For more than 30 years, Valmont has offered municipalities and D.O.T.s steel and aluminum poles and structures to meet the most demanding requirements. We have built our reputation on a company-wide commitment to customer service, innovation, and cost control. Most importantly, we put our experience, understanding of specifications and reputation for excellence into everything we design and manufacture.

With our breadth of products, Valmont is unmatched in our ability to merge standard products with decorative products. Whether you’re revitalizing your main street or developing a major intersection, Valmont offers a complete traffic and lighting solution. Simply stated, we’re a one-stop shop that leverages your community’s needs from lighting to transportation management.

Meeting the needs of you, our customer, is Valmont’s top priority. No matter how large or small your order, whether it is a standard product or specially designed to meet your requirements, our focus is to provide a quality product, to deliver that product on time and per spec, and ultimately, to make your community a safer, better place.

Our product offerings include:
- Standard traffic signal poles
- Standard street lighting poles
- Sign structures
- Specialty structures
- Decorative traffic signal poles
- Decorative street lighting poles
- Mass transit poles
TABLE OF CONTENTS

Manufacturing Locations ................. 4
Traffic Structures
  Standard .................................. 6
  Decorative ............................... 8
Street Lighting
  Standard ................................ 10
  Decorative ............................... 12
Sign Structures ............................ 14
Mass Transit ............................... 16
Specialty Structures ...................... 17
Quality & Safety ........................... 18
Engineering & Design ..................... 19
Finishes ................................. 20
Specifications ............................ 21
Design Information ....................... 22
Fluting Options ........................... 23
Our North American manufacturing locations are strategically located to fulfill our customer’s ever-changing needs. Our facilities are AISC certified and supported by AWS approved welders. By sharing manufacturing and engineering practices across our network, we are better able to leverage our existing products and processes, resulting in shorter lead times. Wherever you are, Valmont is there – helping make your community a safer, better place.
TIMELINE

1946
Robert Daugherty founds a farm equipment manufacturing company in Valley, NE.

1959
Valmont begins manufacturing steel pipe and tubing.

1960s
Valmont integrates electro-resistance welding in tapered tube production. This enables Valmont to expand into the pole industry.

1968
Valmont becomes a publicly traded company (Currently, NYSE: VMI).

1970
Valmont enters transportation market.

1991
Valmont acquires Feralux, a Canadian manufacturer of aluminum poles and sign structures.

2000
Valmont acquires Lexington Standard, manufacturer of aluminum poles.

2004
Valmont acquires W. J. Whatley, manufacturer of composite poles.

2008
Valmont partners with West Coast Engineering Group Ltd., manufacturer of steel poles.

Present
Valmont continues to be a leader in the manufacturing of transportation structures.
TRAFFIC STRUCTURES

STANDARD TRAFFIC

Valmont offers a vast array of traffic pole configurations to meet your needs. Whether you are looking for standard product or decorative product, Valmont delivers.
Our standard steel traffic poles help improve intersection functionality and appearance with their simple, clean designs. Our structures are available with standard fixed connection or with unique adjustable clamp-on connection for use with either straight or curved mast arms, with or without additional luminaire arms. Valmont offers a complete package tailored to exact specifications with a wide range of design, and our poles conform to meet your unique loading requirements. At Valmont, we design our traffic structures to exacting government standards, including AASHTO Specifications. Rest assured, our designs help keep your intersections safe and reliable.
TRAFFIC STRUCTURES

DECORATIVE TRAFFIC

Valmont’s historic and contemporary decorative traffic poles are an attractive choice for residential neighborhoods, urban areas, and downtown redevelopment projects. Their ornamental designs and clean, simple arm attachments also help improve intersection appearance. Our combination structures include both traffic and lighting applications in a variety of styles and configurations.

Our innovative manufacturing process creates a variety of fluted cross-sectional shapes ranging from 8, 12 or 16 flutes per pole. Shape options include sharp or flat flutes. Custom cross-sections are also available to meet your unique needs. Ask us about our decorative pole caps, cast nut covers, channel scrolls, and cast bases.
STANDARD LIGHTING

You can depend on Valmont’s high quality steel and aluminum poles for an appealing solution to your street lighting needs. Our shafts are available in single-piece, up to 50 feet. We offer round tapered, straight round, straight square or square tapered poles for either single or multiple light fixtures, with a choice of davit, truss and monotube arms. Accessories include transformer bases, bracket arms, pole caps, nut covers and hinged handholes.

