# INNOVATION TO MAKE IT FIRST, QUALITY TO MAKE IT LAST.



# **Viking**



# THE LEADER IN PRIMARY AND SECONDARY CONTAINMENT CORROSION RESISTANT LININGS **WORLDWIDE**



ISO 9001:2008 Certified

www.blairrubber.com



Blair Rubber Company is the only full service manufacturer in North America that has a complete line of corrosion resistant rubber linings. Since inception, Blair has consistently invested in research and development to improve existing products and bring new products to market.

Since 1981, Blair's staff has been dedicated to manufacturing and improving one product - rubber linings. A focus from which evolved an unparalleled knowledge base of chemicals, applications, and the successful installation of rubber linings. Blair is always ready to help by offering Teamwork, Dedication, Quality, Experience and Support.

### **Blair International**

In the 1990's, Blair began exporting rubber linings to China and Israel. Since that time Blair Rubber Company has established a global presence earning a worldwide reputation for high quality, reliable linings and outstanding customer service. Blair has local representatives in China, Israel, Mexico, India, Saudi Arabia, Peru, Chile and Venezuela, among others, providing regional sales, support and applicator information. Blair's international staff, located in their U.S. headquarters, provides sales and support of the balance of the global market. For more information and regional contacts, please visit the Blair Rubber website at www.blairrubber.com.







Our manufacturing process involves complete traceability from the raw materials, to testing, to full inspection of every roll that is shipped. At Blair, we strive to provide all our customers with the most reliable product, recommending the right installers for your job, and providing you with a variety of linings to ensure proper transport, storage and corrosion protection against chemicals.

# **Blair Product Lines**

# **Primary Containment Linings**

### **Enduraflex™**

The Enduraflex<sup>™</sup> lining series features a comprehensive selection of resilient, protective rubber linings available in soft natural rubber, synthetic rubber, semi-hard linings, tri-bond<sup>™</sup> construction and chemical cure.

### Goodyear Plioweld™

Goodyear Plioweld<sup>™</sup> is available in soft natural, chlorobutyl, semi-hard, neoprene, and chemical cure linings.

### Crislip™

Crislip chlorobutyl rubber lining system is ideal for oxidizing solutions, such as bleach and locations that require ozone and oxidation resistance.

### Marflex™

The Marflex<sup>™</sup> lining system is available in soft natural, semi-hard, and chlorobutyl linings.

### **Endurabond™**

Extend the life of your rubber lining with Endurabond<sup>™</sup> cement system for excellent adhesion of linings to metal surfaces.

# **Secondary Containment Linings**

### **MARSEAL®**

*MARSEAL®* flexible sheet membranes combined with hot-air welded seam construction provide absolute security in secondary containment.



### www.blairrubber.com

# Contact Blair Before Your Applicator Lines It

Blair's rubber linings have successfully protected such equipment as FGD scrubber units, chemical processing and storage tanks, rail road tankcars, sewage disposal units, food processing tanks, flanged pipes and fittings, electroplating equipment, separators, fans and fan housings, fume ducts and hundreds of other applications. These resilient protective rubber linings can be applied to steel, aluminum, or practically any other metal.



### **Primary Containment Linings**

### Semi-Hard Rubber

Blair's **semi-hard** rubber tank linings offer excellent resistance to various chemical services. These linings include natural rubber, natural synthetic rubber blends and natural rubber-graphite



reinforced stocks. These compounds are formulated for services involving wet chlorine, strong acids at high operating temperatures, plating solutions and water conditioning equipment. All have a soft tie gum for maximum adhesion to steel.

# **Tri-Bond Rubber**

Blair's **Tri-bond** rubber linings are designed with a triple layer construction consisting of a soft/semi-hard/soft combination of rubber. Linings are specially compounded for steel pickling lines, halogen acid services, as well as many other solutions, and offer resistance to thermal shock, abrasion and flexing fatigue.



