



High-Strength Industrial Coatings and Secondary Fuel Containment Solutions



Start with the EssentialSM



Basic Concepts (BCI) is part of Justrite Safety GroupTM

For more than a century, Justrite has kept workers safe. We're trusted experts dedicated to protecting where the world works, ensuring every customer achieves compliance to regulations, and follows best practices for a safe and productive workplace.

Justrite Safety Group is a growing family of leading industrial safety companies. We are united by deep safety knowledge, long experience, and a commitment to protecting people, property and the planet.

Expert



HIGH-STRENGTH COATING PRODUCTS FOR ALL YOUR CONTAINMENT AND COATING NEEDS!

Withstands temperature fluctuations and surface movement. **Resistant to harsh environments.** Suitable for applications where high temperatures are part of standard operations.

- 300%+ elongation
- Tack free in seconds
- 100% solids VOC free
- Applied from 40-1000 MILS
- 20+ year life expectancy
- Fuel 6 chemical resistant
- NSF 6 regulator approved
- Excellent Shore D hardness
- Tensile strength 3500-5500 psi
- Structurally inert to high UV exposure
- Application temperature -40F to 300F+
- Abrasion and corrosion resistant



JFK airport jet fuel tank farm concrete containment coating

About Us

Basic Concepts Inc. specializes in fuel storage containment coatings systems within the petroleum storage fuel terminal industry, railroad industry, and wastewater/water industry. For more than 30 years, customers have trusted our expertise to provide customized solutions to meet their environmental compliance issues.

Acquired by the Justrite Safety Group, BCI combines its market leading, patented spray technology with versatile containment options and water filtration systems. Our proven expertise in secondary containment and coatings allows us to offer an expansive portfolio of products and services from a single-source, ensuring the best possible solution tailored to your application, while complying with applicable environmental regulations. See back cover for more information.



Let our expertise become your peace of mind.

Environmentally Compliant Products and BCI-Certified Services Available Worldwide.

- Secondary containment coatings and systems
- GC-2100 tank farm liner systems
- Storage tank roof coating system
- Truck loading rack containments
- Dock & rail car containment systems
- Geodesic dome seal/leak repair
- Block wall containment system
- Reservoir lining and waterproofing (installations & repairs) PolySeam® liner system
- Internal & external pipeline coatings and repair
- Manhole rehabilitation & repair
- Pipe line repair
- T.R.A.P.S. - overflow protection system and leak detection
- Clarifiers, holding tanks (internal & external)
- Concrete basin containment
- Storm water management and spill products
- Silo rehabilitation
- Site dismantling



Rail pan containment systems



Concrete containment



Truck loading rack

Proud members of and approved by:



e-railsafe



More Than 30 Years of Proven Environmental Protection

Our spray-applied structural coating systems are some of the strongest in the industry. Backed by over 30 years of experience, our projects provide environmental protection and meet regulatory requirements for our customers throughout the United States, including the U.S. military, USDA, airports, and petroleum industry and power companies.

We specialize in coating fuel storage containment areas and deliver impervious fuel storage containment systems throughout industry. Our coatings bond to most substrates including overlay for earthen/soil, steel, concrete, asphalt and several other substrates. Use our system to repair existing traditional liners including HDPE, XR-5, and many others.

High-Temperature Coatings

“BCI’s coating has been installed for over a year and has performed as advertised. Unit 1 has seen a 180,000 MWh reduction in opacity derivations from 2011 to 2012 due in great part from this coating work which equates to 5.1 million dollars in revenue.”

Arthur Bosshart
Tampa Electric Engineer



Precipitator coating



Diesel fuel containment



Fuel containment area

Basic Concepts, Inc. specializes in high tensile strength structural coating applications. With more than 30 years of experience in the fuel containment market, we offer a solution for all your containment needs. We've completed countless customized secondary fuel containment projects using a wide variety of materials, including fast-set spray applied products. We remain committed to help solve your environmental compliance issues.



Petroleum Storage & Refining Industry

As a leader in the coatings and secondary containment market, we provide exclusive, innovative options to meet your fuel containment requirements. Our patented containment system (T.R.A.P.S.) and patented liner seaming system (PolySeam®) provide cost effective methods to meet fuel containment regulations. Through the use of several coating options, we can restore your secondary containment system(s) to meet applicable regulations in the petroleum storage and refining industry.



Chemical, Pulp/Paper & Specialty Plants

A wide range of chemical resistant products meet specialty chemical needs and requirements. Regardless of your containment needs, whether over concrete, steel or many other substrates, we offer a solution for aggressive chemical environments. Both full immersion and secondary containment products available.



Railroad Industry

Serving the railroad industry for over 15 years, we provide services that range from manufacturing, to installation for rail car containment systems, diesel fuel containment coatings, oil water separator rehabilitations and internal tank coatings. We design systems to meet our client's specific containment requirements.