If your project calls for lighting interstate or large highway exchanges, Valmont is your choice for high mast lighting poles. Our single tube structures reach heights up to 175 feet and are adaptable to lowering devices or fixed mounting arrangements.
STREET LIGHTING

DECORATIVE LIGHTING

When your project requires steel or aluminum decorative lighting poles, Valmont has the answer. We have been enhancing streetscapes, walkways and residential neighborhoods for years with historic and contemporary designs.

We meet your unique needs with the ability to create a variety of fluted cross-sections, including sharp, flat, or gear-tooth flutes at 8, 12 or 16 flutes per pole. We will help you with custom cross-sections, as well as, decorative pole caps, cast nut covers, banner arms and cast bases.

For more information on Valmont’s fluting options, please see page 23 or contact your Valmont sales representative.
SIGN STRUCTURES

TRANSPORTATION STRUCTURES
Valmont is a leading supplier of steel and aluminum sign structures in North America. We offer cantilever and overhead span sign structures in various styles – curved monotube, single-chord, two-chord, tri-chord or box-chord. We manufacture structures to government specifications and custom-design structures to meet specific needs. For more information, call 574-936-4221.
Valmont helps lead the way on inner-city transit systems with a complete line of structures, including catenary and urban to residential transition poles, plus the adjacent lighting and traffic control structures. We manufacture high quality poles that help ease your community’s transportation congestion and growing needs. To enhance the aesthetic appeal of the residential to urban transition, we merge our decorative product offering with standard products to provide a one-stop shop. We also provide area lighting poles for park and rides for safe, commuter transportation. Valmont is a member of IEEE/OCS and contributes to the structural specifications for light rail poles.
In an ever-changing world, specialty structures play a vital role in making your community a safer, better place. Valmont offers an array of poles and structures for homeland security, traffic monitoring systems, airports, railroad yards, and even shipping ports.

Valmont has vast experience in providing steel and aluminum poles and structures for surveillance cameras, traffic sensors, highway advisory radio antennas, and dynamic message signs (DMS). In addition, we provide reliable surface lighting for freight terminals and railroad yards to help improve visibility and freight movement.
QUALITY

Quality control is present from the moment an order is entered until long after it is fulfilled. From beginning to end, we work directly with our customers so that our products meet the highest quality standards while being on time, per spec, and on budget. With personal attention, after-sale support, and high-quality products, Valmont helps engineering and planning professionals meet project deadlines and regulation requirements.

SAFETY

Safety is one of our top concerns. We recognize that our people are the reason behind Valmont’s success, and we take great pride in our safety programs.

Valmont repeatedly exceeds industry standards. We follow recommended safety standards and stress the importance of safety at all levels.
VALMONT IS WIDELY RECOGNIZED AS A LEADER IN STRUCTURAL ENGINEERING, CONTINUALLY SETTING THE STANDARD FOR ENGINEERING, DESIGN AND INSTALLATION.

With more than 600 years of combined global experience in structural testing and design, Valmont’s engineers have the resources, the capacity, and the capabilities to anticipate and fulfill our customers’ needs. In fact, many of our engineers spearhead regulatory changes on national committees, such as AASHTO, TRB, NCHRP, ASCE, ANSI and IEEE/OCS. Simply stated, engineering is so ingrained into the Valmont philosophy that our engineering capacity and capabilities are what set us apart from the competition.
STEEL FINISHES

Valmont Structures offers several options for steel paint coatings and control systems to provide a long-lasting appearance. We offer a full range of industrial finishing services including:

GALVANIZING

One of the most common and effective ways to protect steel from corrosion is galvanizing, which provides steel with both interior and exterior protection from corrosion. This barrier coating is unique, differing from all other coatings in the way it bonds to the steel, and in the corrosion resistance of the resulting zinc surface.