Fabricated from Blair's specialized rubber compounds and exclusive bonding processes, **Enduraflex™**, **Plioweld™**, **Marflex™**, **and Crislip™** rubber linings offer you outstanding service-life and dependable performance.



### **Chlorobutyl Linings**

Blair's **Chlorobutyl** linings have superior resistance to ozone, sunlight, and weathering with high-quality chemical and permeation resistance. They may be used for chemicals such as sodium hypochlorite, superphosphoric acid and sulfuric acid. Chlorobutyl is used in FGD scrubbers and mixed applications. Chlorobutyl is heat resistant to 210°F - 230°F (99°C - 121°C) for most acids.



### **EPDM Linings**

Blair's **EPDM** linings have outstanding resistance to the ozone, sunlight and weather conditions. It is also resistant to chemical and oxygenated solvents. EPDM is generally used for oxidizing service conditions such as sodium or potassium chlorate and is heat resistant to 300°F (149°C).

# **Nitrile Linings**

Blair's **Nitrile** linings are resistant to aliphatic hydrocarbons with good abrasion resistance. Nitrile is used in applications for special equipment where oil resistance is required and is heat resistant to 200°F (99°C).

# Endurabond™ Innovative Adhesive Systems

The life of a rubber lining is, to a great extent, dependent on the continued adhesion of the rubber lining to the metal substrate. Over the years we have developed a quality adhesive system of bonding tank lining to the metal tank. The **Endurabond™** cement system results in excellent adhesion of the linings to the metal surface.

# Chemcure™ Curing Agent

To be used as a replacement for highly flammable and extremely dangerous agents, **Chemcure™** is our exclusive non-flammable curing chemical catalyst for curing chemical cure style rubber tank linings.

# **Secondary Containment Linings**

# **MARSEAL®** Secondary Containment Linings

*MARSEAL®* secondary containment linings are flexible sheet membranes that provide superior protection should your primary containment fail. *MARSEAL®* linings adhere to concrete surfaces to create a secure, seamless vessel. Compared to traditional liquid applied coatings, *MARSEAL®* linings will not crack when concrete cracks or moves and is virtually unaffected by UV radiation therefore requiring little to no ongoing maintenance.









# **Industries & Application Areas**

### **Chemical Storage and Transportation**

From chemical storage tanks, pipelines, railcars and tank trucks, Blair Rubber Company is unparalled in the chemical industry for manufacturing rubber linings that deliver long-term performance and dependability. With installations that have been in service for over 30 years, Blair has earned a reputation for quality and reliability in both primary and secondary containment. Blair manufactures over 90 rubber linings to provide protection for a full range of chemical storage and transportation applications; superior quality linings for sodium hypochlorite and other bleaches, phosphoric acid, HCL and a wide range of other chemicals that require corrosion protection.

### **Coal and Power Industry**

Blair Rubber Company's high-performance corrosion resistant linings can be found throughout the power industry from fossil fuel to nuclear power plants. Blair linings protect all of the components encountered in flue gas desulfurization (FGD) and nuclear water treatment systems including processing pipes, slurry and process tanks, agitators, absorber towers and outlet flues. Blair linings provide superior corrosion protection, durability and reliability in this highly corrosive environment.

### Mining and Mineral Processing

The multi-stage process to extract gold and minerals from ore requires highly corrosive chemicals at elevated temperatures with a high solids and highly abrasive content. Blair Rubber has developed a full-range of linings that perform exceptionally well in this harsh environment providing superior protection to all the processing areas and equipment.

### Water Treatment

From industrial water treatment to deionization and water polishing, Blair manufactures the right rubber linings to protect tanks, piping and equipment from corrosion. In addition to excellent chemical resistance, Blair also offers a line of white / food grade linings offering ultra-pure water protection.

