JM Eagle

THE WORLD’S LARGEST MANUFACTURER OF PLASTIC PIPE

waterworks • electrical • gas • drainage • plumbing & irrigation
At JM Eagle, every piece of plastic pipe is designed for longevity, engineered with precision, tested for quality and made with pride.
Dear Partners,

JM Eagle is the world’s largest manufacturer of plastic pipe, producing dozens of pipe varieties in hundreds of sizes for nearly every application. Its products play a vital role in improving and maintaining health and quality of life throughout the world.

Plastic pipe has been shown in many studies to exceed 100 years of service life. It does not rust, crack or lose performance. And at JM Eagle, every piece of plastic pipe is designed for longevity, engineered with precision, tested for quality and made with pride.

It is my vision that all countries—both emerging and established—build or replace their infrastructures to be long lasting, to protect their environments and precious resources, and to deliver clean, fresh and safe water to their people.

I invite you to partner with JM Eagle to make this vision a reality.

God Bless,

Walter Wang
Scope of Business

JM Eagle is committed to delivering life’s essentials to people across the globe.

With 22 manufacturing plants throughout North America, JM Eagle manufactures the widest array of high-grade, high-performance polyvinyl chloride and high-density polyethylene pipe on the market. Its pipes are used in a variety of industries including utility, plumbing, electrical, natural gas, irrigation, potable water, drainage and sewage.

Annual sales at JM Eagle total nearly $2 billion, and its sales by tonnage are higher than any other pipe manufacturer.

Leader in the Industry

JM Eagle, the world’s leading manufacturer of plastic pipe, is rooted in the family tradition of Formosa Plastics, whose business excellence and community involvement are recognized in Asia and throughout the world.

In 1982, Formosa Plastics purchased the eight plants comprising the plastic-pipe
JM Eagle employs nearly 2,000 people at its corporate office and in its 22 plants located in 15 states and Mexico. These plants boost and sustain local economies directly through employment and via community involvement. Further, its nearly $2 billion-dollar sales and shipped tonnage are unmatched by any other manufacturer in the world and support an entire supply chain engaged in the production of plastic pipe.

Impact on the United States and the World

JM Eagle’s products have also impacted lives around the globe, both through international sales and philanthropic endeavors.

On the product side, JM Eagle plastic pipe is saving local economies billions of dollars each year through the preservation of water, less expensive installation, virtual elimination in the cost of repairs and drastically reduced costs for replacement.

Today, JM Eagle dominates the market with the full range of common product lines, as well as specialty pipe and unique product innovations.

J-M Manufacturing grew to a 14-plant enterprise by 2007, when it acquired the second largest manufacturer, PW Eagle. The company relocated its headquarters to Los Angeles in 2009.

Through strong leadership and significant capital investment, JM Eagle is committed to developing long-term infrastructure in emerging countries that will provide safe, clean water for generations to come.

In November 2005, Mr. Walter Wang, who had risen through the ranks of the family business and grown J-M Manufacturing’s sales five times over, acquired 100 percent of the company from Formosa Plastics.

Operations of Johns Manville to form J-M Manufacturing, headquartered in Livingston, N.J.
Production Capacity and Scope

JM Eagle carries more pipe products, in more pipe diameters, for more applications, than any other manufacturer of plastic pipe in the world.

With the capacity to produce 2.2 billion pounds of pipe a year and experience shipping to all continents, JM Eagle far surpasses global competition in:

- Technological product innovations.
- Modern manufacturing efficiencies.
- Product breadth.
- Environmentally progressive initiatives.
- Supplying pipe to all corners of the globe.
- Western-U.S. production for easy shipping to Asia.

JM Eagle sets the standard in modern production of plastic pipe. It is not only the manufacturer for infrastructures of the future, it is also the company for the future.
Green Manufacturing

JM Eagle has led the industry in initiatives that both preserve our resources and protect the Earth.

JM Eagle is committed to preserving the environment, as well as the world’s most precious commodity, water. As such, it has led the industry in initiatives that both preserve our resources and protect the Earth.

JM Eagle PVC requires lower amounts of water and lower temperatures used in manufacturing than competing products, thanks to the company’s carefully engineered manufacturing processes. It follows stringent, audited air-quality standards and guards against ground contamination, and it employs a 100-percent-recycling policy for scrap. Further, its plants store no reportable quantities of hazardous materials in manufacturing and use no chlorinated solvents.

Outside of the plant, plastic pipe from JM Eagle requires less fuel to transport due to its lighter weight than other materials, and it requires virtually no fuel-consuming heavy equipment to install.

