



CerarMix Applicator Specialist Course Description

Wanted: Industrial Coating Applicator Specialist (CAS) “Entry Level”

ACTS CerarMix Solutions International (ACTS CSI) is currently offering immediate entry level training for individuals interested in working in the industrial coatings industry and earning livable wages that lead to wage progression.

The CerarMix Applicator Specialist (CAS) training program is designed to assist men and women, including those non-traditionally employed in the coating trade, to gain the skills needed to become successful installers for the industrial coating trade. Participants learn trade skills, which are relevant to the work-site of various trade occupations.

Topics include trade terminology, industrial safety and trades math. Trainees also learn forklift operation, and road flagging. Emphasis is on learning skills and adopting positive attitudes that lead to becoming a productive member of any work-site team or organization.

Subjects and activities that focus on building habits for success include personal learning styles, time management, understanding non-verbal communication, initiative taking, group-team communication, line/staff/team organization, etc.

Basic aptitude requirements for this position:

- Can read, write and comprehend in common “English.”
- Can function and interact well within a “team” structure with a positive attitude
- Has an express interest in and can understand basic mechanical devices “working with objects such as ladders, ropes, pulley systems, scaffolding, small engines, pumps and hand tools.”
- Can function while wearing personal protective clothing such as “suits, gloves, hard hat, goggles, breathing respirators and harnesses.
- Has a general sense of self preservation and the safety of others.
- Willing to study in a classroom and clinical setting and pass a written test.

Basic Qualifications for Employment:

- Must provide proof of citizenship and is authorized to be employed in the United States.
- Must have a valid Social Security Card.
- Pass a criminal background check.
- Pass a “Drug Free Work Place” screening.
- Willing to travel regionally or nationally, staying in hotels/motels.

Compensation:

- At minimum, US Department of Labor Prevailing Wage or higher based on experience and previous employment history.
- Fringe benefits.
- Per-Diem when traveling.
- Healthcare benefits package.
- Overtime .
- Retirement package.
- Government and industry accredited training and certifications.

CerarMix Applicator Specialist (CAS) Training

The CerarMix Applicator Specialist (CAS) training covers the “Core Body of Knowledge” requirements for substrate surface preparation and CerarMix application using patented CerarSpray equipment, as well as OSHA health and safety regulations relating to various coating operations in a variety of industries.

CerarMix Applicator Specialists (CAS) apply CerarMix coating formulated for industrial/commercial structures and infrastructure to prevent deterioration, reduce material repair, replacement and maintenance, and labor costs. CerarMix coating is ideal for steel bridge applications to fight corrosion, or pre-coated and lined pipe, facility interior and exteriors, high value asset protection such as storage tanks, heavy equipment, municipal infrastructure, structural steel, and marine vessels.

ACTS CSI has designed a comprehensive CerarMix Applicator Specialist training and certification program. The 3-level curriculum, scheduled over four (4) consecutive weeks, consists of 1) e-learning, 2) classroom and workshop, and 3) field apprenticeship components.

E-learning: Trainees gain basic knowledge of CerarMix technologies, and the industries served via the Internet using a Personal Computer. Independent study is segmented into three two-hour sessions that can be completed at the individual's own pace over a 3 day consecutive period in the comfort of their own living space. Includes online quizzes and a final exam. A passing ratio of 70% on the final exam is required to advance to classroom and workshop training.

Online education includes:

1. Science of CerarMix
2. CerarMix Coatings
3. Panelized Building Systems
4. Transportable Structures
5. Pre-coated Pipe
6. Composite Products

Classroom and Workshop Training: Training sessions are comprised of lecture, written exercises, large and small group discussions, PowerPoint, and hands-on workshops that reinforce the learning experience. During this session, trainees learn techniques needed to effectively prepare CerarMix formulas, apply CerarMix structural coatings on a variety of substrates such as wood, metal, concrete, pipe, and more, and are introduced to OSHA regulations on health and safety, safe work practices, and safe and proper use of tools and CerarSpray equipment. Upon completion of classroom and workshop training, trainees will have gained a new set of skills for CerarMix structural coatings that are directly connected to services provided by ACTS CSI. Includes quizzes, the CAS I final exam, and CerarSpray equipment operations, diagnostics, and servicing validation. A passing ratio of 70% on the final exams and validations is required to advance to field apprenticeship.

