to maximize job site safety, eliminate duplicate testing, generate significant time and cost savings for the benefit of unions, members, contractors, and their customers. This is accomplished by denying job site presence to individuals whose abilities are impaired by drugs or alcohol or who have otherwise violated the Program.

The administration of the Program is provided by Construction Data Services, an independent Third Party Administrator, to prevent any conflict of interest and to ensure that the integrity and confidentiality of the Program is preserved. Construction Data Services is an international substance abuse testing, safety and medical management company who administers substance abuse testing programs throughout United States and Canada.

Toxicological services are provided by Quest Diagnostics, the largest and most experienced Substance Abuse and Mental Health Services Administration (SAMHSA) certified laboratory in America, thereby assuring that drug screening services are confidential and in full compliance with prevailing standards and laws allowing for negative results to be reported to employers the day after the individual provides a test.

The Program, along with the Employee Assistance Program is intended to:

- Help produce a safe, drug and alcohol free work place for all employees;
- Educate employers and employees on the signs, symptoms and consequences of substance abuse;
- Improve work place safety and reduce substance abuse-related injuries and property damage;
- Reduce absenteeism and tardiness;
- Refer employees with substance abuse problems to appropriate care and assistance;
- Deter individuals from bringing, possessing, using, distributing or having in their systems alcohol or other drugs on work time or premises;
- Improve productivity and service quality for our customers.

The types of testing conducted under the Program include implementation, pre-employment, pre-access, random, post accident, reasonable suspicion, periodic, return to work, and probationary status / follow-up testing.



www.mcaa.org



www.ua.org



www.cdsonsite.com