Due its sustainability—identified in studies to last at least 100 years—plastic pipe from JM Eagle conserves water due to reduced leakage and waste, and it protects the environment against biological contamination.

Plastic pipe from JM Eagle is the product that will best protect the health of the earth and its inhabitants for generations to come.
Commitment to Product Innovation

In the last three years, JM Eagle has developed exclusive technologies that have revolutionized infrastructure development for cities across the United States.

- Ultra Blue PVCO has a wall that’s four times stronger than conventional PVC at nearly half the wall thickness.
- Eagle Corr PE for drainage features a dual-crown corrugated exterior for greater pipe stiffness values.
- Eagle Loc 900 with internal joint restraint eliminates the need for external tools, rods, clamps, bolts or splines.
Commitment to Quality

Every piece of JM Eagle plastic pipe undergoes stringent quality verification with state-of-the-art testing technology to ensure its strength and performance. These tests are performed continuously by plant personnel on the production line, as well as by external auditors in unannounced visits.

Both JM Eagle pipe’s raw-material formulations and physical properties are verified to meet or exceed all industry standards. JM Eagle employees, from the headquarters to the plant, stand by the quality of their product.

For cities seeking to build water infrastructures that will provide exemplary performance, plastic pipe from JM Eagle is the first choice.

Commitment to Production Efficiencies and Continuous Improvements

While many industries in the United States scaled back, JM Eagle reinforced its commitment to maintaining its high level of excellence and superiority in product breadth, geographic reach and production capacity. It routinely invests money in developing new technologies and products, increasing its efficiencies, and providing better customer service.

JM Eagle has spent more than $350 million in the last 15 years to employ the most modern manufacturing practices available to ensure its products set the standard for superior quality. The company recently embarked on a capital-improvement project ($20 million) to improve its manufacturing facilities.

JM Eagle is focused on growth through continual modernization and increasing its already-high level of technology. It is truly a company that works toward a better future.
WATERWORKS

BLUE BRUTE™ (C900)
• Used in transmission/distribution, municipal water systems and other services.
• Available in 4”–12” diameters.
• Long-term hydrostatic strength to meet high safety requirements.
• Produced in blue, white, purple and green.

EAGLE LOC 900™
• JM Eagle C900 pipe with internal joint restraint mechanism.
• Used in potable water and sanitary sewer force mains in open-trench, horizontal directional drilling and road bore applications.
• Available in 4”–12” diameters, DR14 and DR18.
• Eliminates corrosion associated with external joint restraints.

MEETS AWWA C900, FM 1612 and ASTM D1784 cell class 12454; Gaskets meet ASTM F477; Joints meet ASTM D3139.

BIG BLUE™ (C905)
• Used in transmission/distribution, municipal water systems and other services.
• Available in cast-iron ODs in 14”–48” diameters.
• Long-term hydrostatic strength to meet high safety requirements.

GRAVITY SEWER
• Used for sanitary sewage collection systems.
• Available in 4”–48” diameters.
• Ring-Tite™ joints.
• Improved design for reserve strength and stiffness to increase load-bearing capacity.

MEETS ASTM D3034 (SDR 35 and 26) and ASTM F679 (PS46 and PS115) and ASTM D1784 cell class 12454 or 12364; Gaskets meet ASTM F477; Joints meet ASTM D3139.

ULTRA BLUE™ PVCO
• Used in potable water and force main applications.
• Available in cast-iron ODs in 6”–16” and IPS ODs in 6”–12” diameters.
• Molecularly oriented to be lighter yet stronger—as much as four times stronger than conventional PVC.
• Delivers HDB of 7,100 psi vs. HDB of 4,000 psi of conventional PVC pipe.

HIGH-DENSITY PE WATER & SEWER
• Used in municipal and industrial water transmission systems.
• Available in 1½”–83” diameters.
• Zero leak rate, high performance and long life expectancy.
• Can be manufactured with the color striping to identify application, such as a blue stripe for potable water, a green stripe for sewer application, and a purple stripe for reclaimed water.

MEETS AWWA C901/C906, ASTM D2239, ASTM D2737, ASTM D3035, F714, cell class per ASTM D3350, PPI listed material (TR-4) PE3408/3608 & PE4710, ANSI/NSF-14.

FITTINGS & ACCESSORIES
• Gasketed Sewer

IRRIGATION P.I.P.
• Used in irrigation, rural water systems other services.
• Available in 6”–22” diameters.
• Produced in accordance with Natural Resources Conservation Service 430-DD.
• Ring-Tite™ joints.
• Pressure-rated 63*, 80, 100 and 125 psi.

