The New Technical & Aesthetic Solution

OCLX
Overhead Contact Line support masts
Overhead Contact Line support masts
## Summary

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The new technical and aesthetical solution

The place of the tramway is expanding in the cities. The success of a tram line results from a complex equilibrium, linked to its socio-economic stakes, its accessibility, the mobility of inhabitants, the quality of its urban integration and the reflection between general contractor and construction managers.

A tram line also «promotes associated» elements of architecture and design essential to its proper functioning, such as stations and furniture to ensure the comfort and safety of users. Among these emergences, the tramway poles have a significant visual impact on the urban landscape, due to the multiplicity of masts standing in the perspective of buildings and landscapes. Unfortunately, due to budget constraints, the design quality of these masts is sometimes neglected. So, with this in mind, we have developed a new industrial solution: the X profile made of steel that combines economy, technique and aesthetics and which offers a great opportunities to the actors of the trams to reconcile these masts with their environment. The OCL X masts are suitable to all projects that impose a reasonable economy, while requiring quality and expressiveness.
**OCL X Sections**

**Sizing according to the requisite effort**
**Table of sections and standards of effort**

The OCL X masts are defined in 2 standard heights : 8m50 / 10m50 et 5 classes d’efforts. They are dimensioned according to standard NF C 11-201/A1. The top deflection of the mast is limited to 1.5% under the service load conditions without wind. The conical cross masts are composed of a main core and 2 legs. The resulting effort must be applied in the main axis of the mast. (An angle of 30° maximum is allowed)

<table>
<thead>
<tr>
<th>Height (mm)</th>
<th>Force (daN)</th>
<th>Base width (mm)</th>
<th>Top width (mm)</th>
<th>Core width (mm)</th>
<th>Legs width (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8500</td>
<td>400</td>
<td>400</td>
<td>200</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>8500</td>
<td>800</td>
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<td>25</td>
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<td>200</td>
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</tr>
<tr>
<td>8500</td>
<td>2200</td>
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<tr>
<td>8500</td>
<td>3200</td>
<td>500</td>
<td>270</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>10500</td>
<td>400</td>
<td>470</td>
<td>250</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>10500</td>
<td>800</td>
<td>470</td>
<td>250</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>10500</td>
<td>1200</td>
<td>470</td>
<td>250</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>10500</td>
<td>2200</td>
<td>600</td>
<td>320</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>10500</td>
<td>3200</td>
<td>600</td>
<td>320</td>
<td>40</td>
<td>30</td>
</tr>
</tbody>
</table>
The 3 generics OCL X

Variations of the mast
the most refined to the most expressive one

On the basis of the core X profile perfectly adapted to common sections of tram lines, round and square claddings are available in aluminum sheet, on the lower part up to 3 meters, and in the upper part up to 6 meters. These options offer a wide expressive potential that resonates with the identity of the places crossed.

In this catalog, we offer various technical solutions and claddings that can be enriched and personalized by the owners and the project management.

<table>
<thead>
<tr>
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<th>Lower round and square cladding</th>
<th>Protection + pattern</th>
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<tbody>
<tr>
<td>Basic</td>
<td>X profile without cladding</td>
<td>for common sections</td>
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<tr>
<td>XL</td>
<td>Lower round and square cladding</td>
<td></td>
</tr>
<tr>
<td>XXL</td>
<td>Upper and lower round and square cladding</td>
<td>Protection + pattern</td>
</tr>
</tbody>
</table>

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**OCL X basic lateral**

X profile without cladding for common sections

**STRUCTURE : X**
- Steel S355
- Machine-Welded conical structure.
- Stainless steel connecting piece between the X profile and the arm.
- Surface Preparation: Steel grit Blasting SA2.5
- Bi-Component Epoxy Primer.
- Polyurethane finish Bi-components.
- Durability 12-15 years in C3 exterior.
OCL X basic axial

X profile without cladding for common sections

STRUCTURE: X
Steel S355
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.
OCL XL round perforated

Lower section cladded with the aluminium round perforated sheet accessory & lighted beacon

STRUCTURE: X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X-profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Lower perforated round-conical cladding in aluminium, thickness 3mm with powder coating finish.
Inspection door equipped with anti-theft magnetic lock, clipped on the structure without visible screws.
RGBW LED beaconing through a diffusing PMMA panel.
OCL XL round axial perforated

Lower section cladded with the aluminium round perforated sheet accessory & lighted beacon

STRUCTURE - X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X-profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Lower perforated round-conical cladding in aluminium, thickness 3mm with powder coating finish.
Inspection door equipped with anti-theft magnetic lock, clipped on the structure without visible screws.
RGBW LED beaconing through a diffusing PMMA panel.
OCL XXL round perforated

Upper and lower sections cladded with the aluminium round perforated sheet accessory & lighted beacon.

STRUCTURE: X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Upper and lower perforated round-conical cladding in aluminium,
thickness 3mm with powder coating finish.
Inspection door equipped with anti-theft magnetic lock,
clipped on the structure without visible screws.
RGBW LED beaconing through a diffusing PMMA panel.
OCL XL square perforated
Aluminium square perforated sheet accessory on the lower part & lighted beacon

STRUCTURE: X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Lower perforated square-conical cladding in aluminium, thickness 3mm with powder coating finish.
Inspection door equipped with anti-theft magnetic lock, clipped on the structure without visible screws.
RGBW LED beaconing through a diffusing PMMA panel.
OCL XXL square perforated

Aluminium square perforated sheet accessory on the upper and lower parts & lighted beacon

STRUCTURE - X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X-profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Upper and lower perforated square-conical cladding in aluminium, thickness 3mm with powder coating finish.
Inspection door equipped with anti-theft magnetic lock,
clipped on the structure without visible screws.
RGBW LED beaconing through a diffusing PMMA panel.
cladding
THE ENGRAVING