20 Hours - Instructor-led classroom sessions cover topics such as:

1. Health & Safety
2. Abrasive Materials
3. Corrosion Protection
4. Fire & Heat Control
5. Surface Preparation
6. CerarMix Formulations & Applications
7. CerarSpray Equipment Maintenance and Repair
8. Quality Control

35 Hours - Interactive Workshop Training will provide visual and hands-on reinforcement designed to teach trainees the practical application of CerarMix technologies, basic diagnostics and distribution systems including:

1. Safety Protocols
2. Substrate Assessments/Documentation
3. Substrate Surface Preparation
4. Math Calculations & Conversions
5. CerarMix Formula Preparation
6. CerarSpray Equipment Breakdown
7. CerarSpray Application
8. Documentation
9. Quality Control

Field Apprenticeship: Offers trainees the opportunity to perform essential skills and perfect techniques in a real-world setting as a Field Apprentice. Opportunities to demonstrate mechanical ability, problem-solving skills and the ability to work collaboratively with a team. On-the-job training provides job-specific technical knowledge and practical experience necessary to succeed in industrial coatings operations. 2 week paid Apprenticeship. Weekly hours and rate compensation TBD based on job assignment and location.

Learning Outcomes

Level 1 graduates have the ability to achieve 6 Certificates of Completion in the following career subjects:

- CerarMix Application Specialist Level I (after passing CAS I exam).
- Industry Safety (OSHA compliant);
- First Aid/CPR (OSHA compliant);
- Scaffolding;
- Flagging (State Certification);
- Forklift (National Certification)

By the end of the CerarMix Applicator Specialist Training Program trainees should be able to:

1. Possess life skills such as punctuality, perseverance, positive attitude, and work ethic that will assure job success on a industrial coating site.
2. Possess skills specific to each segment of the industrial coatings training program and may include practice with hand tools, power tools, doing math problems, tool and material identification, among others.
3. Possess the necessary skills to pass the OSHA Safety and Orientation Test prior to advancing to the Field Apprenticeship segments of the 4 week CAS I training program.
4. Possess the necessary skills and hours requirements to achieve certifications in the following: Forklift Operation, Flagger (traffic control), Scaffolding, Industrial First Aid and CPR, OSHA 10.

Training Modules Description

Preparation for various certifications and exams are offered as an integral part of the overall CerarMix Applicator Specialist training program including the following:

Health & Safety Module *

Industrial First Aid/CPR - 6 Hr : First-aid and CPR training is conducted using the conventional methods of training such as lecture, demonstration, practical exercise and examination (both written and practical). The goal of the training is to ensure that trainees understand the concepts of first aid and can demonstrate their ability to perform various first aid and life-saving procedures in compliance with OSHA First Aid Standard 29 CFR 1910.151

OSHA Safety Orientation - 10 Hr: The 10 hour training program is designed to provide trainees with a better understanding of construction safety in order to identify and prevent hazards at the construction site. The OSHA 10-hour Construction Training Course covers safety regulations as specified under OSHA 29 CFR 1926. Upon successful completion of this training, participants will receive an OSHA 10-Hour Construction Outreach DOL course completion card within 4-6 weeks. *Course completion cards do not have an expiration date.*

OSHA Fall Protection - 2 Hr: This training covers the *OSHA 29 CFR 1926 Subpart M Fall Protection (1926.500-503)* standard for construction workers. Every CAS trainee who might be exposed to fall hazards shall receive training on recognizing the hazards of falling, and the procedures to be followed in order to minimize these hazards.