SOLVENT WELD
• Used in plumbing, irrigation and industrial applications.
• Available in ½”–16” diameters.
• Available in Schedule 40 and 80.
• Class pipe 63, 100, 125, 160, 200 and 315 psi.
• 20-foot standard lengths to reduce joint lengths.

SOLAR BLOK
• Used in above-ground irrigation applications.
• Available in ½”–4” diameters.
• Comes in brown.

MEETS ASTM D1785.

FITTINGS & ACCESSORIES
• Gasketed Sewer

PLUMBING & IRRIGATION
### ELECTRICAL

**SCHEDULE 40**
- Available in ½” through 8” diameters, 10-foot and 20-foot lengths.
- Rated for 90-degree C Cable.
- For use in both above-ground and underground installations.
- Easy to load, transport and handle.
- Unaffected by electrolytic or galvanic corrosion, or any known corrosive soil or water condition.
- Designed for installed cost savings.

**C DUCT**
- Available in 4” diameter.
- Superior dielectric strength.
- Suitable for direct burial or concrete-encased telephone duct applications.
- 20-foot lengths, bell end.
- Available in white or gray.

**SCHEDULE 80**
- Available in ½” through 6” diameters.
- Rated for 90-degree C Cable.
- For use in both above-ground and underground heavy-wall installations.
- Unaffected by electrolytic or galvanic corrosion, or any known corrosive soil or water condition.

**DB 120, 100 & 60**
- For use in outdoor power and communications applications.
- 20-foot lengths, bell end.
- Rated for 90-degree C Cable.

**EB 20 & 35**
- For use in concrete installations.
- Available in 20-foot lengths.
- Suitable for power and communications applications.
- Rated for 90-degree C cable.

**EAGLE LOC™ CONDUIT**
- For use in horizontal directional drilling.
- Suitable for power and communications applications.
- Available in Schedule 40, 4”, 5” and 6” diameters;
- Provides quick, uncomplicated assembly.

**HDPE COMMUNICATION DUCT**
- Available in ¾” to 12” diameters.
- Suitable for telecom and fiber-optic applications.
- High stress crack resistance, low coefficient of friction and high tensile strength.
- Comes in reels or sticks, with or without pull tape, in blue, green, black, orange and red.
- Available with internal lubrication.
- Available parallel reeled.

**ABS**
- Acrylonitrile Butadiene Styrene.
- Used in commercial, residential and industrial applications for sanitary drain, waste and vent.
- Available in 1½” – 6” diameters (Schedule 40/DWV and/or with Cellular Core).

**D2729 / D3034 SEWER / DRAIN PIPE**
- For landscape drainage applications.
- Available in 3” – 6” diameters, solid and perforated.
- 10-foot standard length for easy handling.

**BLACK PVC**
- Used in solar plumbing applications.
- 1½” to 2” diameters.
- Schedule 40.

**EAGLE LOC WELL CASING**
- Used in domestic, municipal, industrial or dewatering applications.
- Available in 4” – 6” SDR 21, SDR 17 and SCH 40.

**F480 WELL CASING**
- Used in irrigation applications.
- Available in 4”–12” diameters.
- Solvent weld.

**THREADED DROP PIPE**
- Used in domestic, municipal, industrial or dewatering applications.
- Available in 1”–2” diameters.
- Schedule 80 and Deep Drop/Schedule 120.
- Coupling available.

**Meets ASTM D1784 cell class 12454.**
Fittings

**Schedule 40 Fittings**
- Couplings
- Terminal adapters
- Female adapters

**Schedule 40 & 80 Standard Radius Elbows**
- Belled end
- Plain end
- UL listed

**Special Radius Sweeps**
- Schedule 40 and 80
- DB (Direct Burial)
- C Duct
- Belled and plain end
- ½" through 8"

**Boxes**
- FS/Junction boxes
- Access fittings

**Duct Spacers**
- Vertical slide connection for easy assembly.
- Locking tab to prevent floating.
- Only two components needed, base and intermediate.
- Designed for use with plaster duct only.

**Couplings**
- Swedge
- Repair
- 5-degree
- Swedge reducers
- Caps and end bells

**DWV**
- Used for drain waste and vent applications.
- Solid core available in ½”–16” diameters.
- Foam core available in 1½”–12” diameters.
- Schedule 40 pipe dimensions.
- Meets ASTM D2665 and F891.