Water/Wastewater Industry

Meeting the needs of the water/wastewater industry is our priority. We supply cost effective solutions to concrete degradation, restoration, corrosion prevention, waterproofing, and rehabilitation of manholes and holding pond liners. Use our coating systems to restore and maintain sand filters, clarifying tanks, holding tanks and many other steel, concrete or operational equipment.



Power Plant Industry

A variety of coating and liner options are available for the power industry. Utilizing high temperature, fast-set structural coatings, epoxies and synthetic liners, we help meet your secondary fuel containment, pond liners, waterproofing and pipeline repair needs. We increase the life expectancy of key operating equipment such as precipitators, pumps and more.

■ New and Existing Rail Pan Containment Coatings

- Repair in Place or remove and coat entire pan for longer operational life
- Hydrocarbon and chemical coatings available
- Repair: Steel, Fiberglass, Concrete, cracks, and expansion joints
- Fills or bridge: cracks, voids, oles, rusted spots
- Versatile installation with capabilities to bond rail pan containment to the track base to provide full containment (No overspill with larger release)



Fully sealed to base of rail



Proud members of and approved by:



■ Internal and External Tank Containment Coatings

- Chemical and potable water systems available
- Capabilities range from sulfuric acid to leachate water and fuels
- Potable water approved (NSF 61)



■ Fuel & Truck Loading Racks

- Used to seal and restore aging truck loading racks
- Withstands daily traffic of 80,000-lb tankers - saves on costly concrete recapping
- Protects against incidental drips and spills while fueling
- Anti-skid option for increased slip resistance
- Can be used to seal large expansion joints and cracks
- 300% elongation with a 3900 PSI tensile strength
- High abrasion resistant
- Inert to freeze/thaw in northern climate zones



■ Coating Solutions for the Wastewater and Water Industry

Successfully tested by an ANSI nationally accredited lab, potable water elastomers extend the service life of water management infrastructure and help preserve a precious natural resource.

- Resistant to harsh out gassing
- Prevents and corrects inflow and infiltration (I&I) issues
- UV-resistant
- High temperature resistant
- Potable water approved (NSF61)



Spray technology repairs cracks and leaks.

▶ Structural issues prior to coating.



UV and corrosion resistant high-strength coating for tanks.

■ Containment Leak and Crack Repair

Tradition crack repair with caulking and flexible sealants cannot always handle concrete movement and large temperature fluctuations. SC-3900 seals and bridges hairline cracks and large moving joints to properly seal the area and provide long lasting protection.

- Bridges large gaps
- Stops active leaks
- Provides high-strength
- Offers superior elongation
- Stops deterioration
- Stops freeze thaw



■ Tank and Geodesic Dome Roof Repair

Geodesic dome repair involves replacing panels, seals, and applying various forms of tape to help seal gaps. BCI's SC3900 flexible coating system is the alternative. Quick, stronger than any tape on the market, and can be used on a variety of substrates including aluminum, steel and concrete. It can even be applied while the tank is in service, therefore eliminating down time for the asset owner.

- Repair and seal leaks
- Bridges gaps between panels caused by daily thermal expansions and contractions
- UV-, abrasion-, and corrosion-resistant
- Can be applied while tank is in service - no down time!
- Can be applied to aluminum, steel, and concrete
- Permanently seals Geodome panel gaskets, eliminating possible replacement needs



■ Pipeline Repair

Designed for repairing high-pressure transmission pipelines. Repairs straight pipe, elbows, tees, reducers, risers, high temperature, underwater and offshore platform pipelines. BCI-approved product lines have been used around the world and in applications ranging from petroleum pipelines, to foundations for gas



SC-3900 Containment Wall System

Industrial strength coating SC-3900 complies with NSF/ANSI Standard 61 Section 5 2011, is approved for secondary containment by the Florida Department of Environmental Protection Agency, and meets environmental compliance regulations nationwide.

Suitable for all industrial environments, with a 20-plus year life expectancy:

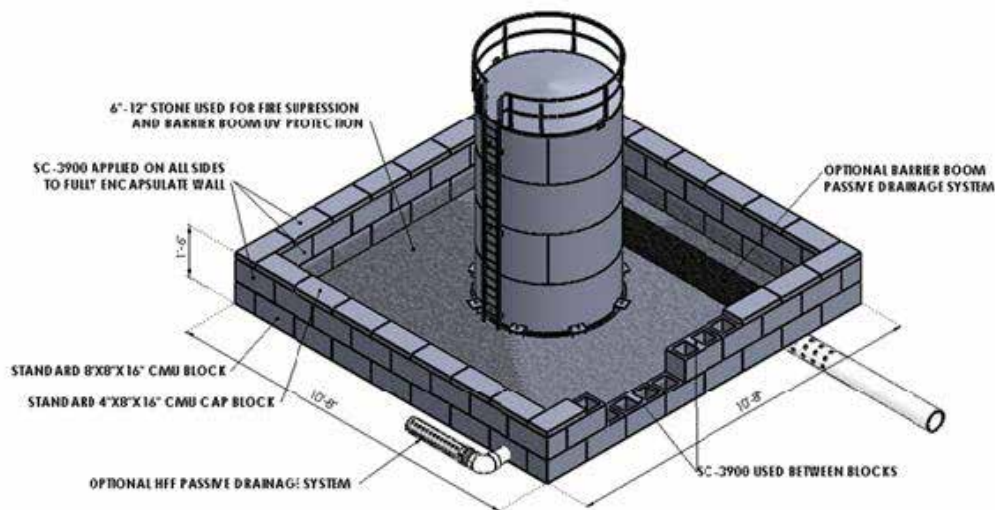
- Restores structural integrity
- 3700- to 5500 psi tensile strength
- UV-resistant
- Abrasion and corrosion resistant
- Low-temperature application
- High-temperature resistant
- No VOCs

Applications:

- Substation Containment Systems
- Fuel Tank Containment
- Fuel Retention Walls
- Storm Water Barrier Walls
- Drum Storage Areas

Advantages of Containment Walls:

- PE-stamped and approved
- Flexible design around equipment and supports
- Directly built over earthen substrates
- Long life expectancy
- Meets secondary fuel containment requirements
- Quick install timeline – (50-75% faster installations)
- Engineered design available for unique/nonconforming applications
- Passive storm water control with oil leak protection



CR-3000 Chemical Resistant Coatings

With our systems, tanks and equipment can be returned to service within hours, not days. Our spray applied elastomer system is comparable to many epoxy systems. With faster set times, and outstanding adhesion (primer not necessary), our products offer an operational advantage and cost saving approach to rehabilitating your equipment and structures.

Chemical resistance includes:

- Ethanol
- Methanol
- Gasoline
- Hydrochloric acid
- Jet fuel
- Phosphoric acid
- Sodium hydroxide
- Sulfuric acid

Applications:

- Steel and concrete internal tank coatings
- Primary containment for interior tank linings.
- High splash or spill areas with direct chemical contact.
- Water Treatment chemical processing.
- High concentration chlorine contact chambers.
- Lechate runoff tanks.

Advantages of Resistant Coatings:

- Elongation allows movement with the substrate
- 3000 PSI very strong and adds strength to substrate
- Quick back to service
- High abrasion resistant
- Apply in thicknesses of 60-1000 mils
- Bridge cracks and voids



Holes in tank were repaired using our structural coating system.

GC-2100 Liner System

The liner system consists of pre-fabricated panels designed in varying lengths and thicknesses to meet any dimensional and product resistance needs. During the installation process, these panels are attached together using SC-3900. This attachment method results in a thicker liner-to-liner interface of approximately 40 percent, creating a strong, seamless liner system when complete.

- Geotextile material coated with an impermeable layer of proprietary modified spray elastomer
- State-of-the-art, automated application process ensures a consistent layer of durable protection
- Engineered and tested to resist tearing, puncturing and most chemicals
- Customize size, color and thickness to fit any application

Applications:

- Earth and Berm containments
- Petrolatum tank farms
- Old asphalt containments
- Water treatment holding ponds
- Wastewater runoff basins
- Mining holding ponds

Advantages of Liner Systems:

- Lasts longer than HDPE to provide industry-leading environmental protection from spills
- Lays flat for easy installation
- Durable under heavy truck traffic
- Maintenance-free and easily cleaned to reused on multiple sites
- Highest customer satisfaction due to design flexibility and fast turnaround on custom orders



Exclusive PolySeam® liner attachment system offers a faster, cost-effective alternative to traditional batten bar attachment.

When used in conjunction with our XR-5 or HDPE Containment Liners, the patented PolySeam system replaces the maintenance and repairs needed to maintain integrity of the batten bar method of attachment—for a virtually maintenance-free system! Installs faster and is more durable, saving thousands of dollars in installation costs, and it installs in the most extreme conditions.

■ PolySeam® Liner Attachment System *Patent No. 8,361,261 B2*

System Highlights:

- Delivered to your site and then cut to desired length for seaming application.
- Sections are then seamed into place using traditional welding methods.
- Attachments are then made from HDPE or XR-5 to tank ring walls, wall, pipe supports or any other penetration.
- Once XR-5/HDPE transition strip is in place, existing liner system is attached using our spray applied coating system to the containment penetrations.
- Note: All bonding surfaces will need to be cleaned, potentially blasted and primed prior to application.



Double-bottom tank sealed with PolySeam® prevents water from going under the tank, no corrosion.

Once considered difficult penetrations to encapsulate are now easily ENCAPSULATED with the PolySeam® System.