Flower
OCL XL round Flower engraved

Aluminium round-conical accessory, with Flower pattern engraving on the lower part & lighted beacon

STRUCTURE • X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Lower engraved round-conical cladding in aluminium,
thickness 3mm with powder coating finish.
Inspection door equipped with anti-theft magnetic lock,
clicked on the structure without visible screws.
RGBW LED beaconing through a diffusing PMMA panel.
OCL XXL round Flower engraved

Aluminium round-conical accessory, with Flower pattern engraving on the upper and lower parts & lighted beacon

STRUCTURE - X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Upper and lower engraved round-conical cladding in aluminium, thickness 3mm with powder coating finish.
Inspection door equipped with anti-theft magnetic lock, clipped on the structure without visible screws.
RGBW LED beaconing through a diffusing PMMA panel.
mixed square cladding on the lower and upper sections, composed of a perforated aluminium sheet & glued laminated wood

**STRUCTURE** - X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X-profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

**CLADDING**
Lower square conical perforated cladding in aluminium, thickness 3mm with powder coating finish, without visible screws.
Upper square conical cladding in stained wood, clipped on aluminium structure, without visible screws.
mixed round cladding on the lower and upper sections, composed of a perforated aluminium sheet & glued laminated wood

STRUCTURE - X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Lower round-conical perforated cladding in aluminium, thickness 3mm with powder coating finish, without visible screws.
Upper round-conical cladding in stained wood, clipped on aluminium structure, without visible screws.
Flower light
OCL XXL round Flower light

Round-cladding with laser cut pattern and diffusing PMMA panel. Programmable RGBW LED backlighting.

STRUCTURE - X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Lower and upper round-conical cladding in aluminium, thickness 3mm with laser cut pattern and powder coating finish.
Inspection door equipped with anti-theft magnetic lock.
clipped on the structure without visible screws
RGBW LED beaconing through a diffusing PMMA panel.
Traffic light
OCL XXL round Traffic light

Round-cladding with laser cut pattern and diffusing PMMA panel. Programmable RGBW LED backlighting.

STRUCTURE - X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Lower and upper round-conical cladding in aluminium, thickness 3mm with laser cut pattern and powder coating finish.
Inspection door equipped with anti-theft magnetic lock.
clipped on the structure without visible screws
RGBW LED beaconing through a diffusing PMMA panel.
THE MIXED MASTS
OCL X mixed with lighting
Integration of catalog lanterns or bespoke luminaires

STRUCTURE - X
Steel S355.
Machine-Welded conical structure.
Stainless steel connecting piece between the X profile and the arm.
Surface Preparation: Steel grit Blasting SA2.5.
Bi-Component Epoxy Primer.
Polyurethane finish Bi-components.
Durability 12-15 years in C3 exterior.

CLADDING
Lower engraved round-conical cladding in aluminium, thickness 3mm with powder coating finish.
Inspection door equipped with anti-theft magnetic lock, clipped on the structure without visible screws.
RGBW LED beaconing through a diffusing PMMA panel.

LIGHTING ARM
Lateral bracket in machine-welded aluminum, powder coated, fixed on the steel structure.
OCL X mixed with lighting
Integration of catalog lanterns or bespoke luminaires
multifunctional OCL X
examples of signage elements integration
**A TEAM**

The strength of Valmont France lies above all in the team spirit that drives more than 300 employees. A state of mind deeply ingrained in the DNA of the company and which can be summed up in a few words: “Satisfy and respect our customers.”

**VISION & STRATEGY**

More than a half century of massive investments in people, technologies, industrial equipment, computing and robotics has enabled Valmont France to become the French leader in designing and manufacturing Urban Lighting Fixtures in Steel, Aluminum & Wood.
OUR HISTORY
FROM THE STATUS OF CHALLENGER TO THE ONE OF LEADER ON HIS MARKET

1956 : Creation of S.E.R.M.E.T.O. in Cusset (03) by Mr. ROUGIER.
1974 : Creation of the commercial network SERMETO.
1985 : Purchase of the aluminum factory TUBALCO (Rive de Gier (42)) belonging to Pechiney-Cegedur.
1989 : Acquisition of the majority of the shares by the VALMONT INDUSTRIES group.
2004 : Fusion of the Charmeil and Rive de Gier sites into a new entity : Valmont France.
2008-2009 : Robotization of major production steps (welding flange & folding).
2009 : Creation of an integrated polyester paint application plant (zero rejection).
2010 : Implementation of Lean Management process Continuous improvement.
2013 : Implementation of CSR & QSE.
2014 : Launching of a dynamic around Urban Hybridization.
2016 : Realization of the important NDIA project in Qatar.
Valmont is gradually implementing a CSR (Corporate Social Responsibility) approach integrating the 3 components of sustainable development:

- Economic
- Societal
- Environmental

Our goal is also to obtain the lowest possible carbon footprint across all materials. Valmont is already able to provide the CO2 footprint for each of its products. Moreover, with its geographical location in the center of the territory, Valmont France limits its CO2 emissions pertaining to transportation. Once the carbon footprint is evaluated, Valmont offers its customers the option of neutralizing CO2 with the choice of a carbon offset.
OUR MARKETS

LIGHTING  Functional masts and candelabras / High-mast / Decorative / Tailor-made.
TELECOM  Monotube and Lightpole.
ENERGIES  LV-MV-VHV supports

OUR LOCATIONS

Valmont is comprised of more than 80 production sites and employs over 10,000 people who share the same goal of excellence, on six continents.
Valmont France is part of the Infrastructure Products Division (ESS), which has more than 3,000 employees, making it the largest segment of the Valmont Group.
OCLX
Overhead Contact Line support masts