**100-Foot Low Head**
- Used in low-pressure irrigation applications.
- Available in 8”–20”.
- P.I.P. and I.P. OD dimensional pipe.

**High-Density PE Irrigation and Water Systems**
- Green Stripe™ turf pipe for irrigation in ¾” and 1” diameters.
- Pure-Core® for water service in ½” – 2” diameters.
- Geo-Flo for geothermal applications in ¾”, 1” and 1¼” diameters.
- Meets AWWA C901, ASTM D2239, ASTM D2737, ASTM D3039, cell class per ASTM D3350, PPI listed material (TR-4) PE 3408/3608 and PE4710, ANSI/NSF-14.
**GAS**

**HIGH-DENSITY PE BLACK GAS**
- Suitable for fuel gas use in multiple applications for distribution, and oil and gas gathering.
- Available in ¾”-20” diameters.
- Lightweight, non-corrosive.
- Available in coil lengths.
- Easy to install by heat fusion or mechanical fittings.

*Meets ASTM D2513, cell class per ASTM D3350, PPI listed material (TR-4) PE3408/3608, PE100, PE4710.*

**MEDIUM-DENSITY PE YELLOW GAS**
- Suitable for fuel gas use in multiple applications for distribution.
- Available in ⅝”-12” diameters.
- Lightweight, non-corrosive.
- Available in coil lengths.
- Easy to install by heat fusion or mechanical fittings.

*Meets ASTM D2513, cell class per ASTM D3350, PPI listed material (TR-4) PE2406/2708.*

**GAS SLEEVE**
- Applications include pipe-sleeve — not for use in transmitting natural gas.
- Integral solvent weld bells.

**DRAINAGE**

**ULTRA CORR/”ULTRA RIB” (CORRUGATED)**
- Used for sanitary sewer and storm drain applications.
- Available in 24”-36” (Ultra Corr”) and 8”-24” (Ultra Rib”) diameters.
- Increased load-bearing and system capacity at a reasonable cost.

*Meets AASHTO M304, ASTM F794 and F949; Gaskets meet ASTM F477; Joints meet ASTM D3212.*

**EAGLE CORR PE**
- Available in 4-inch to 60-inch diameters.
- Suitable for use in gravity flow drainage applications.
- Features a corrugated exterior for structural strength and smooth interior for maximum hydraulic efficiency.
- Superior strength-to-weight ratio.
- Flexible conduit design will support H-25 live loads with a minimum cover of 1 foot, with cover heights over of 100 feet.
- Used for DOT/capital improvement, residential, commercial, recreational, agricultural, irrigation.

*Meets AASHTO M252 Type S, AASHTO M294 Type S, ASTM F2306 and ASTM F2648.*

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**The full line of PVC and PE pipe.**
Eagle Loc 900 rescues Port of Tampa

A Tampa, Fla., water main’s rusted ductile iron pipe got a fresh start with Eagle Loc 900, reducing costs and municipal worries.

Corrosive, aggressive soil had eaten through a 35-year-old ductile iron pipeline. The rescue came with 960 feet of 12-inch Eagle Loc 900 from JM Eagle, an internal joint restraint system that eliminates the need for external fixtures on PVC pipe.

The combination of toxic soil and rotted ductile iron slowed the process considerably. Yet the crew was able to lay more pipe per day than would have been expected with ductile iron or other products that require old-fashioned restraints.

JM Eagle’s internal joint restraint technology is fitted into the bell portion of PVC pipe. During on-site installation, each set of connected pipe immediately locks as the joints are put together. Also, the internal joint restraint is encased within the PVC pipe so it never touches soil and flowing fluids.

Great savings, convenience and durability await municipal officers who realized the time has come to embrace new concepts and technologies.

Ultra Blue PVCO helps city of Celina move beyond the rusty Iron Age

Celina, Ohio, ended its city’s ductile iron pipe dominance and embraced modern technologies for critical infrastructure improvements.

For seven years, the only plastic pipe installed in city water projects—10 city and five commercial—has been JM Eagle’s exclusive Ultra Blue C909, a molecularly oriented polyvinyl chloride (PVCO) pressure pipe that is lightweight and high-strength for potable water and force main systems.
For the Navajo Nation, gaining water access to all of their Native American land was a dream. Now, thanks to HDPE piping from JM Eagle, the dream is a reality.

Approximately 10,000 people living on southern Navajo land in New Mexico had had no access to clean running water. But in April 2010, a federal program brought the start of construction on 13 miles of 24-inch HDPE pipeline.