Flagging Certification - 4 Hrs: Prepares trainees for the MDOT road flagging certification examination. Trainees learn how to establish and maintain a safe traffic flow in a construction zone and understand both hazardous and safe behaviors involved in a variety of flagger situations. Trainees review the materials that are needed to successfully pass the Mississippi flagger certification examination. A Certification card will be issued to those who pass the exam. *Repeat training and certification is required every 2 years.*

OSHA Forklift Operation and Certification - 4 Hrs: Trains individuals in the functions and parts of a forklift, OSHA forklift regulations, safety habits in forklift operation, and the proper picking, placing and moving of a variety of loads through the work site. Trainees will also take the test to become a certified forklift operator. *Forklift certification is generally good for 3 years and is valid in all 50 states, as well as Canada.*

OSHA Scaffolding Safety Training & Certification - 6 Hrs: This training targets individuals in the industrial coatings industry that must use or erect and dismantle different types of scaffolding. This training is intended as an overview of the Safety Standards for Scaffolds Used in the Construction Industry, providing explanations of the various requirements set by OSHA. The approach is to cover hazard identification, avoidance, and control, along with practical information on safe work practices. Successful completion provides trainee with a Construction Scaffolding Safety Training Certificate and wallet card. *Recommended retraining every 3 years.*

*Trainees who currently possess required OSHA compliant training in first-aid/CPR, safety orientation - 10 hr, forklift, flagging, scaffolding and fall protection may elect to continue their education and receive advanced certification identified in the "Specialists Modules" discussed on page 6 of this document.

Abrasive Materials

This training Module defines the mechanisms of abrasive processes and explains the major types of wear. Trainees will learn how CerarMix provides high performance abrasion resistance properties to improve the durability and production capabilities of high value assets in a variety of industrial and commercial applications. *A written exam, and hands-on skill assessment are given at the end of the module.*

Corrosion Protection, and Containment

This training Module will cover fundamental aspects of corrosion, corrosion control and its prevention. Trainees will explore the causes and mechanisms of corrosion and common methods of corrosion control. They will also gain an understanding of the economic, social, political and environmental impacts of corrosion. Trainees will learn how CerarMix provides effective corrosion control as an innovative and advanced corrosion prevention technology. *A written exam, and hands-on skill assessment are given at the end of the module.*

Fire and Heat Control

This training module discusses the crucial role that fire and heat control plays in establishing public and commercial safety along with the protection of high value assets in building and infrastructure. Trainees will gain insight into the differences between flame resistant, heat barrier, fire suppression, fire retardant, and fire resistant coatings. Trainees will learn about the insulating principles of CerarMix and its ability to lengthen the time that substrates can maintain their integrity under fire conditions. Additionally, trainees will be introduced to current market trends relating to fire suppression and protective coatings. *A written exam, and hands-on skill assessment are given at the end of the module.*

Substrate Surface Preparation

This module provides trainees with knowledge of CerarMix materials and techniques for surface preparation that prepares the trainee to perform basic surface inspections using non-destructive techniques and inspection instrumentation. Trainees will learn CerarMix surface preparation methods used to prepare steel and concrete for application of CerarMix coatings, removing surface defects and contaminants and proper use of surface preparation standards. Classroom instruction is comprised of lectures, discussions, group exercises and hands-on practical labs that teach the trainee how to perform basic inspection tests. *A written exam, practical exam, and inspection log book evaluation are given at the end of the module.*

CerarMix Formulations & Applications

The primary objective of this Module is to familiarize the trainee with CerarMix and the fundamental principles of the performance of CerarMix formulations. Trainees will discover the reasons and benefits for using CerarMix coatings, and its desirable material properties for various applications. Trainees will also learn about CerarMix formula components, their functions, and how they contribute to desired coating properties. The knowledge of basic concepts of CerarMix formulations, nanotechnology, the role of additives and catalysts, goes a long way in understanding and appreciating market segments, product differentiations, product attributes and performance, cost, application areas and troubleshooting. Effects of key formulation parameters on product attributes and cost will be discussed.