# **Applications**

Abrasion – Sliding

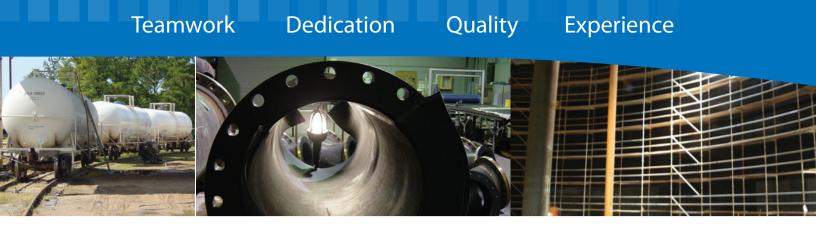
Alkaline Mine Water Abrasion - Impingement Acetic Acid Acetic Anhydride Acetone Acid Mine Water **Aluminum Chloride** Aluminum Hydroxide Aluminum Nitrate Aluminum Phosphate Aluminum Sulfate Ammonium Hydroxide Ammonium Nitrate Ammonium Phosphate Ammonium Sulfate **Barium Chloride** Battery (Sulfuric) Acid Bleach (NaOCI) (Sodium Hypochlorite) Boric Acid Brine **Calcium Chloride** Calcium Hydroxide Calcium Hypochlorite Caustic Potash Caustic Soda Chlorine (water or gas) Chromic Acid Copper Chloride Copper Cyanide Copper Sulfate Deionized/Distilled Water Dextrose **Diammonium Phosphate** Electro)plating Solutions **Ethylene Glycol** Ferric (Iron III) Chloride Ferric (Iron III) Sulfate Ferrous (Iron II) Chloride Ferrous (Iron II) Sulfate Fluorosulfonic Acid Formaldehyde Glucose Glycerine Gold Chloride Gypsum Ore

Lead Nitrate Lead Sulfate Lime Hydrated Lime Water Lye Solution Magnesium Chloride Magnesium Hydroxide Magnesium Nitrate Magnesium Sulfate Maleic Acid Malic Acid Manganese Chloride Manganese Sulfate Mercuric Cyanide Methyl Alcohol **Mineral Spirits** Naphtha Natural Gas Nickel Acetate Nickel Chloride Nickel Nitrate Nickel Sulfate Nitric Acid **Oxalic Acid** Petroleum Oils Phosphoric Acid Phthalic Acid (Powder)Potassium Cuprocyanide Potassium Cyanide Potassium Hydroxide (Potash) Potassium Sulfate Sea Water Sewage Sludge (Activated) Silver Nitrate Soda Alum Soda Ash Sodium Bicarbonate Sodium Borate Sodium Carbonate Sodium Cyanide Sodium Hydroxide Sodium Sulfate Starch Syrup Sucrose Solution Sulfur Dioxide (FGD Scrubber)

### References

Company	Location	Application	Year in Service
Innophos	Mexico	Fertilizer / Phosphoric Acid	2006
Pena Colorada	Mexico	Iron Ore Mining	2010
Fertinal	Mexico	Fertilizer / Phosphoric Acid	2010
Huaying Phosphoric	China	Phosphoric	1999
Raytheon Wengfu	China	Chemical Fertilizer	1998
Commonwealth Edison	IL, USA	Limestone Scrubbing	1972
Orlando Public Utilities	FL, USA	Power Plants/Coal	1986
Agrium	ID, USA	Phosphate Evaporators	1990
Intermountain Power Project	UT, USA	Pipe Lining	2000
Public Service of Colorado	CO, USA	Particulate Removal	1972
South Carolina Public Service	SC, USA	Limestone Scrubbing	1978
Seminole Electric	FL, USA	Reline Surge Tanks	1991
Santee Cooper	SC, USA	Power Plants/Coal	1995
Sask Power	Sask, Canada	Rubber Lined Pipe	1994
Sual Power Plant	Philippines	Scrubber	2000
Virginia Electric & Power	VA, USA	Wet Limestone Slurry	1993
Utah Power & Light	WY, USA	Sodium Carbonate	1980
Cincinnati Gas & Electric	KY, USA	Lime/Surge Tanks	1980
Allegheny Power	PA, USA	Wet Limestone Slurry	1993
Mosaic Phosphates	FL, USA	Phosphate Tank Lining	1997

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