Valmont is a pioneer and an industry leader in hot-dip galvanizing; in fact, Valmont is one of the United States’ largest custom galvanizers. Simply stated, we are one of the only pole manufacturers that own our own galvanizing facilities, ultimately benefiting the production of your product from design to delivery.

V-PRO™ PROTECTION SYSTEMS

V-PRO Protection Systems were developed exclusively for Valmont by utilizing independent laboratory testing. Depending on your service expectations and environmental conditions, the following corrosion protection systems are available:

V-PRO 1
- Basic one coat powder.
- Appropriate for most geographic areas with applications of slow speed traffic, parking lots, shopping malls, office complexes, apartments, parks, tennis courts, etc.
- Zero or very limited exposure to de-icing salts, ocean spray, or acid rain.
- Gloss and color retention is moderate to good.
- Suitable over galvanized where additional corrosion protection is required and with carbon steel.
- Not recommended for weathering steel.
- Economical cost.

V-PRO 2
- Two coat powder. Includes primer and top coat.
- Appropriate for most roadside applications of moderate speed traffic or where poles are sufficiently set away from high speed traffic.
- Use where there is light ambient salt, road rock salt or moderate acid rain.
- Color retention is moderate to good.
- Suitable over galvanized and carbon steel.
- Not recommended for weathering steel.
- Economical cost.

V-PRO 3
- Two coat liquid. Includes zinc primer and top coat.
- Appropriate for more extreme roadside applications with high speed traffic, and where poles are located close to traffic. Most geographic areas are applicable.
- Use where there is high ambient salt, rock salt, high impact abuse, and rock chip resistance required.
- Color retention is good to very good.
- Suitable over galvanized, carbon steel or weathering steel.
- Applied over galvanizing provides superior protection where high concentrations of liquid de-icing agents or other corrosive compounds utilized.
- Moderate cost.

V-PRO 4
- Two coat liquid. Includes zinc primer and premium top coat.
- Appropriate for extreme applications where color and gloss retention is vital for 5 to 10 years or more.
- Great for decorative poles, bright colors and high sun exposure areas.
- Appropriate for roadside applications with high speed traffic. Most geographic areas are applicable.
- Use where there is high ambient salt, rock salt, high impact abuse, and rock chip resistance required.
- Applied over galvanizing provides superior protection where high concentrations of liquid de-icing agents or other corrosive compounds utilized, including acid rain.
- Suitable over galvanized, carbon steel or weathering steel.
- Color retention is very good.
- Premium cost.

Why Choose V-PRO Protection Systems?

Valmont Structures devoted extensive research to ensure your steel poles receive maximum protection from the environment. We qualify our protection systems by utilizing the most sophisticated testing techniques available to the industry. Our testing includes:

- Cathodic Delamination Testing
- Electrochemical Impedance Spectroscopy (EIS)
- Cross-Section Analysis
- Cyclic Exposure
- UV Testing
- Gravelometery
- Gloss and Color

Valmont’s V-PRO Protection Systems were developed utilizing comprehensive testing while working with various paint coating manufacturers. Our systems were evaluated under numerous environmental conditions by an independent laboratory. Through this testing, we know how our systems will perform over time and provide you the service life you expect.
STEEL TRAFFIC SPECIFICATIONS

GENERAL
A Traffic Signal Pole System consists of a tapered pole, tapered traffic signal mast arm(s), luminaire arm(s) (if required), and anchor bolts.

DESIGN
Design is in accordance with AASHTO, “Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.”

FABRICATOR
The Fabricator is certified to AISC Fabricator Certified Quality Program. Proof of this certification is required to ensure that the fabricator has the personnel, organization, experience, procedures, knowledge, equipment, capability and commitment to fabricate quality traffic pole structures.

WELDING
All welding is in accordance with the American Welding Society (AWS) D1.1 Structural Welding Code. Tackers and welders are qualified in accordance with the code. Tube longitudinal seam welds are free of cracks and excessive undercut, performed with automatic processes, and are visually inspected. Longitudinal welds suspected to contain defects are magnetic particle inspected. All circumferential butt-welded tube splices are non-destructively tested.