This Module will also cover CerarMix coating application methods, proper handling of CerarMix prior to application, the methods and techniques used to apply CerarMix, and identify possible coatings defects prior, during, and after application of CerarMix coatings. A lab session will include hands-on coating formulations, application and testing. The trainee will also receive an overview of the coatings market, technologies and trends. *A written exam, practical exam, and formula log book evaluation are given at the end of the module.*

CerarSpray Equipment Maintenance and Repair

Trainees will learn the importance of the CerarSpray equipment and the patented process involved in applying CerarMix formulas on any substrate. CerarSpray components will be identified and features and benefits will be discussed. Trainees will understand the procedures involved in the care, maintenance and repair of CerarSpray equipment. Trainees will learn about the causes of common equipment failures and recognize how equipment failures are investigated and remediated. Trainees will be able to identify hazards that are commonly encountered by CerarMix Coating Applicators and the equipment, methods, and procedures available to reduce these hazards to an acceptable level. *A written exam, and hands-on skill assessment are given at the end of the module.*

Quality Control

This training Module provides trainees with a complete understanding of quality assurance procedures, system failure analysis, and proprietary techniques used in CerarMix technologies. Trainees will gain insight into quality standards during various stages of CerarMix manufacturing processes that relate to pre-coated and lined pipe, CerarMix composite products, panelized building systems, storm shelters, transportable structures, and industrial structural coatings. *A written exam, and hands-on skill assessment are given at the end of the module.*

Specialist Modules

Abrasive Blast Cleaning: Prepares trainees involved in abrasive blasting activities on the procedures relating to blasting health and safety hazards, personal hygiene practices, safe work practices and the use of Personal Protective Equipment and respirators. *A written exam is given at the end of the module.*

Water Jetting: Prepares trainees involved in water jetting activities on the procedures relating to water jetting health and safety hazards, personal hygiene practices, safe work practices and the use of Personal Protective Equipment and respirators. *A written exam is given at the end of the module.*

OSHA Construction Training & Certification - 30 Hr: This training is a comprehensive occupational health and safety program designed for anyone involved in the construction industry. The program provides complete information on OSHA compliance issues. Upon successful completion of this training, participants will receive an OSHA 30-Hour Construction Outreach DOL course completion card within 4-6 weeks. *Course completion cards do not have an expiration date.*

OSHA Disaster Site Worker Training - 16 Hr: Enables the disaster site worker to recognize their responsibility to make decisions and choices that will positively affect their personal health and safety and that of others. Topics include characteristics of a disaster site, disaster site health hazards, disaster site safety hazards, recognition of Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) agents & symptoms, proper use of personal protective and respiratory protective equipment, and methods of decontamination. Upon successful completion of this training, participants will receive an OSHA Disaster Site Worker course completion card within 4-6 weeks. *Course completion cards do not have an expiration date.*

OSHA Confined Space - 8 Hr : This Confined Space Entry Training is based on the OSHA 1910.146 permit-required confined space standards for general industry. Objectives of this course are for the trainee to understand the scope & application of OSHA's various confined space entry standards and be able to identify "Confined Spaces", then determine if they are "Permit Required". The trainee will also learn the responsibilities of entrants, attendants, entry supervisors, contractors, and have a basic knowledge of the general use and limitations of related equipment, understand the requirements for "Rescue & Emergency Services, and more.

OSHA Maritime Industries - 10Hr: Provides instruction on a variety of shipyard safety and health standards to participants. This training is for individuals involved in ship repairing, ship building and ship breaking. This course focuses on hazard identification, avoidance, control, and prevention. Prepares trainees on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in the maritime industry. Upon successful completion of this training, participants will receive an OSHA Maritime Worker course completion card within 4-6 weeks. *OSHA course completion cards expire in 5 years.*

**For more information on CerarMix Applicator Specialist Training,
please email inquiries to: info@actscsi.com**