The entire pipeline project might not have come to fruition without the integration of JM Eagle’s HDPE piping. Originally, ductile iron was specified, but the engineering contractor later opted to switch to HDPE. A major reason: HDPE pipe was the best choice to address the area’s aggressive soil content.

“There were concerns about corrosion due to the aggressive soils, and HDPE obviously doesn’t corrode,” says Andrew Robinson, the engineer on the project. “HDPE pipe absorbs pressure surges better.”

Because groundwater in the tribal lands is scarce and poor quality, the Navajo Nation needed a safe, reliable source of water.

“Our grandfathers used to talk about seeing water pipes in our future from far away,” says Sam Sage, president of the Navajo Nation. “They told us we’d be able to get water in our homes, and this is coming to pass.”

Since the PVC pipe is specially manufactured to have a thinner wall, all while boosting strength, it is lighter than other comparable materials. Workers save time because they can move the 6-, 8- and 12-inch pipe without the help of heavy equipment.

The lightweight pipe boasts a hydrostatic design basis of 7,100 psi vs. an HDB of 4,000 psi for conventional PVC pressure pipe.

PVCO pipe also addresses important health and cost-of-labor issues. Rust from iron ductile pipe consumes the chlorine residual that is meant to kill fungal growth in the water system. Plastic pipe ends the worry about rusting and “red water” complaints from customers and saves the city’s three-man crew from extra repairs.

Now the city is safe from inheriting corrosive or potentially faulty pipelines.
Africa

JM Eagle can ensure the development of a long-term infrastructure in emerging countries, including Africa, that will provide safe, clean water for generations to come.

Today, 350 miles of donated JM Eagle pipe is carrying clean water to more than 125,000 people in eight countries in the Sub-Saharan region.

As JM Eagle’s philanthropic efforts in the continent grow, the company welcomes new ideas and new partners in its effort to provide clean, safe drinking water to these people in one of the poorest parts of the world.
Thailand

JM Eagle’s involvement in this country has made a world of difference to the people in cultivating their crops and delivering clean drinking water to households. Thanks to JM Eagle’s generous financial and product donations, Santisuk, Thailand, has received an irrigation system. It has also made possible a system that provides clean drinking water for 500 people in the village of Pateung, Thailand, and protects surrounding natural resources from contamination.

Honduras

The village of Santa Cruz, Honduras, had an insufficient supply of fresh water, causing diseases associated with water contamination to develop among children and the elderly. In addition, the villagers were forced to ration their water during the dry season to compensate for the depleted supply.

JM Eagle’s donation of 45,600 feet of PVC pipe to construct an 8.5-mile pipeline now brings clean, fresh mountain spring water from a holding tank to the 5,000 people of the village.

It is JM Eagle’s goal to improve the quality of life throughout the world.
About Walter Wang, President and CEO, JM Eagle

Walter Wang has guided his career and his life with unmatched integrity, a tireless work ethic, a strong entrepreneurial spirit and a desire to improve the conditions of people around the world.

Beginning his career at Formosa Plastics in Taiwan as a factory machinery operator on all shifts around the clock, Mr. Wang is now the leader of the world’s most formidable plastic-pipe company, JM Eagle, and a member of the boards of directors of Formosa Petrochemical Corp. and Formosa Chemical and Fiber Corp.

His impressive rise to success and high standing in the world market have afforded him a unique position in which to do good.

In 1998, he received the Model Overseas Chinese Young Entrepreneur Award, presented by the president of Taiwan. In 2005, Mr. Wang received the Best Manufacturer Award from Pan Asian American Chamber of Commerce. In 2006, he was awarded the Ellis Island Medal of Honor Award for his contributions to America.

Mr. Wang is a member of the Committee of 100, a national organization of Chinese-American leaders, and received its 2007 Philanthropic Award. And he is a member of the World Economic Forum Centre for Global Growth Companies Committee.

Over the years, Mr. Wang and his wife, Shirley, have offered financial support to more than 15 philanthropic initiatives in disaster relief, clean water, cancer research, education and computer skills development.

Together the Wangs have established the nation’s first endowed academic chair on U.S.-China relations and Chinese-American studies at UCLA.

The Wangs have also been dedicated supporters of projects to address pressing social and healthcare problems in China, including seed-stage and ongoing support for the China AIDS Initiative.

Other charitable foundations that the Wangs support are Doctors Without Borders and the Asian Pacific American Legal Center. For their efforts, Mr. and Mrs. Wang were honored by the APALC with its 2010 Public Service Award.
“Building essentials for a better tomorrow.”