MATERIAL CERTIFICATIONS
All structural steel materials are manufactured in the United States of America, and comply with the American Society for Testing and Materials (ASTM) specifications. Mill certifications are supplied as proof of compliance with the specifications.

CALCULATIONS
Calculations and detailed drawings are submitted demonstrating compliance with the AASHTO specifications. They include stress analysis on the mast arm, luminaire arm, pole, base plate, and anchor bolts. Maximum loads and stresses are determined for the most critical wind direction.

POLE
The pole is fabricated from coil or plate conforming to ASTM A572 or ASTM A595 Grade A with a minimum yield strength of 55 ksi. The pole is round in cross-section and has a constant linear taper of 0.14 in/ft. The shaft is one piece, contains no circumferential welded splices, and is a single ply (no laminated tubes). The pole has a reinforced 4.0” x 6.5” handhole with cover located 1’-6” from the pole base. Each pole is provided with an end cap secured in place with set screws.

SIGNAL MAST ARM
The mast arm is fabricated from coil or plate conforming to ASTM A572 or ASTM A595 Grade A with a minimum yield strength of 55 ksi. The arm is round in cross-section and has a constant linear taper of 0.14 in/ft. All mast arms up to 50’ in length are manufactured and shipped in one piece with no circumferential welded splices and are of a single ply (no laminated tubes). Each arm is provided with a cast end cap secured in place with set screws.

BASE PLATE
Base plates conform to ASTM A36 or ASTM A572. Plates are integrally welded to the tubes with a telescopic joint or a full penetration weld joint with a backing ring.

ANCHOR BOLTS
Anchor bolts conform to the requirements of ASTM F1554. The upper 12” of the bolts are hot dip galvanized per ASTM A153. Each anchor bolt is supplied with two hex nuts and two flat washers. The strength of the nuts are equal or exceed the proof load of the bolts. A nut cover is provided for each anchor bolt and attached to the pole with a 0.25” stainless steel, self-tapping, hex head screw.

ALUMINUM FINISHES

POWDER COATING
This process subjects low-molecular-weight solid resins to elevated temperatures, causing them to melt, flow, and chemically meld to form a durable, attractive, consistently finished protective coating.

BRUSHED OR ANODIZED ALUMINUM
The anodizing process protects aluminum products with a durable, attractive finish. The process can produce a wide range of surface finishes — from bright and shiny to dull matte, in brilliant, subtle, or rich color schemes. Anodizing also enhances resistance to abrasion and corrosion and reduces surface electrical conductivity.

Visit valmontstructures.com or contact your Valmont sales representative to obtain our Finishes Color Charts.
The following information is required to provide complete specifications for your project. This includes the gauge and diameter of the post shaft, the size of the base (determined by the shaft dia.) and the anchor bolt size. Please fill in the boxes below.

- Local Structural Code
- Local Wind Condition
- Shaft Type (shape)
- Base Series
- Finish Type (galv., powdercoat, powdercoat over galv.)

- Equipment Mounted to Post
  - Width X Length (projected area)
  - Weight
  - Location (height and orientation)
  - Signal EPA to be calculated with backplates, if required.

= Fill Dimension

Wind Condition: _______ mph

Orientation Guide

Handhole

Decorative Base Type or Style
Clamshell or Nut Cover
Series Name, Material (cast iron or aluminum)
FLUTING OPTIONS

*Fluting shape available on traffic poles.
Serving the world since 1946

Valley, Nebraska • Santa Fe Springs, California • Aurora, Colorado • Atlanta, Georgia • Elkhart, Indiana • Plymouth, Indiana • Farmington, Minnesota • Hauppauge, New York • Salem, Oregon • Brenham, Texas • Ferndale, Washington • Delta, British Columbia • Winnipeg, Manitoba • Barrie, Ontario • St. Julie, Quebec • United Kingdom • France • Germany • Finland • Italy • Turkey • Morocco • Netherlands • Poland • Estonia • China

Conserving Resources. Improving Life.

Division Headquarters
7002 N. 288th Street
P.O. Box 358
Valley, Nebraska 68064 USA

Phone: 402.359.2201
800.825.6668
Fax: 402.359.6221
E-mail: polesinfo@valmont.com
valmontstructures.com