Steel, concrete, round or square supports can be transitioned with NO problem!



Pump pad application



Concrete application



Pipe support application



Steel sheeting application

T.R.A.P.S. for existing and new tanks approved by the Florida Department of Environmental Protection Agency requiring overfill protection system

Exclusive Total Release Annular Protection System (T.R.A.P.S.) ensures containment area will hold the desired amount or greater to meet FDEPA requirements of five minutes maximum pumping capacity. The system includes continuous monitoring of a containment area for hydrocarbons, notification to personnel should a hydrocarbon be detected, and valve closure to activate at desired rate with instantaneous closing of containment valve.

■ T.R.A.P.S. (Total Release Annular Protection System) *Patent No. 7874764*

System Highlights:

- Continuous monitoring for hydrocarbon detection, if detected system will notify terminal personnel immediately with both visual and audio alerts. Valve closure will start at desired rate with closing of containment valve.
- Flexible, custom design options (including email, cell phone or other desired means for notification). Various interfaces compatible with most PLC's.
- Durable containment system, impervious coating. No VOCs, rapid cure times.
- High design flexibility, can be modified to fit almost any layout or tank configuration.
- Install around existing tanks with or without existing ring walls. Successfully installed in conjunction with new double bottom installations and around existing tanks with tight piping areas, or any custom requirement needed.
- Applied over a variety of substrates including soil, asphalt, concrete, steel, and others.



Control panel can network/monitor up to 128 independent sensor circuits simultaneously. Standard interface modes. Monitors both high & high-high level alarms.



Hydrocarbon sensor located at containment discharge low point. Detects most common light fuels in 3 seconds with 1-mm film.



Concrete application



Earthen application

Heavy-duty XR-5 and cost effective high-density polyethylene (HDPE) liners solve containment issues with greater durability and longer-life protection than batten bar

XR-5 Quick Overview:

- Excellent stability, with low thermal expansion-contraction properties
- High-strength, chemical-resistant grade for maximum protection to high temperatures and a broad range of chemicals including acids, oils and methane
- Formulated for long-term outdoor exposure to UV rays
- Florida Department of Environmental Protection Agency approved for secondary containment

■ Tank Farm Liner Systems

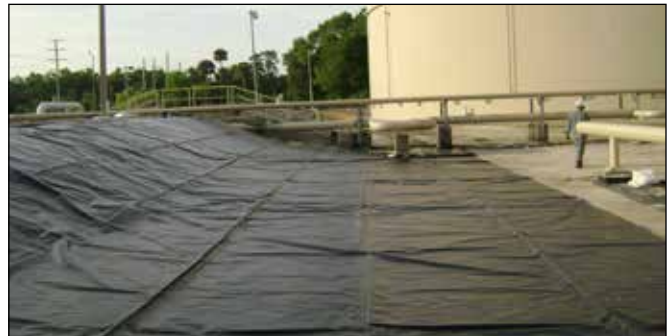
XR-5 liner material is well-suited for large installations, i.e. covering approximately 215,000 square feet, such as a tank farm with 2 tanks holding 3-million gallons of diesel fuel.



Approximately one foot of dirt was removed and elevation was established for storm water drainage.



HDPE shown with PolySeam®



Containment area is utilized for the secondary containment of approximately 3-million gallons of diesel fuel.

■ Reservoir Lining and Waterproofing Installations & Repairs



ENGINEERED ENVIRONMENTAL SOLUTIONS

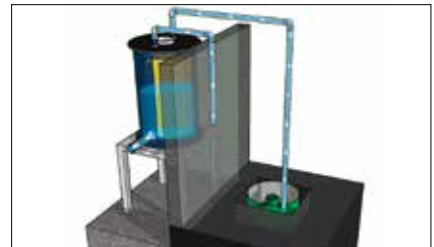
LET OUR EXPERTISE BECOME YOUR PEACE OF MIND.

Committed to safety in all aspects, Basic Concepts strives to be a leading collaborator of engineered safety solutions to help solve industrial and environmental risks. From start to finish, we implement a consultative approach to ensure the creation of a custom product solution designed specifically for your objectives.



High-strength industrial coatings specialists backed by 30 years of expertise. Using patented spray technology, provides fuel containment solutions for the power, petroleum, and water/wastewater industries.

Industrial Coatings and Secondary Fuel Containment
 Call: 813-659-3512



Global leader in providing **hydrocarbon management products** and solutions for secondary containment, and utility vault and manhole maintenance. Installed over 10,000 electric substations since 2002.

Secondary Oil Containment and Filtration for Electric Utilities
 Call: 866-242-4368



World leader in **flexible, portable secondary spill containment**. Cutting-edge, patented Rigid-Lock technology offers fast deployment, one-piece construction, and drive-through capability. Serving the military and industrial markets for over 25 years.

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 Call: 800-285-4203